

DRAFT 10/3/90

**ENVIRONMENTAL MONITORING AND ASSESSMENT PROGRAM
NEAR COASTAL COMPONENT
1990 DEMONSTRATION PROJECT**

FIELD OPERATIONS MANUAL

by

**C.J. Strobel
Science Applications International Corporation
27 Tarzwell Drive
Narragansett, Rhode Island 02882**

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**Project Officer
R. Latimer**

**Environmental Research Laboratory
Office of Research and Development
U.S. Environmental Protection Agency
Narragansett, Rhode Island 02882**

Appendices

- A. Results of Site Reconnaissance
- B. List of Station Locations and Types
- C. Equipment List and Daily Checklists
- D. Hazardous Materials Safety and Handling Information
- E. Permit for the Operation of a Marine Band VHF Radio
- F. Instructions for Fish Pathology Examination
- G. Flow Charts
- H. Operation of the Sea-Bird SBE 25 CTD
- I. Performing Winkler Titrations using the Hach DO Kit
- J. Operation of the Hydrolab DataSonde 3 Data Logger
- K. Data Sheets and Instructions

APPENDICES

APPENDIX A
RESULTS OF SITE RECONNAISSANCE
LISTING OF MOTELS, BOAT RAMPS, ETC.

As a result of an abbreviated reconnaissance, this section is not yet ready. Presently included is a GIS listing of all marinas in the states covered by the DP.

MARINAS

HARBOR HILL CORP	ANDREA LN	AVON	CT
A GS	MAIN ST	BRANFORD	CT
DUTCH WHARF BOAT YARD & MARINA	MAPLE ST	BRANFORD	CT
GOODSELL POINT MARINA	GOODSELL PT RD	BRANFORD	CT
KELSEYS MARINE RAILWAY	PAYNES POINT	BRANFORD	CT
LAND & SEA ENGINE WORKS	GOODSELL PT RD	BRANFORD	CT
PIER 66 INC	GOODSELL PT RD	BRANFORD	CT
CAPTAINS COVE MARINA	BOSTWICK AV	BRIDGEPORT	CT
FAYERWEATHER BOAT YARD INC	BYWATER LN	BRIDGEPORT	CT
HITCHCOCK MARINE SERVICES	CALIFORNIA ST	BRIDGEPORT	CT
PARSELLS MARINA	SEAVIEW AV	BRIDGEPORT	CT
RIVERSIDE MARINE INC	STRATFORD AV	BRIDGEPORT	CT
SHIP AND SHORE INC	664 SPORT HILL	BRIDGEPORT	CT
OHARA MARINE INC	204 CANDLEWOOD LAKE RD	BROOKFIELD	CT
MEFFERD DISPLAYS INC	POWDER MILL RD	CANTON	CT
CHESTER MARINA	RAILROAD AV	CHESTER	CT
CHRISHOLM MARINA INC	RTE 154	CHESTER	CT
CONNECTICUT RIVER MARINA	RAILROAD AV	CHESTER	CT
HAYS HAVEN MARINA INC	RAILROAD AVE	CHESTER	CT
PARKERS BOAT YARD	RAILROAD AV	CHESTER	CT
CEDAR ISLAND MARINA INC	RIVERSIDE DR	CLINTON	CT
CLINTON BOAT WORKS INC	RIVERSIDE DR	CLINTON	CT
HAMMONASSETT RIVER MARINA	STONY POINT RD	CLINTON	CT
HARBORSIDE MARINA	GROVE ST	CLINTON	CT
OLD HARBOR MARINA ASSOCIATES	WATERSIDE LN	CLINTON	CT
PORT CLINTON MARINA INC	INDIAN DR	CLINTON	CT
SWS INC	RIVERSIDE DR	CLINTON	CT
WILSON R E MARINA	RIVERSIDE DR	CLINTON	CT
COBALT MARINE	OAKUM DOCK RD	COBALT	CT
DRENCKHAHN BOAT BASIN INC	RIVER ST	COS COB	CT
HARBOR MARINE CENTER INC	RIVER RD	COS COB	CT
JAY-VEE CORP	RIVER RD	COS COB	CT
KOBRAK KARL	RIVER RD	COS COB	CT
MIANUS MARINE INCORPORATED	RIVER RD	COS COB	CT
WATERWAYS INC	RIVER RD	COS COB	CT
D S C INCORPORATED	DOGWOOD DR	DANBURY	CT
POCONO MARINA	POCONO POINT RD	DANBURY	CT
MATTEI F & J MARINE SALES	ROOSEVELT DR	DERBY	CT
ANDREWS MARINA INC	BRIDGE RD	EAST HADDAM	CT
HAVEN EAST MARINA	MANSFIELD GROVE RD	EAST HAVEN	CT
LIGHT HOUSE-MARINA INC	OLD TOWN HWY	EAST HAVEN	CT
LIGHTHOUSE MARINA	OLD TOWN HWY	EAST HAVEN	CT
BREWERS CHANDLERY EAST INC	NOVELTY LN	ESSEX	CT
BREWERS DAUNTLESS SHIPYARD	PRATT ST	ESSEX	CT
ESSEX BOAT WORKS INC	FERRY ST	ESSEX	CT
ESSEX ISLAND MARINA INC	ESSEX ISLAND	ESSEX	CT

GALES FERRY MARINA INC	CHAPMAN LN	GALES FERRY	CT
LONG COVE LANDING INC	MILITARY HWY	GALES FERRY	CT
CATALANO J & SONS INC	WATER ST	GREENWICH	CT
ROTA BROS MARINE	HAMILTON AV	GREENWICH	CT
RUDYS TACKLE BARN	WATER ST	GREENWICH	CT
TRIDENT CAPITAL CORP	STEAMBOAT RD	GREENWICH	CT
GROTON OIL CO INC	THAMES ST	GROTON	CT
PALMERS COVE MARINA	GROTON LG PT RD	GROTON	CT
SHENNECOSSETT YACHT CLUB INC	SHENNECOSSTT RD	GROTON	CT
SPICERS MARINAS	SHENNECOSSTT RD	GROTON	CT
THACKSTON M D CO	MAXON RD	GROTON	CT
BROWNS BOAT YARD	CHAFFINCH ISLAND RD	GUILFORD	CT
GUILFORD BOAT YARDS INC	WATER ST	GUILFORD	CT
DAMAR LTD	HADDAM DOCK RD	HADDAM	CT
WILLIAMS & MANCHESTER SHIPYARD	MARINE PARK	HADDAM	CT
CHASE DEVELOPMENT CORPORATION	COMMERCIAL PLZ	HARTFORD	CT
WEST PALM BEACH MARINA INC	FINANCIAL PLZ	HARTFORD	CT
RITTS SEAPORT MARINE INC	COTTAGE RD	MADISON	CT
YORKHAVEN MARINA INC	NEW RD	MADISON	CT
STATEWIDE MARINE INC	CORRIGAN AV	MERIDEN	CT
FLAGSHIP MARINE INCORPORATED	BRIDGEPORT AV	MILFORD	CT
MILFORD BOAT WORKS INC	HIGH ST	MILFORD	CT
MILFORD HARBOR MARINA INC	HIGH ST	MILFORD	CT
MILFORD WHARF CO INC	ROGERS AV	MILFORD	CT
SPENCERS MARINA INC	ROSE ST	MILFORD	CT
BROWERS COVE MARINA	MASONS ISLAND	MYSTIC	CT
GWENMOR MARINA INC	WATER ST	MYSTIC	CT
GWENMOR MARINA INC	BROADWAY EXTENSION	MYSTIC	CT
MARINE EXHIBITS & RESTORATION	MURPHY POINT	MYSTIC	CT
MASONS ISLAND MARINA	MASONS ISLAND ROAD	MYSTIC	CT
MYSTIC RIVER MARINA INC	MASONS ISLAND	MYSTIC	CT
MYSTIC RIVER PROPERTIES INC	MURPHY POINT	MYSTIC	CT
WHITTLE OLD MYSTIC MARINA INC	WHITEHALL AV	MYSTIC	CT
WILLIAM COVE BOAT YARD	STAFFORD STREET	MYSTIC	CT
KIMBERLEY BOAT WORKS	EAST COTTON HILL RD	NEW HARTFORD	CT
CITY POINT BOAT YARD	WATER ST	NEW HAVEN	CT
ETHERINGTON INDUSTRIES INC	LLOYD ST	NEW HAVEN	CT
MARINA LANDING DEV CORP	WATER ST	NEW HAVEN	CT
NEW HAVEN MARINA INC	COVE ST	NEW HAVEN	CT
NIANTIC RIVER MARINA INC	WHALLEY AV	NEW HAVEN	CT
TSILFOGLOU JOHN	FRONT ST	NEW HAVEN	CT
BURRS YACHT HAVEN INC	PEQUOT AV	NEW LONDON	CT
CROCKERS BOATYARD INC	HOWARD ST	NEW LONDON	CT
FORT TRUMBULL MARINA INC	TRUMBULL ST	NEW LONDON	CT
KACPRZYNSKI ZYGMUT ESTATE	SANDY LK	NEWTOWN	CT
BAYREUTHER BOAT YARD	OSWEGATCHIE HLL	NIANTIC	CT
BAYREUTHERS BOAT YARD	SMITH COVE	NIANTIC	CT
BAYVIEW LANDING	MAIN ST	NIANTIC	CT
BOATS INCORPORATED	MAIN ST	NIANTIC	CT
NIANTIC BOAT YARD INCORPORATED	SMITH AV	NIANTIC	CT
TIGHES MARINA	RD SAUNDERS PT	NIANTIC	CT
WATERMARK MARINE SERVICE	BLACK POINT RD	NIANTIC	CT

BEEBE COVE MARINA	SPICER AV	NOANK	CT
NOANK SHIPYARD INC	PEARL ST	NOANK	CT
NOANK VILLAGE BOATYARD INC	126 PROSPECT HILL RD	NOANK	CT
PALMERS COVE MARINA INC	GROTON LG PT RD	NOANK	CT
SPICERS INC	MARSH RD	NOANK	CT
BLOOM BROTHERS MARINA	COVE AV	NORWALK	CT
CROSSHILL CHANNEL	COVE AV	NORWALK	CT
MAURICE MARINE	WATER ST	NORWALK	CT
NORWALK BOAT CLUB	WALL ST	NORWALK	CT
NORWALK COVE MARINA INC	CALF PASTURE BEACH RD	NORWALK	CT
SHORE POINTS MARINA INC	SELLECK ST	NORWALK	CT
UNITED MARINE INC	FOOT OF COMMERCE ST	NORWALK	CT
VINCO MARINE SERVICES INC	WATER ST	NORWALK	CT
BLACK HALL MARINA	RTE 156 A/K/A SHORE ROAD	OLD LYME	CT
COVE LANDING MARINE INC	HAMBURG COVE	OLD LYME	CT
OLD LYME MARINA INC	34 NECK RD A/K/A RTE 156	OLD LYME	CT
PETERSON ENTERPRISES	FERRY RD	OLD LYME	CT
PETERSON ENTERPRISES	FERRY RD	OLD LYME	CT
REYNOLDS GARAGE & MARINE INC	RT 156	OLD LYME	CT
NEW ENGLAND MARINE INC	RTE 27	OLD MYSTIC	CT
FERRY POINT MARINA INC	FERRY POINT RD	OLD SAYBROOK	CT
MARSTERS MARINE SERVICE	MAIN ST	OLD SAYBROOK	CT
OAKLEAF MARINA INC	FERRY RD	OLD SAYBROOK	CT
PERSSON SETH BOAT BUILDERS	RIVERSIDE AV	OLD SAYBROOK	CT
RAGGED ROCK MARINA CORP	FERRY RD	OLD SAYBROOK	CT
RIVER LANDING ASSOCIATES LTD	FERRY RD	OLD SAYBROOK	CT
SAYBROOK MARINE SERVICE INC	CLARK ST	OLD SAYBROOK	CT
WETMORE S MARINA	TOWN BEACH RD	OLD SAYBROOK	CT
YACHT DISTRIBUTORS INC	FERRY RD	OLD SAYBROOK	CT
HULL HARBOR INC	GROVE ST	PORTLAND	CT
PORTLAND BOAT WORKS INC	GROVE ST	PORTLAND	CT
PORTLAND RIVERSIDE MARINA INC	RIVERVIEW ST	PORTLAND	CT
YANKEE BOAT YARD & MARINA INC	RIVERVIEW ST	PORTLAND	CT
MARINA ANGELOPOULOS	UNCAS AV	QUAKER HILL	CT
SEA BOURNE MARINA	SETH LOW MTN RD	RIDGEFIELD	CT
AMUNDSEN OLE INC	RIVERSIDE AV	RIVERSIDE	CT
OLE'S BOAT YARD	RIVERSIDE AV	RIVERSIDE	CT
BOATWORKS INC	ROWAYTON AV	ROWAYTON	CT
HASKELL W ROBERT SERVICES	ROWAYTON AV	ROWAYTON	CT
HORIZON MARINE ENTERPRISES	WILSON AV	ROWAYTON	CT
ROWAYTON MARINE WORKS INC	ROWAYTON AV	ROWAYTON	CT
WHITE BRIDGE MARINA	ROWAYTON AV	ROWAYTON	CT
SOUTH GLASTONBURY MARINA INC	TRYON ST	S GLASTONBURY	CT
COPPERMINE INN & MARINA INC	COPPERMINE RD	SEYMOUR	CT
HARBOR VALLEY MARINA INC	VICTORY ST	SHELTON	CT
MURPHYS BOATYARD INC	RIVER RD	SHELTON	CT
RIVERS END MARINA INC	VICTORY ST	SHELTON	CT
LAKESIDE MARINA	LEE FARM DR	SOUTHBURY	CT
YE YACHT YARD	HARBOR RD	SOUTHPORT	CT
HARBOR SQUARE INC	CANAL ST	STAMFORD	CT
MAC DONALD YACHT RIGGING INC	7 YACHT HAVEN MARINE CTR	STAMFORD	CT

MARINA AMERICA INC	FOOT OF WASHINGTON BLVD	STAMFORD	CT
MARINA BAY CONDOMINIUM ASSOC	SEAVIEW AV	STAMFORD	CT
YACHT HAVEN INCORPORATED	FOOT OF WASHINGTON BLVD	STAMFORD	CT
YANKEE HARBOR MARINE INC	WALLACE ST	STAMFORD	CT
CARDINAL STANLEY A	RFD 3 BOX 90 C	STONINGTON	CT
DONS DOCK	WATER ST	STONINGTON	CT
HARSTAN OF STONINGTON INC	RR 3 BOX 187-B	STONINGTON	CT
INLAND YACHTS LTD		STONINGTON	CT
SOUTHERN NEW ENGLAND	TOWN DOCK	STONINGTON	CT
BROWN BOAT WORKS INC	STRATFORD AV	STRATFORD	CT
HOUSATONIC MARINA INC	FERRY BL	STRATFORD	CT
MARINE SYSTEMS	FOOT OF BROAD ST	STRATFORD	CT
STRATFORD MARINA INC	FOOT OF BROAD ST	STRATFORD	CT
AXELS MARINE SERVICE INC	AVENUE A	WATERFORD	CT
WADDYS DOCK & MARINA	ROPE FERRY RD	WATERFORD	CT
KIMBERLY HARBOR INC	KIMBERLY AV HWY	WEST HAVEN	CT
PROFESSIONAL SEA SERVICE INC	WARNER AV HWY	WEST HAVEN	CT
MYSTIC SHIPYARD INC	ESSEX ST	WEST MYSTIC	CT
WILLOW POINT MARINA	MAPLE AVENUE	WEST MYSTIC	CT
DICKS MARINA & RESTAURANT	BOSTON POST ROAD	WESTBROOK	CT
FIBERGLASS REPAIR COMPANY	WILLARD AVENUE	WESTBROOK	CT
HARRYS MARINE REPAIR INC	HAMMOCK DOCK RD	WESTBROOK	CT
PIER 76 INC	OLD BOSTON POST RD	WESTBROOK	CT
PILOTS POINT MARINA INC	PILOT PT DR AV	WESTBROOK	CT
PAWCATUCK RIVER BOAT YARD	MECHANIC ST	WESTERLY	CT
COASTWISE SERVICE INC	RIVERSIDE AV	WESTPORT	CT
1100 ABG/SSRM MARINE	BOLLING AIR FORCE BASE	WASHINGTON	DC
ANACOSTIA MARINA INC	M ST SE	WASHINGTON	DC
BUZZARD POINT BOATYARD	BOX 8114 S W STATION	WASHINGTON	DC
CARLEY CAPITAL GROUP	CONNECTCT AV NW	WASHINGTON	DC
NATIONAL MARINE MANUFACTURES	THOMAS JFRSN NW	WASHINGTON	DC
OTTAWAY MARINA S CONSULTANT	A ST SE	WASHINGTON	DC
SUMMIT NORTH MARINA	RED LION RD	BEAR	DE
BEASTONS BOAT RENTALS	HASSELL AVE	BETHANY BEACH	DE
WHITES CREEK MANOR INC	ROUTE 1 MIDDLESEX BEACH	BETHANY BEACH	DE
RUSTS MARINA	RT 2 BOX 22	DAGSBORO	DE
BARNARDS DELAWARE CITY MARINA	CANAL ST	DELAWARE CITY	DE
PONTOON EXPRESS INC	RURAL ROUTE 5 BOX 205	HARBESON	DE
LOVE CREEK MARINA MBL HM SITES	CHASKI LN	LAUREL	DE
ANGLERS RESTAURANT INC	ANGLER RD	LEWES	DE
FISHERMANS WAY INC	PILOT TOWN RD	LEWES	DE
LEWES HARBOR MARINA	CANAL	LEWES	DE
LOVE CREEK MARINA MBL HM SITE	RT 24 W	LEWES	DE
NEW HAPPY HOLIDAY BOAT SALES	SAVANNAH RD	LEWES	DE
RALEY ROBERT A	RT 24 & COUNTY RD 30	LEWES	DE
MISPILLION BOATYARD INC	RD 3 NEW WHARF RD	MILFORD	DE
MISPILLION LIGHTHOUSE MARINA	RT 1	MILFORD	DE
KOHLERS MARINE	LONGNECK RD	MILLSBORO	DE
ANCHOR MARINA INC	ELKTON RD	NEWARK	DE
DISTANT HORIZON DREAM INC	HWY 1	REHOBOTH BCH	DE
INDIAN RIVER MARINE SERVICE	INDIAN RV INLT	REHOBOTH BCH	DE

PIER POINT MARINA INC	RODNEY ST	REHOBOTH BCH	DE
WALKERS MARINE INC	SEAFORD-WOODLAND RD	SEAFORD	DE
WATER SPORTS LTD	BOX 164 RT 3	SELBYVILLE	DE
IMMELS MARINE INC	BROOM ST	WILMINGTON	DE
OLD 7TH STREET BOAT YARD	THE FOOT OF E 7TH ST	WILMINGTON	DE
RAMBLER BOAT WORKS INC	A ST	WILMINGTON	DE
ROGERS MARINE SERVICE	LAKE ST	ACUSHNET	MA
LENNIES BOAT CO	MAIN ST	AGAWAM	MA
DENIS JOHN J	ROBERT ST	ATTLEBORO	MA
BARNSTABLE MARINE SERVICE INC	MILLWAY RD	BARNSTABLE	MA
MILLWAY MARINE	MILLWAY BARNSTABLE HARBOR	BARNSTABLE	MA
ATLANTIS MARINA INC	PLEASANT ST	BOSTON	MA
BOSPORT DOCKING COMPANY INC	CONSTITUTION WHF	BOSTON	MA
FARRELL LINES INC	STATE ST	BOSTON	MA
NANTUCKET	INTERNATIONL PL	BOSTON	MA
NORWOOD MARINE INCORPORATED	R 24 ERICSSON ST	BOSTON	MA
QUARTERDECK MARINE CORP	CONDOR ST	BOSTON	MA
RAYMOND GROUP INC	EIGHTS STREET BOX 42	BOSTON	MA
SHERBURNE ASSOCIATES	INTERNATIONL PL	BOSTON	MA
TERN HARBOR MARINA	RIVER ST	BOSTON	MA
THORBURN MARINE	ALLSTON ST	BOSTON	MA
BIGELOW & COMPANY INC	MAC ARTHUR BLVD	BOURNE	MA
DICKS MARINE BROKERAGE	CRANBERRY HWY	BUZZARDS BAY	MA
FRIES AUTO & BOAT SALES INC	CRANBERRY HWY	BUZZARDS BAY	MA
ONSET BAY CORP	RFD 3	BUZZARDS BAY	MA
BALLENTINES BOAT SHOP INC	RT 28A	CATAUMET	MA
DENSMORE SHIPHERD OWNER	43 RTE 28 A	CATAUMET	MA
KINGMAN MARINE INC	SHIPYARD LANE	CATAUMET	MA
PARKERS BOAT YARD INC	RED BRK HBR RD	CATAUMET	MA
SQUETEQUE HARBOR MARINE	1375 ROUTE 28 A	CATAUMET	MA
CHATHAM MARINE ENTERPRISES	ELIPHAMET LANE	CHATHAM	MA
MEINCKE A M & SONS INC	BRIDGE ST	CHATHAM	MA
OUTERMOST HARBOR MARINE	SEAGULL RD	CHATHAM	MA
ADMIRAL HILLMARINA INC	JUSTIN DR	CHELSEA	MA
PEPINS SPORT CENTER INC	DELTA PARK	CHICOPEE	MA
MILL RIVER MARINE RAILWAYS	BORDER ST	COHASSET	MA
PECKS BOATS INC	RT 28	COTUIT	MA
NAUTICUS MARINA INC	ELM ST	DEDHAM	MA
SHAWS BOAT YARD INC	MAIN ST	DIGHTON	MA
BAKER BUOY	MATTAKEESETT CT	DUXBURY	MA
DUXBURY MARINA AND RAILWAY	MATTAKEESETT CT	DUXBURY	MA
LONG POINT MARINE INC	WASHINGTON ST	DUXBURY	MA
NORTHSIDE MARINA AT SESUIT HBR	SESUIT NECK RD	EAST DENNIS	MA
CAL YACHTING INC	GREEN HARBOR RD	EAST FALMOUTH	MA
EDWARDS BOATYARD INC	FALMOUTH HWY	EAST FALMOUTH	MA
GREEN POND FISHN GEAR INC	MENAUHANT RD	EAST FALMOUTH	MA
GREEN POND TACKE INC	MENAUHANT RD	EAST FALMOUTH	MA
MILLERS MARINE SALES & SERVICE	RESERVIOR RD	EAST OTIS	MA
EDGARTOWN MARINE INC	MORSE ST	EDGARTOWN	MA
GENTLE EDWIN B JR	UPPER MAIN ST	EDGARTOWN	MA
ACUSHNET RVR SAFE BG CLB	MIDDLE ST	FAIRHAVEN	MA

BRIGHTMANS MARINE CORP	ELM AV	FAIRHAVEN	MA
EARLS MARINA INC	WINSAGANSTT HTS	FAIRHAVEN	MA
FAIRHAVEN SHIPYARD INC	FT ST	FAIRHAVEN	MA
BORDEN LIGHT MARINA INC	BANK ST	FALL RIVER	MA
ANDREWS TONY & MARINA F	OLD MTG HSE	FALMOUTH	MA
BAY MARINA MANAGEMENT INC	STONEWALL LN	FALMOUTH	MA
BEST WESTERN-FALMOUTH MARINA	ROBBINS RD	FALMOUTH	MA
EAST MARINE INC	FALMOUTH HTS RD	FALMOUTH	MA
FALMOUTH MANAGEMENT CORP	SCRANTON AV	FALMOUTH	MA
MIZZEN MANAGEMENT INC	FALMOUTH HEIGHTS RD	FALMOUTH	MA
POOLE DOUGLAS ENTERPRISES	FALMOUTH HTS RD	FALMOUTH	MA
QUISSET HARBOR BOAT YARD INC	QUISSET HARBOR RD	FALMOUTH	MA
WOODS HOLE BOAT SALES INC	CLINTON AV	FALMOUTH	MA
PAULS MARINA	AQUA VITAE RD	HADLEY	MA
HARWICH PORT BOAT WORKS INC	HARBOR RD	HARWICHPORT	MA
HAPPY HOLLOW BOAT YARD	OTIS ST	HINGHAM	MA
HEWITTS COVE MARINA INC	LINCOLN ST	HINGHAM	MA
LANDFALL MARINE CENTER INC	LINCOLN ST	HINGHAM	MA
QUALITY FIBERGLASS INC	SUMMER ST	HINGHAM	MA
JONES FERRY MARINA INC	JONES FERRY RD	HOLYOKE	MA
NANTASKET PIER MARINE & MARINA	GEORGE WASH BL	HULL	MA
PRISCILLA SAILS	CADISH AV	HULL	MA
SUNSET MARINE INC	NANTASKET AV	HULL	MA
SOUTH RIVER YACHT YARD INC	MARSHFIELD AVE	HUMAROCK	MA
ALL CAPE MARINE	OLD YARMOUTH RD	HYANNIS	MA
BEARSE AUTO MARINE INC	ENTERPRISE RD	HYANNIS	MA
BRADBURY MARINE INC	PLEASANT ST	HYANNIS	MA
HARBOR PLACE MARINE INC	BREEDS HILL RD	HYANNIS	MA
LEWIS BAY MOTEL REST & MARINA	SCHOOL & SOUTH STS	HYANNIS	MA
MARINE CORP	ARLINGTON ST	HYANNIS	MA
LANDING MARINE	LANDING RD	KINGSTON	MA
BARDENS BOAT YARD INC	ISLAND WHF RD	MARION	MA
BURR BROTHERS BOATS INC	FRONT ST	MARION	MA
BRIDGEWAY INN OF MARSHFIELD	CORNER SEA & FERRY STS	MARSHFIELD	MA
TAYLOR MARINE CORP	WOODLAWN CIR	MARSHFIELD	MA
MARINE SERVICE & ELECTRONICS	PRINCE AV	MARSTONS MLS	MA
HALF TIDE MARINA INC	FROG POND CLOSE RD	MASHPEE	MA
EDEY DUFF BOAT YARD	AUCOOT RD	MATTAPOISETT	MA
ELEN PETER	OCEAN DR	MATTAPOISETT	MA
MATTAPOISETT BOATYARD INC	NEDS POINT RD	MATTAPOISETT	MA
STRATTON BOAT YARD	HARBOR RD	MATTAPOISETT	MA
CAPE MARINE INC	SHORE RD	MONUMENT BCH	MA
EXODUS MARINE INC	SHORE RD	MONUMENT BCH	MA
FIDDLERS COVE MARINA INC	FIDDLERS COVE RD	N FALMOUTH	MA
GAFFEY YACHTS INC	THE DRIFTWAY	N SCITUATE	MA
BOUDREAU BERNARD	NORTON ST	N WEYMOUTH	MA
SCALISI MARINE INC	PEARL ST	N WEYMOUTH	MA
HITHER CREEK BOAT YARD INC	CAMBRIDGE ST	NANTUCKET	MA
NANTUCKET HARBOR SERVICES	WESTERN AV	NANTUCKET	MA
NANTUCKET SHIPYARD INC	WASHINGTON ST	NANTUCKET	MA
SHERBURNE ASSOCIATES	ZERO MAIN STREET	NANTUCKET	MA

RICHARDSONS MARINE SERVICES	ENTERPRISE DR	NORTH CHATHAM MA
RON'S MARINE SERVICE	ENTERPRISE DR	NORTH CHATHAM MA
OX-BOW MARINA INC	ISLAND RD	NORTHAMPTON MA
ARMSTRONG BOATS	WASHINGTON ST	NORWELL MA
KINGS LANDING MARINA INC	KINGS LNDG	NORWELL MA
VINEYARD PORTHOLE INCORPORATED	CIRCUIT AVE EXTENSION	OAK BLUFFS MA
ONSET BAY CORPORATION INC	GREEN ST	ONSET MA
CROSBY YACHT YARD INC	CROSBY CIR	OSTERVILLE MA
OYSTER HARBOR MARINE INC	BRIDGE ST	OSTERVILLE MA
ONOTA BOAT LIVERY INC	PECKS RD	PITTSFIELD MA
JESSES BOAT YARD	HEDGE RD	PLYMOUTH MA
MARINER BOAT SHOP INC	STATE RD RTE #3A	PLYMOUTH MA
PLYMOUTH BOAT YARD	HEDGE RD	PLYMOUTH MA
PLYMOUTH MARINE INC	UNION ST	PLYMOUTH MA
BARLOWS BOAT YARD	WINGS NECK RD	POCASSET MA
BOSTON HARBOR MARINA CO	VICTORY AV	QUINCY MA
BOSTON HBR MRINA A JINT VNTURE	VICTORY AV	QUINCY MA
QUINCY BOAT & ENGINE COMPANY	DENSMORE ST	QUINCY MA
MASS BAY MARINE ENTERPRISES	WHITIN AV	REVERE MA
NORTH SHORE MARINE	SHORE RD	REVERE MA
CONCORDIA COMPANY INC	SOUTH WHARF S DARTMOUTH	S DARTMOUTH MA
DRY DOCK MARINE CORP	STATION AV	S YARMOUTH MA
MARINA BAY DIGIAVANNI	BOX 370	S YARMOUTH MA
SHIP SHOPS INC	PLEASANT ST	S YARMOUTH MA
MOFFITT E T CORPORATION	TOWN NECK RD	SANDWICH MA
SANDWICH CAPE COD CANAL MARINA	FREEZER RD	SANDWICH MA
FOXHILL YACHT CLUB INC	BALLARD ST	SAUGUS MA
PERFORMANCE MARINE INC	344 CENTRAL ST	SAUGUS MA
DRIFTWAY MARINE INC	DRIFTWAY RD	SCITUATE MA
SCITUATE HARBOR MARINA IN	PO BOX 301	SCITUATE MA
TOTAL MARINE CONCEPT INC	SUITE 203 MILL WHARF PLZ	SCITUATE MA
YOUNGS BOAT STORAGE INC	EDWARD FOSTER	SCITUATE MA
DONS MARINA	RIVERSIDE AV	SOMERSET MA
SOMERSET MARINE INC	RIVERSIDE AV	SOMERSET MA
ANDERSON KARL	47 THEOPHILUS F SMITH RD	SOUTH DENNIS MA
GALATEA INC	OLD MAYFAIR RD	SOUTH DENNIS MA
BRUNELLE INC	ALVORD ST	SOUTH HADLEY MA
AREYS POND BOAT YARD INC	AREYS LANE	SOUTH ORLEANS MA
HOLLAND SPORTS & MARINA	MASHPAUG ROAD	SOUTHBRIDGE MA
AMERICAN MARINE & BOATING CTR	PT GRV RD	SOUTHWICK MA
DIESS HARRY	CALEF AV	SWANSEA MA
COAST WISE WHARF CO INC	BEACH ST	VINEYARD HAVN MA
MACHINE & MARINE SERVICE INC	BEACH RD	VINEYARD HAVN MA
MACIEL MARINE LTD INC	LAGOON POND ROAD	VINEYARD HAVN MA
BEAR HILL INVESTMENT CORP	BEAR HILL RD	WALTHAM MA
CAPE COD SHIPBUILDING CO INC	NARROWS RD	WAREHAM MA
WARRS MARINE INC	LOWER MAIN ST	WAREHAM MA
WEBSTER LAKE MARINA	THOMPSON RD	WEBSTER MA
B K ENTERPRISES INC	BARN HILL LANE EXTENSION	WEST CHATHAM MA
BASS RIVER CORP	MAIN ST	WEST DENNIS MA
ROSE POINT MARINE INDUSTRIES	LEONARD ST	WEST WAREHAM MA

MC GOWAN MARINE	PINE HILL RD	WESTPORT	MA
TRIPP F L & SONS INC	CHERRY & WEBB RD	WESTPORT PT	MA
BELLE ISLE SALES & SERVICE	BELLEVUE TER	WINTHROP	MA
CRYSTAL COVE MARINA INC	SHIRLEY ST	WINTHROP	MA
ZEOLI MARINE SERVICE	PLEASANT ST	WINTHROP	MA
WOODS HOLE MARINE INC	WATER ST	WOODS HOLE	MA
LEWIS BAY MOTEL REST & MARINA	PRESCOTT ST	WORCESTER	MA
WIKANDER YACHT YARD INC	WINDROWS WAY	ALLEN	MD
ANNAPOLIS BAY CHANLERS INC	2ND ST	ANNAPOLIS	MD
ANNAPOLIS LANDING MARINA INC	KLAKRING RD	ANNAPOLIS	MD
ARNOLD GAY YACHT YARD	SHIPWRIGHT ST	ANNAPOLIS	MD
BAY EAST MARINA INC	SEVERN AV	ANNAPOLIS	MD
BEARDS CREEK MARINE	HIGHPOINT DR	ANNAPOLIS	MD
BTC INC	326 FIRST ST STE 21	ANNAPOLIS	MD
BURLEIGH CORPORATION	OLD ANNAPOLIS	ANNAPOLIS	MD
CAPE ST CLIRE IMPRV ASSCATION	RIVER BAY RD	ANNAPOLIS	MD
CHESAPEAKE HARBOR MARINA	CHESAPEAK HBR	ANNAPOLIS	MD
CRAIN BENNETT	EASTERN AV	ANNAPOLIS	MD
D AND D MARINA	HAVEN RD	ANNAPOLIS	MD
FAIRWINDS MARINA INC	FAIRWINDS DR	ANNAPOLIS	MD
FIRST MARINE GROUP INC	STATE ST	ANNAPOLIS	MD
GREENBELT DELIVERIES INC	COLONY DR	ANNAPOLIS	MD
HOLIDAY HILL MARINA INC	3RD ST	ANNAPOLIS	MD
JABIN BERT YACHT YARD INC	EDGEWOOD RD	ANNAPOLIS	MD
JONES MARINA ASSOCIATES	ELIZABETH RD	ANNAPOLIS	MD
MEARS J H & CO	EASTERN AV	ANNAPOLIS	MD
MEARS MARINA ASSOCIATES	CHESTER AV	ANNAPOLIS	MD
MEARS MARINA ASSOCIATES	CHESTER AV	ANNAPOLIS	MD
PIER 4 ASSOCIATES INCORPORATED	4TH ST	ANNAPOLIS	MD
PLEASURE COVE YACHT & BCH CLUB	BAY FRNT TER	ANNAPOLIS	MD
PORT ANNAPOLIS MARINA INC	BEMBES BEACH RD	ANNAPOLIS	MD
S & W MARINE INC	1ST ST	ANNAPOLIS	MD
SARDINIAS CLUB INTERNATIONAL	OLD ANNAPOLIS	ANNAPOLIS	MD
SARLES BOAT & ENGINE SHOP	BOUCHER AV	ANNAPOLIS	MD
SPA CREEK YCHT CLUB OF ANNPLIS	BURNSIDE AV	ANNAPOLIS	MD
SUNSHINE ONE INC	SEVERN AV	ANNAPOLIS	MD
SWAN CREEK ASSOCIATES LTD	4TH ST	ANNAPOLIS	MD
TANSTAAFL INC	ORCHARD RD	ANNAPOLIS	MD
TRED AVON ASSOCIATES LTD	4TH ST	ANNAPOLIS	MD
WOLVERTON MARINE	HOMERD LNDG RD	ANNAPOLIS	MD
YACHT BASIN CO	BOX 168	ANNAPOLIS	MD
YACHT BASIN COMPANY INC	COMPROMISE ST	ANNAPOLIS	MD
FERRY POINT YACHT BASIN INC	MILL CRK RD	ARNOLD	MD
ANCHOR BAY YACHT SALES INC	NANTICOKE RD	BALTIMORE	MD
ATLANTIC SAILING YACHTS OF MD	BOSTON ST	BALTIMORE	MD
B-7 PARTNERSHIP	BOSTON ST	BALTIMORE	MD
BALTIMORE MARINE TERMINAL ASSO	HOWARD ST	BALTIMORE	MD
BALTIMORE YICTBASAM	INSULATOR DR	BALTIMORE	MD
BAYSIDE MARINA ASSOCIATES	RUTHERFORD RD	BALTIMORE	MD
BEACON INC	BOWLEYS QTRS RD	BALTIMORE	MD
BOATEL BALTIMORE INC	BOSTON ST	BALTIMORE	MD

BOATING CENTER OF BALTIMORE	TURKEY POINT RD	BALTIMORE	MD
BROWNS COVE MARINA INC	BROWNS RD	BALTIMORE	MD
BUEDELS MARINA & BOAT YARD	OLD EASTERN AV	BALTIMORE	MD
CARLEY CAPITAL GROUP	FELLS ST	BALTIMORE	MD
CHESAPEAKE CLASSIC YACHT SVC	31ST ST	BALTIMORE	MD
CHESAPEAKE YACHTING CENTER	WAGNER LN	BALTIMORE	MD
DECKELMANS BOAT YARD	201 OAK AVE	BALTIMORE	MD
EDWARDS BOAT YARD INC	EDWARDS LN	BALTIMORE	MD
ESSEX YACHT HARBOR	SANDALWOOD RD	BALTIMORE	MD
EVERING JOSEPH F JR	CHESTER RD	BALTIMORE	MD
FT MCHENRY SHIPYARD INC	25TH ST	BALTIMORE	MD
GALLOWAY CREEK MARINA INC	BURKE RD	BALTIMORE	MD
INNER HARBOR MARINA	KEY HWY	BALTIMORE	MD
JACKS MARINE SERVICE	GREENLAND BEACH	BALTIMORE	MD
JENKINS NORTH INC	HOLLY NECK RD	BALTIMORE	MD
KEY BRIDGE MARINA	COVE RD	BALTIMORE	MD
LAMPRON ENTERPRISES INC	HILLTOP AV	BALTIMORE	MD
LIBERTY ADVERTISING LTD	HOLLY NECK RD	BALTIMORE	MD
MARINA ENTERPRISES LTD	BRIAR POINT RD	BALTIMORE	MD
MARINE OFFICE OF AMERICA CORP	WEST RD	BALTIMORE	MD
MARKEL LOUIS F	PT CRK RD	BALTIMORE	MD
MARKLEYS MARINA INCORPORATED	NANTICOKE RD	BALTIMORE	MD
MIDDLE RIVER MARINE INC	BROWNS RD	BALTIMORE	MD
NORTH POINT MARINA	CREEK RD	BALTIMORE	MD
OLD BAY BOAT WORKS	BAY FRONT RD	BALTIMORE	MD
PETES MARINA	GROSS AV	BALTIMORE	MD
PORTERS SENECA PARK MARINA	SENECA PARK RD	BALTIMORE	MD
RILEYS MARINA SALES & SERVICE	OLD EASTERN AV	BALTIMORE	MD
RIVERSIDE MARINE INC	RIVERSIDE DR	BALTIMORE	MD
RUDYS MARINA INC	SHORE RD	BALTIMORE	MD
SAMPLE MARINE MOTORS	MITCHELL RD	BALTIMORE	MD
SHECKELLS BOAT YARD	WISE AV	BALTIMORE	MD
SHELTERED HARBOR MARINA SVCS	STANSBURY RD	BALTIMORE	MD
STANSBURY YACHT BASIN	SHORE RD	BALTIMORE	MD
STONEY CREEK BOAT YARD INC	CARVEL BEACH RD	BALTIMORE	MD
SUE CREEK BOAT YARD INC	POPLAR RD	BALTIMORE	MD
SUN MARINE INC	NOLLMEYER RD	BALTIMORE	MD
TRADEWINDS MARINA INC	ARMSTRONG RD	BALTIMORE	MD
WEAVERS MARINE SERVICE INC	RIVERSIDE DR	BALTIMORE	MD
WEST SHORE YACHT CENTER INC	RIVERSIDE AV	BALTIMORE	MD
YOUNGS BOAT YARD	GROSS AV	BALTIMORE	MD
BENEDICT MARINA	P O BOX 200	BENEDICT	MD
DE SOTOS LANDING MARINA	DESOTO LN	BENEDICT	MD
OCEAN PINES MARINA	OCEAN PINES	BERLIN	MD
LIBERTY YACHT CLUB	BETHESD MTR CTR	BETHESDA	MD
BUDDYS MARINA	RT 2 BOX 85	CALIFORNIA	MD
MILL COVE HARBOR	MILL COVE HARBOR RD	CALIFORNIA	MD
LAST CHANCE INC	P O BOX 73	CHANCE	MD
SCOTTS COVE MARINA	P O BOX 150	CHANCE	MD
AVALON YACHT BASIN INC	COR LOUISA & WATER STREET	CHARLESTOWN	MD
PEPCO INC	WATER ST 4	CHARLESTOWN	MD

BOHEMIA BAY YACHT	TOWN PT RD	CHESAPEAKE CY MD
BOHEMIA RIVER ASSOCIATES LTD	TOWN PT RD	CHESAPEAKE CY MD
BOHEMIA VISTA YACHT BASIN	VISTA MARINA RD	CHESAPEAKE CY MD
HARBOUR NORTH MARINA INC	RIVER RD	CHESAPEAKE CY MD
MC CARTHY WILLIAM	TOWN PT RD	CHESAPEAKE CY MD
SCHAEFERS MARKET INC	BANK ST	CHESAPEAKE CY MD
TWO RIVERS YACHT BASIN INC	2 RIVERS LN	CHESAPEAKE CY MD
ROD & REEL INC	ROUTE 261	CHESAPKE BCH MD
BAY BOAT SHOP INC	CRAB ALLEY ROAD	CHESTER MD
ISLAND VIEW MARINA	CRABALLEY DRIVE	CHESTER MD
STRONG BAY YACHT SALES INC	W S CASTLE MARINA RD	CHESTER MD
THOMPSON BOAT YARD	LITTLE CREEK	CHESTER MD
GREAT OAK LANDING PARTNERSHIP	HANDY POINT ROAD	CHESTERTOWN MD
KIBLERS MARINA	FOOT OF CANNON ST	CHESTERTOWN MD
TOLCHESTER MARINA INC	MD RT #21	CHESTERTOWN MD
WORTON CREEK MARINA INC	BUCK NECK RD	CHESTERTOWN MD
GOOTEES MARINE INC	JCT MD RTS 335 & 336	CHURCH CREEK MD
NAVIS MARINE OPERATIONS INC	KENNERSLEY POINT MARINA	CHURCH HILL MD
MONA PROPERTIES	MALCOLM DR	CLINTON MD
PORT TOBACCO MARINA INC	MALCOLM DR	CLINTON MD
COBB ISLAND MARINA INC	NE CRAIN BLVD	COBB ISLAND MD
CATHER MARINE INC	WINDSOR DR	COLTONS POINT MD
S D S MARINE SERVICES INC	MD RT #242	COLTONS POINT MD
CRISFIELD FISHING CENTER	JERSEY ISLAND RD	CRISFIELD MD
CROCKETT SHIP YARD	BOX 5 HOSPITAL ROAD	CRISFIELD MD
MARYLAND INC STATE OF	7TH ST	CRISFIELD MD
SMITHS MARINA	RIDGELY RD	CROWNSVILLE MD
DIVER DOWN DIVING SERVICE	PETERSBURG RD	DAVIDSONVILLE MD
BAY MARINE SERVICE	DEALE RD	DEALE MD
HANSELS MARINA	DRUM POINT RD NEAR MD 256	DEALE MD
MC MASTERS MARINA INC	DRUM PT RD	DEALE MD
PHIPPS MARINE RAILWAY	OFF DRUM POINT RD	DEALE MD
RAMSEY INC	VACATION LN	DEALE MD
SHERMANS MARINA	DEALE RD	DEALE MD
SHIPWRIGHT HARBOR INC	HERRING BAY RD	DEALE MD
DENNIS POINT MARINA INC	WINDMILL PT RD	DRAYDEN MD
LONG POINT MARINA INC	KITTY KNIGHT BL	EARLEVILLE MD
LOSTEN MARINA	GLEBE RD	EARLEVILLE MD
RICHMONDS MARINA	GREENSPRING RD	EARLEVILLE MD
EASTON POINT MARINA INC	EASTON POINT ON PORT RD	EASTON MD
LINCOLN CNTY LAND CTTLT CMPNY	BROOKLETTS AV	EASTON MD
UPPER FERRY MARINE	RT 1	EDEN MD
ANCHOR YACHT BASIN INC	TURKEY PT RD	EDGEWATER MD
BENNETT SKIP MARINE LTD	SOLOMONS IS RD	EDGEWATER MD
BURR YACHT SALES INC	TURKEY PT RD	EDGEWATER MD
CADDLE CREEK MARINA	CADDLE CRK RD	EDGEWATER MD
ELFREY JOHN W CO	WYNE PL	EDGEWATER MD
FISHERMANS DOCK	CARRS WHF RD	EDGEWATER MD
HOLIDAY POINT MARINA INC	BEACH DR	EDGEWATER MD
LEITCH R S COMPANY	SOLOMONS IS RD	EDGEWATER MD
LIBERTY YACHT CLUB INC	OLD SOUTH RV RD	EDGEWATER MD

LILY BROTHERS YACHT YARD	SOLOMONS IS RD	EDGEWATER	MD
LONDONTOWN MARINA INC	N/E SIDE SHORE DR	EDGEWATER	MD
MARITIME MOBILE MARINE INC	RUXTON RD	EDGEWATER	MD
MARKS MARINA INC	SOLOMONS IS RD	EDGEWATER	MD
MAYO RIDGE MARINA	WATERVIEW DR	EDGEWATER	MD
OAK GROVE INC	SOLOMONS IS RD	EDGEWATER	MD
PAULS MARINA	POCOHANTAS DR	EDGEWATER	MD
PIER 7	SOUTH RV RD	EDGEWATER	MD
RHODE RIVER MARINA INC	GERMANTOWN RD	EDGEWATER	MD
SELBY BAY YACHT BASIN INC	SELBY BL	EDGEWATER	MD
SHRIG BOATYARD INC	RIVER TER	EDGEWATER	MD
STILL HARBOUR MARINE	TURKEY PT RD	EDGEWATER	MD
TOLOROSA INC	TURKEY PT RD	EDGEWATER	MD
TRADEWINDS MARINA INC	TURKEY PT RD	EDGEWATER	MD
TROJAN HARBOR MARINA	FLYING POINT RD	EDGEWOOD	MD
ELK HAVEN MARINA NC	GREEN HAVEN DR	ELKTON	MD
LOCUST POINT MARINA INC	RIVER RD	ELKTON	MD
MITCHELLS MARINA	MAINSAIL DR	ELKTON	MD
TUG & MARINE SERVICES INC	RIVER RD	ELKTON	MD
B W S MIDWAY MARINA	MC GLAUGHLIN LANE	FISHING CREEK	MD
MARYLAND INC STATE OF	KING CHARLES SE	FT WASHINGTON	MD
GREGG NECK BOAT YARD INC	GREGG NECK RD	GALENA	MD
GALESVILLE YACHT YARD	RIVERSIDE DR	GALESVILLE	MD
HARTGE YACHT YARD INC	CHURCH LANE	GALESVILLE	MD
SHADY OAKS MARINA	SHADY OAKS LN	GALESVILLE	MD
SMITH BROTHERS INC	WOODFIELD RD	GALESVILLE	MD
STEAMBOAT LANDING INC	RIVERSIDE DR	GALESVILLE	MD
DUFFY CREEK MARINA INC	NR SASSAFRAS RIVER	GEORGETOWN	MD
GEORGETOWN YACHT BASIN INC	ON THE SASSAFRAS RIVER	GEORGETOWN	MD
SAILING ASSOCIATES INC	N/S SASSAFRAS RIVER	GEORGETOWN	MD
FRIENDSHIP MARINA	LEYMAR RD	GLEN BURNIE	MD
MAURGALE MARINA INC	NABBS CREEK RD	GLEN BURNIE	MD
DROTERS MARINA INC	C/O ANGLERS MARINA	GRASONVILLE	MD
LIPPINCOTT SAILING YACHT INC	ROUTE 2 BOX 545	GRASONVILLE	MD
MEARS MARINA ASSOCIATES	KENT NARROWS SWRDS MRN RD	GRASONVILLE	MD
ROYAL LEEN MARINE	RT 1 BOX 536 A-1	GRASONVILLE	MD
SCOTT MARINE INC	KENT NARROWS S	GRASONVILLE	MD
PENNS BEACH MARINA INC	FOOT OF LEWIS ST	HAVR DE GRACE	MD
TIDEWATER/HAVRE DE GRACE INC	FOOT OF BOURBON ST	HAVR DE GRACE	MD
BLACKSTONE MARINA	BLACKSTONE RD	HOLLYWOOD	MD
RIPPON BROTHERS SEAFOOD INC	MD RT 335 BOX 204	HOOPERSVILLE	MD
COMBS CREEK MARINA	RT 2 BOX 59	LEONARDTOWN	MD
PINE COVE MARINE CORPORATION	RT 760 BOX 270	LUSBY	MD
DORCHESTER FAMILY RESTAURANT	RT 16 TAYLORS ISLAND RD	MADISON	MD
CASA RIO MARINA INC	CADLE CRK RD	MAYO	MD
CHESAPEAKE MARINE SURVEY	CARRS WHARF ROAD	MAYO	MD
CAPE ST MARYS MARINA INC	END OF MAYPOLE AVE	MECHANICSVL	MD
HORIZON MARINE INC	JUMPERS HOLE RD	MILLERSVILLE	MD
RIVERVIEW MARINA INC	N/S MD RT 301	NEWBURG	MD
ANCHOR MARINA	MAULDIN AV	NORTH EAST	MD
BAY BOAT WORKS INC	HANCES POINT	NORTH EAST	MD

MC DANIEL YACHT BASIN INC	GRANDVIEW AV	NORTH EAST	MD
SHELTERS COVE MARINA INC	PO BOX 483	NORTH EAST	MD
B & R BAYSIDE BOATEL INC	US 50 W OF BRIDGE	OCEAN CITY	MD
BAHIA MARINA INC	HERRING WY	OCEAN CITY	MD
FISHERMANS MARINA	SOUTH HARBOR RD	OCEAN CITY	MD
NEW WHITE MARLIN MARINA INC	SOMERSET AND BAY	OCEAN CITY	MD
O C BAYSIDE MARINA INC	RT 50	OCEAN CITY	MD
TALBOT STREET PIER INC	TALBOT ST	OCEAN CITY	MD
TRIMPER DANIEL	U S RT 50	OCEAN CITY	MD
APPLEGARTHS MARINE YARD	MORRIS ST	OXFORD	MD
CROCKETT BROS BOAT YARD INC	BANK ST	OXFORD	MD
CUTTS & CASE INC	TILGHMAN ST	OXFORD	MD
MCNAB CORPORATION	TILGHMAN ST	OXFORD	MD
OXFORD MARINE INC	2ND & RICHARDSON STS	OXFORD	MD
OXFORD YACHT AGENCY INC	MORRIS ST	OXFORD	MD
PIER STREET MARINA AND REST	PIER ST	OXFORD	MD
TRED AVON YACHT CLUB	STRAND	OXFORD	MD
BAR HARBOR MARINA INC	BAR HARBOR RD	PASADENA	MD
BODKIN YACHT CLUB INC	BELHVN BH MDW	PASADENA	MD
BODKINS BOATYARD	CEDAR RD	PASADENA	MD
CARBACK RICHARD T	POPLAR RG RD	PASADENA	MD
FAIRVIEW MARINE CORPORATION	FAIRVIEW BCH RD	PASADENA	MD
FLORIDA MARINA AND BOAT SALES	MOUNTAIN RD	PASADENA	MD
HAMMOCK ISLAND MARINA	VENTNOR RD	PASADENA	MD
LAKE MONTAUK LTD PARTNERSHIP	WATER OK PT	PASADENA	MD
PASADENA BOATEL & BEACH CLUB	KNOLLVIEW AV	PASADENA	MD
PASADENA YACHT YARD	FT SMALLWOOD RD	PASADENA	MD
VENTNOR MARINE SERVICE INC	VENTNOR RD	PASADENA	MD
WATERSIDE PROPERTIES INC	COLONY RD	PASADENA	MD
BUSH RIVER BOAT WORKS INC	PERRYMAN RD	PERRYMAN	MD
CHESTNUT POINT MARINE CAMP	CHESTNUT PT RD	PERRYVILLE	MD
CRAFT HVEN MARINA CAMPGROUNDS	CARPENTERS POINT RD	PERRYVILLE	MD
OWENS A H & SONS INC	RIVER ROAD	PERRYVILLE	MD
CURLEYS POINT MARINA	CLARK RD	PINEY POINT	MD
PORT TOBACCO INN & MARINA	SHIRLEY BLVD	PORT TOBACCO	MD
HALPERIN EDWARD	IRON GATE CT	POTOMAC	MD
M & H MARINE SERVICE	ROUTE 13/MOUNT VERNON RD	PRINCESS ANNE	MD
MARINA MAGOTHY INC	RT 1 BOX 203	QUEENSTOWN	MD
MISTY COVE MARINA	BOX 513	RIDGE	MD
PT LOOKOUT MARINE PROPERTIES	MILLERS WHF RD	RIDGE	MD
TROSSBACH OYSTER HOUSE	AIREDALE ROAD	RIDGE	MD
CAINS WHARF	WALNUT ST	ROCK HALL	MD
CHESTER RIVER MARINE SERVICE	RT 1 BOX 13 A	ROCK HALL	MD
KENDALL MARINA	SOUTH WALNUT ST	ROCK HALL	MD
LANKFORD BAY MARINA INC	MC KINLEYVILLE ROAD	ROCK HALL	MD
NORTH SIDE MARINA INC	S WALNUT ST	ROCK HALL	MD
OSPREY POINT INC	RT 20 AT THE BAY	ROCK HALL	MD
PORT OF ROCK HALL INC	ROUTE 20 GRATITUDE ROAD	ROCK HALL	MD
SAILING EMPORIUM INC	GREEN LANE	ROCK HALL	MD
SPRING COVE MARINA	SPRING COVE LANE	ROCK HALL	MD
STEAMBOAT LANDING MARINA	RT 1 BOX 92 A	ROCK HALL	MD

SWAN CREEK MARINA INC	GRATITUDE POINT	ROCK HALL	MD
SWAN POINT PROPERTIES LTD	END OF RT 20 AKA GRITUDE	ROCK HALL	MD
GREAT OAK LANDING PARTNERSHIP	6000 EXCTIVE BLVD STE 700	ROCKVILLE	MD
MAGOTHY MARINE PROPERTIES	FEDERICK RD	ROCKVILLE	MD
MEARS MARINA ASSOCIATES	6000 EXCTIVE BLVD STE 700	ROCKVILLE	MD
MEARS POINT MARINA ASSOCIATES	EXECUTIVE BL	ROCKVILLE	MD
PLEASURE COVE YACHT & BCH CLUB	FREDERICK RD	ROCKVILLE	MD
CLARKS GOOSE CREEK MARINA	RT 1 MEADOWBRIDGE ROAD	SALISBURY	MD
MC GINTY MARINA CONSTRUCTION	WHITMAN AV	SALISBURY	MD
JORDON DICK INC	RT 5	SCOTLAND	MD
CYPRESS MARINE INC	CYPRESS RD	SEVERNA PARK	MD
PLEASURE COVE MARINA	N DR	SEVERNA PARK	MD
SAPPINGTONS MAR REPR DRY STOR	SEVERN RD	SEVERNA PARK	MD
SAPPINGTONS YACHT YARD INC	SEVERN RD	SEVERNA PARK	MD
SAPPINGTONS YACHT YARD INC	SEVERN RD	SEVERNA PARK	MD
SOUTH SHORE MARINE	RITCHIE HWY	SEVERNA PARK	MD
B S W M ENTERPRISES INC	FORD ROAD	SHADY SIDE	MD
BACKYARD BOATS-SHADYSIDE INC	WOODS WHF RD	SHADY SIDE	MD
BSWM ENTERPRISES INC	FORD RD	SHADY SIDE	MD
PARISH CREEK MARINA BOAT YARD	FORD RD	SHADY SIDE	MD
PARRISH CREEK MARINA	FORD RD	SHADY SIDE	MD
HARGIS MARINA	BAYSIDE RD	SNOW HILL	MD
PUBLIC LANDING HARBOR	RT 3 BOX 121 A	SNOW HILL	MD
CALVERT MARINA LTD PARTNERSHIP	DOWELL ROAD	SOLOMONS	MD
HARBOR ISLAND MARINA INC	ROUTE 2-4	SOLOMONS	MD
LANGLEY POINT MARINA INC	MD RT 2 & 4	SOLOMONS	MD
LEITCH R S COMPANY	CHARLES & WILLIAM ST	SOLOMONS	MD
SHEPHARDS YACHT YARD	LORE ST	SOLOMONS	MD
SOLOMONS YACHTING CENTER	A STREET	SOLOMONS	MD
SPRING COVE MARINA LTD	LORES ST	SOLOMONS	MD
WASHBURN CHRIS BOAT YARD INC	CALVERT MARINA DOWELL RD	SOLOMONS	MD
ZAHNISERS INC	C STREET	SOLOMONS	MD
FLAG HARBOR LTD PARTNERSHIP	SKYLINE DR	ST LEONARD	MD
FLAG HARBOR YACHT HAVEN	LONG BEACH AT ST LEONARD	ST LEONARD	MD
HIGGINS YACHT YARD INC	CARPENTER STREET	ST MICHAELS	MD
ST MICHAELS HARBOUR INN &	HARBOUR RD	ST MICHAELS	MD
ST MICHAELS TOWN DOCK MARINA	MULBERRY ST	ST MICHAELS	MD
KENT ISLAND JOINT VENTURE	BOX 26	STEVENSVILLE	MD
QUEEN ANNE MARINA INC	410 CONGRESSIONAL DR	STEVENSVILLE	MD
WEHRS DAVID W INC	KENTMORR RD	STEVENSVILLE	MD
TALL TIMBERS DEV CO INC	TALL TIMBERS MARINA	TALL TIMBERS	MD
COLLIER RONALD	GENERAL DELIVERY	TILGHMAN	MD
E B C INC	ROUTE 33 & KNAPPS NARROW	TILGHMAN	MD
KNAPPS NARROW MARINA INC	RT 33 AT KNAPPS NARROWS	TILGHMAN	MD
REESER HENRY	OFF COOPERSTOWN RD	TILGHMAN	MD
SEVERN MARINE SERVICES	CHICKEN POINT ROAD	TILGHMAN	MD
HERRINGTON NORTH INC	HIGHVIEW RD	TRACYS LNDG	MD
GATEWAY MARINA	RT 1 BOX 55-A	TRAPPE	MD
GOOSE CREEK MARINE	P O BOX 169	UPR FAIRMOUNT	MD
TALL TIMBERS DEVELOPMENT CO	BOX 9	VALLEY LEE	MD
GOOSE BAY MARINA	RT 1 BRENTLAND RD	WELCOME	MD

ESSEX SEAFOOD INC	END OF MD ST RT 363	WENONA	MD
KARLSSON ERICH P BUILDERS	CHERRY PT RD	WEST RIVER	MD
KIRCHNERS BOAT YARD INC	CHALK PT RD	WEST RIVER	MD
SHADY OAKS MARINA INC	SHADY OAKS RD	WEST RIVER	MD
BOWERMAN GEORGE S JR	BOWERMAN RD	WHITE MARSH	MD
IMPERIAL MARINE INC	US RT 40	WHITE MARSH	MD
POWLEY MARY P	STAR RT 336	WINGATE	MD
GREENPOINT MARINA	RT 1 BOX 267	WORTON	MD
ABSECON BAY SPORTSMAN CENTER	NATALIE TER	ABSECON	NJ
NORTH CHANNEL MARINA	EDGEMERE DR	ALLENHURST	NJ
YOUNG MARINE COMPANY	SEWELL AV	ASBURY PARK	NJ
BLUE WATER MARINA INC	MADISON AND AMHERST AVE	ATLANTIC CITY	NJ
KAMMERMAN LESLIE R	CARSON AV	ATLANTIC CITY	NJ
LONGPORT MARINE CO	26TH AVE	ATLANTIC CITY	NJ
M W BOAT & ENGINE WORKS	CARSON AV	ATLANTIC CITY	NJ
MARINE RAILWAY OF ATLANTIC CY	CARSON AV	ATLANTIC CITY	NJ
SEAVIEW HARBOR MARINA INC	STATE HIGHWAY 152	ATLANTIC CITY	NJ
H & D BOAT HAULING	HIGHLAND AV	ATLNTIC HGLDS	NJ
AVALON ANCHORAGE MARINA INC	21ST ST	AVALON	NJ
AVALON POINTE MARINA	OLD AVALON BL	AVALON	NJ
HARVEYS PORT OF CALL INC	9TH-12TH AVE/OCEAN DRIVE	AVALON	NJ
AVON FISHING BASIN INC	MAIN ST	AVON BY SEA	NJ
MAIN-ONE MARINA INC	MAIN ST	AVON BY SEA	NJ
BARNEGAT BOAT BASIN	BAY AV	BARNEGAT	NJ
DEL-CAS INC	BAY AV	BARNEGAT	NJ
IGGIES MARINA	BAY	BARNEGAT	NJ
MARINERS MARINA INC	EAST BAY AVE	BARNEGAT	NJ
SHERERS BOAT BASIN	BAY AV	BARNEGAT	NJ
HIGH BAR ISLAND MARINA INC	SUNSET BL	BARNEGAT LGT	NJ
LIGHT HOUSE MARINA INC	6TH ANDBAY AVE	BARNEGAT LGT	NJ
STOTT CHARLES E JR	9TH STREET & BAY	BARNEGAT LGT	NJ
VIKING VILLAGE INC	18TH STREET & BAY	BARNEGAT LGT	NJ
NEW ELCO MARINA INC	A AV	BAYONNE	NJ
BECKERS BOAT BASIN	BAYVIEW AVE	BAYVILLE	NJ
BERTH PLACE INC	BELMONT AV	BAYVILLE	NJ
CEDAR CREEK MARINA	HARBOR INN RD	BAYVILLE	NJ
HOLLY PARK LANDING INC	ISLAND DR	BAYVILLE	NJ
RIVERBANK MARINA	CORRIGAN AV	BAYVILLE	NJ
SANTO MARINE CORPORATION	DOYLE ST	BAYVILLE	NJ
STUMP CREEK SLIP WAYS	CHELSEA AV	BAYVILLE	NJ
WIND & WATER SPORTS INC	BRENNAN CONCRSE	BAYVILLE	NJ
ESCAPE HARBOR SERVICE COMPANY	BAY & DELAWARE AVE	BEACH HAVEN	NJ
GARABOS JIM MARINA INC	ROSEVELT AV	BEACH HAVEN	NJ
GARABOS MARINA	ROOSEVELT AV	BEACH HAVEN	NJ
GARDEN HARBOR MARINA INC	32ND ST & BALTIC AVE	BEACH HAVEN	NJ
HAGLERS MARINA INC	4114 LONG BEACH BLVD	BEACH HAVEN	NJ
HOLGATE HARBOR INC	WEST AV	BEACH HAVEN	NJ
ISLAND MARINA	BAY AV	BEACH HAVEN	NJ
LOVELADIES MARINA INC	LIGHTHOUSE WY	BEACH HAVEN	NJ
MORDECAI BOAT BASIN INC	LIBERTY AV	BEACH HAVEN	NJ
MORRISONS SEAFOOD INC	SECOND AVE & BAY FRONT	BEACH HAVEN	NJ

PENNA MARINA INC	TEBCO TER	BEACH HAVEN	NJ
SCHOENBERGS BOATEL INC	2ND ST	BEACH HAVEN	NJ
SOUTH GATE MARINA	OSBORNE AVE	BEACH HAVEN	NJ
SPORTSMANS DOCK MARINA	20TH ST & THE BAY	BEACH HAVEN	NJ
SPORTSMANS DOCK MARINA	WAVERLY AV	BEACH HAVEN	NJ
WOEHRS TRAILER PARK & MARINA	WEST AV	BEACH HAVEN	NJ
SHELTER COVE MARINA	RTE 601	BELLE MEAD	NJ
JOES MARINA	CREEK RD	BELLMAWR	NJ
A P INLET MARINA & CO	5TH AV	BELMAR	NJ
A P S INLET MARINA AND CO	5TH AV	BELMAR	NJ
ATLANTIC OFFSHORE PERFORMANCE	RIDGE RD	BRICK TOWN	NJ
BRETON WOODS MARINA	BURTIS AV	BRICK TOWN	NJ
CAPE MAY MARINA INC	DRIFTWOOD DR	BRICK TOWN	NJ
CASSIDYS BRETON WOODS MARINA	BURTIS AV	BRICK TOWN	NJ
CLIPPER ASSOCIATES INC	RT 70	BRICK TOWN	NJ
DAVISAB INC	DIVISION ST	BRICK TOWN	NJ
HARRISON EDWARD J INC	PILOT DR	BRICK TOWN	NJ
HERITAGE YACHTS INC	RT 70	BRICK TOWN	NJ
HUPPERT MARINE CO INC	RT 70	BRICK TOWN	NJ
J LIN INC	DRUM POINT RD	BRICK TOWN	NJ
JOHNSONS BOAT BASIN INC	841 STATE HWY E #70	BRICK TOWN	NJ
KURTS MAR COMPETITION CTR	MANTOLOKING RD	BRICK TOWN	NJ
MALGARBEACH INC	PRINCETON AV	BRICK TOWN	NJ
MANTOLOKING MARINE MART INC	MANTOLOKING RD	BRICK TOWN	NJ
MENTOR MARINE INC	PRINCETON AV	BRICK TOWN	NJ
RIVIERA ESTATES INC	BRICK BL	BRICK TOWN	NJ
SHERMANS BOAT BASIN	PRINCETON AV	BRICK TOWN	NJ
STARKS LANDING INC	PRINCETON AV	BRICK TOWN	NJ
WEHRLLEN BROTHERS MARINA INC	PRINCETON AV	BRICK TOWN	NJ
HANCOCKS HARBOR INC	BACONS NECK RD	BRIDGETON	NJ
BRIELLE MARINE BASIN INC	GREEN AV	BRIELLE	NJ
HOFFMAN MARINA	GREEN ST	BRIELLE	NJ
HOFFMANS ANCHORAGE INC	GREEN AV	BRIELLE	NJ
SPORTSIDE MARINA INC	UNION LN	BRIELLE	NJ
VOORHEES ROBERT M	STATE HWY 35/EUCLID AVE	BRIELLE	NJ
YACENDA ENTERPRISES	OCEAN AV	BRIELLE	NJ
BOBS OUTBOARD MARINE	SHORE DR	BRIGANTINE	NJ
DEEBOLD BOAT YARD	SHORE DR	BRIGANTINE	NJ
JOLLY ROGER MARINA	BAYSHORE AV	BRIGANTINE	NJ
PETERSONS MARINA	ATLANTIC BRG BL	BRIGANTINE	NJ
STARR KATHLEEN E	BAYSHORE AV	BRIGANTINE	NJ
VANCE HOWARD	ATLANTIC BRG BL	BRIGANTINE	NJ
VINCES DOCK	SHORE DR	BRIGANTINE	NJ
CURTIN MARINA INC	E PEARL ST	BURLINGTON	NJ
TOPEZ MARINE TRANSPORT	WALL AV	BURLINGTON	NJ
BUOY 77 MARINA INC	WASHINGTON AV	CALDWELL	NJ
PYNE POYNT MARINE SERVICES	N 7TH ST & DELAWARE RIVER	CAMDEN	NJ
CAPE MAY MARINE INC	LAFAYETTE ST	CAPE MAY	NJ
HARBOR TOWN RESORT MARINA INC	GARDEN ST PKWY OCN HWY	CAPE MAY	NJ
HINCH MARINA	OCEAN DR	CAPE MAY	NJ
JENLO CORP	S/S OCEAN DR	CAPE MAY	NJ

MC NEILL MARINA	OCEAN DRIVE/MILL CREEK RD	CAPE MAY	NJ
MISS CHRIS FISHING MARINA	OLD MILL DR	CAPE MAY	NJ
PHARD S BOAT YARD	LAFAYETTE ST	CAPE MAY	NJ
ROSEMAN BOAT YARD	ROSEMANS LN	CAPE MAY	NJ
SEVEN EVANS MARINA INC	WASHINGTON ST	CAPE MAY	NJ
SOUTH JERSEY MARINA INC	RT 109	CAPE MAY	NJ
SUNSET HARBOR MARINA	WILSON DR	CAPE MAY	NJ
TONYS MARINE RAILWAYS INC	U S RTE 9	CAPE MAY	NJ
UTSCHS DOCK	RT 109	CAPE MAY	NJ
YACHT LODGE MARINA	YACHT AV	CAPE MAY	NJ
BAY POINT MARINA	PARIS RD	CEDARVILLE	NJ
MISS FORTESCUE INC	MULFORD AVE	CEDARVILLE	NJ
JOHNSON BROTHERS BOAT	MAIN ST	CHATHAM	NJ
BAY POINT HARBOUR INC		CONVENT STA	NJ
COXS PENNY HILL BOAT YARD	MAIN STREET	DORCHESTER	NJ
TOWER MARINA INC	FOOT OF SCHOOLHOUSE LANE	E BRUNSWICK	NJ
RICHMOND MARINE INC	RIVER RD	EDGEWATER	NJ
VON DOHLN BROS INC	RIVER RD	EDGEWATER	NJ
VON DOHLN MARINA	RIVER RD	EDGEWATER	NJ
FAIR HAVEN ASSOCIATES INC	FOOT OF DE NORMANDIE AVE	FAIR HAVEN	NJ
HIMAR INC	GRANGE AV	FAIR HAVEN	NJ
RICKS MARINA INC	MARINE PLZ	FORKED RIVER	NJ
SILVER BAY MARINA	PENN AV	FORKED RIVER	NJ
SILVER CLOUD MARINA INC	BAY AV	FORKED RIVER	NJ
SOUTHWINDS ENTERPRISES ASSOC	LACEY ROAD	FORKED RIVER	NJ
TALL OAKS MARINA	BAY AV	FORKED RIVER	NJ
TED & SONS FORKED RIVER MARINA	BAY AV	FORKED RIVER	NJ
TOWNSENDS MARINER INC	LACEY RD	FORKED RIVER	NJ
PRINGLES MARINA	DELAWARE AVE	FORTESCUE	NJ
HITCHS MARINA INC	PIER RD	GREENWICH	NJ
POINT PLSANT YCHT FISHING CLUB	MAIN ST	HACKENSACK	NJ
306 ASSOCIATES	COLONIAL RDG DR	HADDONFIELD	NJ
LAKE VIEW DOCKS	SUMMIT AV	HADDONFIELD	NJ
BRIDGEBORO MARINA		HAINESPORT	NJ
FORKS LANDING INC	CAMP SWISS AVE	HAMMONTON	NJ
MULLICA RIVER MARINA	WEEKSTOWN RD	HAMMONTON	NJ
BOAT YARD	BAY TER SR	HARVEY CEDARS	NJ
HARVEY CEDARS MARINA INC	LONG BCH BL	HARVEY CEDARS	NJ
BILLS MARINE	GOFFLE RD	HAWTHORNE	NJ
MUD FLAT MARINA	MATTS LANDING RD	HEISLERVILLE	NJ
GOGATS HOLDING CO INC	LAKESIDE RD	HEWITT	NJ
GREENWOOD LAKE BOAT BASIN INC	LAKESIDE DR	HEWITT	NJ
GREENWOOD SMALL CRAFTS	LAKE SIDE RD	HEWITT	NJ
HAPPY LANDING INC	SHORE RD	HEWITT	NJ
LAKESIDE MARINA CORP	LAKESIDE RD	HEWITT	NJ
REDS MARINA	S ADELAIDE AV	HIGHLAND PARK	NJ
BRANIN GARY	FOOT OF CORNWALL ST	HIGHLANDS	NJ
CAPTAINS COVE MARINA	PORTLAND RD	HIGHLANDS	NJ
MARINE PAK INC	BAY AV	HIGHLANDS	NJ
PROSPECT MARINE INC	WILLOW ST	HIGHLANDS	NJ
SCHUPPS LANDING	BAY AV	HIGHLANDS	NJ

SKIPPERS MARINE BASIN	SHREWSBURY AV	HIGHLANDS	NJ
BROLIN MARINA DESIGNER	BLOOMFIELD ST	HOBOKEN	NJ
LIGHTHOUSE	RIVER STYX ROAD	HOPATCONG	NJ
STYX & STONES REALTY CORP INC	RIVER STYX RD	HOPATCONG	NJ
COZY COVE MARINA	LAKE DRIVE	ISLAND HTS	NJ
DILLINS CREEK MARINA	LAKE & EAST END AVE	ISLAND HTS	NJ
NELSON MARINE BASIN	LAKE DRIVE	ISLAND HTS	NJ
ROOSEVELT MARINA INC	STATE HWY 440	JERSEY CITY	NJ
LAUREL OUTBOARD MARINA	LAUREL AV	KEANSBURG	NJ
LENTZE MARINA INC	1ST ST	KEANSBURG	NJ
EASTERN MARINE	STILLWELL RD	KENDALL PARK	NJ
BROWNS POINT MARINA INC	FRONT ST	KEYPORT	NJ
CAPT FRED'S MARINA INC	FRONT ST	KEYPORT	NJ
KEYPORT MARINE BASIN INC	FRONT ST	KEYPORT	NJ
MINETTE COMPANY	AMBOY RD	KEYPORT	NJ
OLSENS BOATWORKS	FRONT ST	KEYPORT	NJ
PEDERSEN HANS & SONS INC	FRONT ST	KEYPORT	NJ
SEABOARD MARINE INC	HWY 35 & MATAWAN CREEK	KEYPORT	NJ
CHANEL CLUB MARINA INC	ADDRESS UNKNOWN	LAKESWOOD	NJ
LANOKA HARBOR MARINA	BAY WY	LANOKA HARBOR	NJ
LAUREL HARBOR LTD PARTNERSHIP	LAUREL BLVD/WEST BASIN RD	LANOKA HARBOR	NJ
OCEAN BEACH MARINA INC	RT 35	LAVALLETTE	NJ
BERRYS DRIFT WOOD	MATTS LANDING	LEESBURG	NJ
BOAT WORLD MARINA	RIVER RD	LEESBURG	NJ
FOUR STAR MARINA	RIVER RD	LEESBURG	NJ
SNYDERS DRIFTWOOD MARINA	MAURICE RIVER RD	LEESBURG	NJ
WAGNERS BOAT YARD	BURLINGTON AV	LEONARDO	NJ
STEVES DEEPWATER MARINA	OCEAN HEIGHT	LINWOOD	NJ
MEADOWLANDS BOATYARD	INDUSTRIAL AVE & GATES RD	LITTLE FERRY	NJ
CLARKS LANDING MARINA INC	ESPANONG RD	LK HOPATCONG	NJ
FLASH ENTERPRISES INC	ROUTE 181	LK HOPATCONG	NJ
GREAT COVE MARINA	ESPANONG RD	LK HOPATCONG	NJ
GREAT COVE PARK	PO BOX 72	LK HOPATCONG	NJ
ROMBOUGH INDUSTRIES INC	ROUTE 181	LK HOPATCONG	NJ
SAN-BAR MARINA	HOWARD BLVD	LK HOPATCONG	NJ
WAYNES MARINE INC	NORTHWOOD ROAD	LK HOPATCONG	NJ
SHORE AREA BOAT HAULING	AVENEL WY	LONG BRANCH	NJ
SHREWSBURY MARINE INC	PATTEN AV	LONG BRANCH	NJ
DOCKSIDE MARINE INC	MAIN ST	MANAHAWKIN	NJ
DUCK INN MOTEL & MARINA	BAY AV	MANAHAWKIN	NJ
MARGOS INN INC	BAY AV	MANAHAWKIN	NJ
BOLTON & MYERS	PERRINE BL	MANASQUAN	NJ
BURLEWS ANCHORAGE	BRIELLE RD	MANASQUAN	NJ
DRAWBRIDGE LAND CO INC	BRIELLE RD	MANASQUAN	NJ
ROBINSONS ANCHORAGE	BRIELLE RD	MANASQUAN	NJ
SCIBETTA CAROL A	BRIELLE RD	MANASQUAN	NJ
BEATON DAVID & SONS	BEATON ROAD	MANTOLOKING	NJ
LUBECK S SEA BAY MARINA	CURTIS POINT DR	MANTOLOKING	NJ
SEA CHASE MARINA INC	STATE HWY 35	MANTOLOKING	NJ
TRADERS COVE INC	MANTOLOKING RD	MANTOLOKING	NJ
WINTER YACHT BASIN INC	MANTOLOKING RD	MANTOLOKING	NJ

BAY CLUB MARINA	AMHERST & MONROE AVE	MARGATE CITY	NJ
GREAT EGG TOURING & SALVAGE	VENTNOR AV	MARGATE CITY	NJ
SCOTT RAYMOND S JR	AMHERST AV	MARGATE CITY	NJ
STORK RALPH	AMHERST AV	MARGATE CITY	NJ
BAYFRONT MARINA ASSOCIATES	STE 3A R73	MARLTON	NJ
CLAYTON-DILKS INC	ROOSEVELT BLVD	MARMORA	NJ
BRATH MARINE SERVICE INC	SOMERS PNT-MAYS LNDING RD	MAYS LANDING	NJ
HAINES SERVICE CENTER	157 SOMERS PT-MAYS LNDG	MAYS LANDING	NJ
IV MARINERS INC	THOMPSONS LN	MAYS LANDING	NJ
SHADY RIVER MARINA	P O BOX 106 SOMERS PT RD	MAYS LANDING	NJ
SOMERSET COVE INC	SOMERS POINT RD	MAYS LANDING	NJ
THOMPSON MARINE & ENGINE INC	THOMPSONS LN	MAYS LANDING	NJ
WARF ROAD MARINA	RD 1 BOX 276	MAYS LANDING	NJ
WHARF ROAD MARINA	WHARF ROOM	MAYS LANDING	NJ
OLD OAK MARINA	WOODBIDGE AV	METUCHEN	NJ
SPRING GARDEN MARINA INC	SPRING GARDEN RD RD2	MILLVILLE	NJ
CHANNEL CLUB MARINA INC	WEST ST	MONMOUTH BCH	NJ
MONMOUTH SAILING CENTER INC	WEST ST	MONMOUTH BCH	NJ
NAUVOO MARINA CHANNEL CLUB	WEST ST	MONMOUTH BCH	NJ
WESTON MARINA	PARK RD	MONMOUTH BCH	NJ
GREENWOOD LAKE MARINA	ADDRESS UNKNOWN	MT ARLINGTON	NJ
LEES PARK	HOWARD BL	MT ARLINGTON	NJ
LEES PARK MARINA	HOWARD BLV	MT ARLINGTON	NJ
RALBERT ASSOCIATES INC	WINDEMERE AV	MT ARLINGTON	NJ
CAMPBELL BOAT WORKS	BELLE PL	NEPTUNE	NJ
SHARK RIVER HILLS MARINA INC	RIVERSIDE DR	NEPTUNE	NJ
ALLENS DOCK INC	RT 9	NEW GRETNA	NJ
STARLIGHT MARINA INC	ROUTE 9	NEW GRETNA	NJ
GREEN POND MARINE	GREEN POND RD	NEWFOUNDLAND	NJ
GANDY S BEACH MARINA	RD 1 COVE RD	NEWPORT	NJ
POLLINO JOHN	MONEY ISLAND MARINA	NEWPORT	NJ
CHADWICK ISLAND MARINA INC	STRICKLAND BL	NORMANDY BCH	NJ
B & R MARINE	MEADOWVIEW AV	NORTH BERGEN	NJ
BEACH MARINA	P O BOX 208	NORTHFIELD	NJ
HACKNEYS BOATYARD INC	MARGATE BLVD	NORTHFIELD	NJ
MARINERS COVE	MARGATE BRIDGE RD	NORTHFIELD	NJ
BUDS OUTBOARD MARINE INC	9TH ST	OCEAN CITY	NJ
CAPIZZI ENTERPRISES INC	2ND & BAY AVE	OCEAN CITY	NJ
CHALLENGER FISHING INC	THIRD ST & BAY AVE	OCEAN CITY	NJ
MARINA RANDOLPH	8TH ST	OCEAN CITY	NJ
NOREASTER MARINA	7TH & BAY	OCEAN CITY	NJ
OCEAN CITY FUEL DOCK & MARINA	PALEN AV	OCEAN CITY	NJ
OCEAN CITY YACHT SALES INC	WHELK DR	OCEAN CITY	NJ
ZINDEL YACHT SERVICES	MOORE AV	OCEAN CITY	NJ
GOOD LUCK POINT MARINA	END OF GOODLUCK DR	OCEAN GATE	NJ
OCEAN GATE YACHT BASIN	BAYVIEW AV	OCEAN GATE	NJ
CEDAR CREEK MARINA	ABBOTT AV	OCEAN GROVE	NJ
BELLCO	RT 550 & KINGS HWY	OCEAN VIEW	NJ
OCEANPORT LANDING INC	RIVER ST	OCEANPORT	NJ
MARLBORO MARINA INC	SALEM-PENNSVILLE RD	PENNSVILLE	NJ
RIVERVIEW MARINE INCORPORATED	FERRY RD & RIVER DR	PENNSVILLE	NJ

Y C OF P INC	FOOT AT BAYVIEW AVE	PLEASANTVILLE NJ
GATEWAY MARINA	PORT MONMTH RD	PORT MONMOUTH NJ
PENNY HILL BOAT YARD & MARINA	MAIN ST	PORT NORRIS NJ
PORT NORRIS MARINA CORPORATION	OGDEN & BERRY AVES	PORT NORRIS NJ
CHESTNUT NECK BOATYARD	ROUTE 9 & MULLICA RIVER	PORT REPUBLIC NJ
1001 RIVER CORPORATION	RT 70	PT PLSNT BCH NJ
ARNOLDS YACHT BASIN	BEAVER DAM RD	PT PLSNT BCH NJ
BAY POINT YACHT HARBOR INC	FOOT OF BAY AVE	PT PLSNT BCH NJ
CLARKS LANDING MARINA INC	ARNOLD AV	PT PLSNT BCH NJ
DALE YACHT BASIN EAST INC	LAKE AV	PT PLSNT BCH NJ
FORSBERGS BOAT WORKS INC	END DR	PT PLSNT BCH NJ
INLET BASIN INC	INLET DR	PT PLSNT BCH NJ
KENNEL JOHN & KELLER NORMA	BROADWAY ST	PT PLSNT BCH NJ
LOVGRENS DOCK INC	PAULISON AV	PT PLSNT BCH NJ
NEW JERSEY YACHT CORP	RTE 35 & MANASQUAN RIVER	PT PLSNT BCH NJ
NORTH BEACH MARINE	CHANNEL DR	PT PLSNT BCH NJ
POINT ANCHORAGE	RIVERSIDE PL	PT PLSNT BCH NJ
POINT PLEASANT MARINE BASIN	CHANNEL DR	PT PLSNT BCH NJ
WARY ROBERT J INC	BRIDGE AV	PT PLSNT BCH NJ
CAPTAIN S COVE MARINA	PO BOX 8459	RED BANK NJ
IRWINS YACHT WORKS INC	MARINE PARK	RED BANK NJ
MAHER HUGH R	PINE ST	RED BANK NJ
CRESSE RAYMOND C	RAILROAD AV	RIO GRANDE NJ
DREDGE HARBOR YACHT BASIN	RIVER RD	RIVERSIDE NJ
EBLES MARINA INC	CREEK ROAD BOX 112	RIVERSIDE NJ
LENART INVESTMENTS CORP	RANCOCAS AV	RIVERSIDE NJ
R D R ENTERPRISES INC	NORMAN AV	RIVERSIDE NJ
RAN-DEL MARINA	RANCOCAS AV	RIVERSIDE NJ
RIVERSIDE MARINA	NORMAN AVE	RIVERSIDE NJ
WINTERS G SAILING CENTER	RESERVE AVE	RIVERSIDE NJ
COVE MARINA	OCEAN AV	RUMSON NJ
MARINE TRADERS ASSOC	RIVER RD	RUMSON NJ
NOVAL MARINE INC	WASHINGTON ST	RUMSON NJ
MORGAN MARINA INC	CHEESEQUAKE CREEK ROAD	SAYREVILLE NJ
ANGLERS BOAT LANDING	OCEAN AV	SEA BRIGHT NJ
BAYPORT MARINE INC	OCEAN AV	SEA BRIGHT NJ
CHRISS LANDING	OCEAN AV	SEA BRIGHT NJ
COVESAIL INC	OCEAN AV	SEA BRIGHT NJ
N-V ENTERPRISES INC	OCEAN AV	SEA BRIGHT NJ
NAVESINK MARINA INC	OCEAN AV	SEA BRIGHT NJ
PATTEN AVENUE MARINA	2 E CHURCH ST	SEA BRIGHT NJ
FRANK J MARCHE INC	86TH & BAY	SEA ISLE CITY NJ
LARSENS MARINA INC	OLD SEA ISLE BLVD	SEA ISLE CITY NJ
MINMAR INC	LUDLAM'S LANDING	SEA ISLE CITY NJ
PIER 88 MARINA INC	88TH ST & BAY	SEA ISLE CITY NJ
YACHT CLUB OF SEA ISLE	VENICEAN RD	SEA ISLE CITY NJ
BAYSIDE MARINE INC	BAYSIDE TER	SEASIDE HTS NJ
DOCKSIDER MARINE FRANDEVCO	BAY BL	SEASIDE HTS NJ
KENZER COMPANY INC	OCEAN BL	SEASIDE HTS NJ
PELICAN HARBOR INC	STATE HWY #37 EAST	SEASIDE HTS NJ
BERKELEY YACHT BASIN	J ST	SEASIDE PARK NJ

BERKELEY YACHT BASIN INC	J ST & CENTRAL AVE	SEASIDE PARK	NJ
YOLANDS GROB INC	24TH AV	SEASIDE PARK	NJ
KARNAS MARINE INC	CLIFF RD	SEWAREN	NJ
RILEYS BOAT YARD	CLIFF RD	SEWAREN	NJ
HOCHSTRASSERS MARINA INC	8TH ST & BAY SHORE ROAD	SHIP BOTTOM	NJ
CORLETO ERNEST	BAY AV	SOMERS POINT	NJ
GATEWAY MARINA	MAYS LANDING RD	SOMERS POINT	NJ
GRAEF DONNA	LAUNCH & MILLER AVE	SOMERS POINT	NJ
MAC-MOR INC	WOODLAWN AV	SOMERS POINT	NJ
MAYER MARINE	BAY AV	SOMERS POINT	NJ
WOODS GATEWAY MARINA INC	SOMERS PNT-MAYS LNDING RD	SOMERS POINT	NJ
BROWNS BOAT YARD INC	TERRACE PL	SOUTH AMBOY	NJ
LOCKWOOD BOAT WORKS INC	HWY 35	SOUTH AMBOY	NJ
VIKINGS INC	HWY 35	SOUTH AMBOY	NJ
ZUBACKS BOAT	HWY 35	SOUTH AMBOY	NJ
LAKE MOHAWK MARINA INC	SHORE TRL	SPARTA	NJ
STONE HARBOR MARINA INC	STONE HARBOR BL	STONE HARBOR	NJ
LARRYS DOCK	BAYVIEW AVE & PUTNAM ROAD	STRATHMERE	NJ
SURF CITY MARINA INC	325 S FIRST ST	SURF CITY	NJ
VINNYS MARINE REPAIR	EDWARD DR	SWEDESBORO	NJ
CUNNINGHAMS MARINA INC	CENTER ST	THOROFARE	NJ
CEDAR-MAR MARINA INC	FOOT OF CRABBE ROAD	TOMS RIVER	NJ
DOCKSIDE SERVICE INC	COMPASS CT	TOMS RIVER	NJ
EAST DOVER MARINA INC	FISCHER BL	TOMS RIVER	NJ
FRANKS MARINE SERVICE	CAPSTAN DR	TOMS RIVER	NJ
KETTLE CREEK MARINA INC	KETTLE CREEK RD	TOMS RIVER	NJ
NAPOS ERNIE PIER I INC	STATE HWY 37 & DOUGLAS ST	TOMS RIVER	NJ
SILVER BAY ANCHORAGE INC	FISCHER BL	TOMS RIVER	NJ
SILVERBAY NORTH	PUMPSHIRE RD	TOMS RIVER	NJ
SILVERTON LANDING INC	KETTLE CREEK RD	TOMS RIVER	NJ
TIDES IN MARINA & BOAT RENTAL	THISTLE AV	TOMS RIVER	NJ
TOMS RIVER MARINE RAILWAY	ROBBINS PKWY	TOMS RIVER	NJ
CEDAR HARBOR MARINA	BREE DR	TRENTON	NJ
KOCIS WILLIAM T & PEARL R	KLOCKNER RD	TRENTON	NJ
TRENTON MAR TRML SLS LSG CORP	LAMBERTON ST	TRENTON	NJ
AMERICAN BOAT EXCHANGE INC	GREEN ST	TUCKERTON	NJ
CAPE HORN MARINA INC	GREAT BAY BLVD	TUCKERTON	NJ
CAVILEER MARINA	OAK LN	TUCKERTON	NJ
FACEMYERS MARINA INC	GREAT BAY BLVD	TUCKERTON	NJ
GORDONS MARINE SERVICE	GREEN ST	TUCKERTON	NJ
GREAT BAY MARINA	RADIO RD AT GRAVELING PT	TUCKERTON	NJ
HAYES MARINA INC	GREEN ST	TUCKERTON	NJ
MAC-HOEHS MARINA	GREAT BAY BLVD	TUCKERTON	NJ
MUNROS MARINA INC	EAST ANCHOR DRIVE	TUCKERTON	NJ
REDFIELDS MARINA	GREAT BAY BLVD	TUCKERTON	NJ
SCHIMPFS MARINA	BOOM WY	TUCKERTON	NJ
SKINNERS MARINA	BARTLETT AVE	TUCKERTON	NJ
STE-VIN MARINE CENTER INC	RADIO RD & BAYVIEW DR	TUCKERTON	NJ
TUCKERTON MARINE SERVICE	GREEN ST	TUCKERTON	NJ
ULTIMA COVE MARINA INC	GREEN ST	TUCKERTON	NJ
BOSELLIS MARINA	ATLANTIC AV	VENTNOR CITY	NJ

DAFFY DUCK MARINA INC	MONMOUTH AV	VENTNOR CITY	NJ
DORSET MARINE	EDGEWATER AV	VENTNOR CITY	NJ
MARGATE BOATING CENTER	CAMBRIDGE AV	VENTNOR CITY	NJ
LEATHERNECK MARINA INC	CLOVERDALE AVE BOX 224	VILLAS	NJ
BAYVIEW MARINA INC	ITALIA AV	VINELAND	NJ
BEACH MARINA		WARETOWN	NJ
LANGE/MAHR INC	TILLER DR	WARETOWN	NJ
LEAMINGS MARINA INC	MARINA RD	WARETOWN	NJ
LONG QUAY MARINA	OLD MAIN SHORE RD	WARETOWN	NJ
OTTSHORE MARINE SERVICE INC	TILLER DR	WARETOWN	NJ
SANBORN MARINE CENTER INC	BALTIC AV	WARETOWN	NJ
SHORE MARINE MART INC	BAY POINT MARINE DRIVE	WARETOWN	NJ
WARETOWN MARINE BASIN INC	MAIN ST	WARETOWN	NJ
PORT IMPERIAL MARINA	PERSHING CIRCLE	WEEHAWKEN	NJ
ERNIES MARINA	DOCK RD	WEST CREEK	NJ
MARINERS LANDING	DOCK RD	WEST CREEK	NJ
B & E MARINE INC	26TH ST	WILDWOOD	NJ
BISHOPS MARINA	BEACH CREEK & ASH AVE	WILDWOOD	NJ
DADS PLACE MARINA INC	OCEAN AV	WILDWOOD	NJ
G LEE ENTERPRISES	RIO GRANDE AV	WILDWOOD	NJ
GALLOS MARINA	LAKE RD	WILDWOOD	NJ
GRASSY SOUND MARINA INC	WILDWOOD BL	WILDWOOD	NJ
HAYES WATERWAY MARINA	MONTGOMERY AV	WILDWOOD	NJ
NEW NORTH WILDWOOD MARINA	6TH & NEW YORK AVE	WILDWOOD	NJ
PIER 47	WILDWOOD BL	WILDWOOD	NJ
ROSATI MARINA INC	RIO GRANDE AV	WILDWOOD	NJ
STERLING MARINE SALES	PARK BL	WILDWOOD	NJ
SUNSET LAKE MARINA & BOAT WKS	LAKE RD	WILDWOOD	NJ
TOMMY OS MARINA	DELAWARE AV	WILDWOOD	NJ
WATER WAY MARINA	MONTGOMERY AV	WILDWOOD	NJ
WILDWOOD MARINA	LAKE RD & BENNETT AVE	WILDWOOD	NJ
WILDWOOD YACHT BASIN WEST	SHELLCREST RD	WILDWOOD	NJ
VALLEY MARINA INC	US RT 130/RANCOCAS CREEK	WILLINGBORO	NJ
AJAX MARINE ENTERPRISES	MOHAWK AV	ALPLAUS	NY
DEL MARINE INC	KETCHAM AV	AMITYVILLE	NY
JOHNSTON MARINE	KETCHAM AV	AMITYVILLE	NY
PEARL GRAY FISHING STATION	KETCHAM AV	AMITYVILLE	NY
SEA-JAY MARINE INC	KETCHAM AV	AMITYVILLE	NY
SMITH T & SONS	KETCHAM AV	AMITYVILLE	NY
LARRYS LIGHTHOUSE MARINA INC	MEETING HOUSE CREEK ROAD	AQUEBOGUE	NY
ATHENS MARINA	BRICK ROW	ATHENS	NY
ATHENS MARINA CENTER	OFF RTE 385 NORTH	ATHENS	NY
HAYNER ALBERT A	MAIN RTE	AVERILL PARK	NY
C S BABYLON MARINE INC	CEDAR LN	BABYLON	NY
DE GARMO THEODORE MARINE SVCS	POST PL	BABYLON	NY
FROST BOATYARD	SHORE RD	BABYLON	NY
MARINE TRANSPORTATION	FIRE ISLAND AV	BABYLON	NY
NEW YORK STATE OF	ROBERT MOSES STATE PARK	BABYLON	NY
OUTBOARD BARN INC	POST PL	BABYLON	NY
RAINBOW MARINE SERVICE INC	SUMPWAMS AV	BABYLON	NY
SOUTHARDS BOAT YARDS INC	WILLOW ST	BABYLON	NY

STATE CHANNEL MARINA	SEGANUS THATCH	BABYLON	NY
SUFFOLK MARINE CENTER INC	WILLOW ST	BABYLON	NY
ALL ISLAND MARINE CORP	MERRICK RD	BALDWIN	NY
ALL ISLAND MARINE CORP	MERRICK RD	BALDWIN	NY
BALDWIN HARBOR BOAT YARD INC	EASTERN BL	BALDWIN	NY
BALPORT MARINA	HASTINGS PL	BALDWIN	NY
BOOM MARINA	CENTER CIR	BALDWIN	NY
MORGANS MARINA	JEFFERSON PL	BALDWIN	NY
SEADOOR MARINA INC	ARTHUR ST	BALDWIN	NY
BBAY SHORE BOAT TRANSF & YARD	COTTAGE AV	BAY SHORE	NY
CONTARINO & KNOX INC	HOMAN AV	BAY SHORE	NY
COOKWM CSTAL YCHTING CTR	DEGNAN BL	BAY SHORE	NY
KISMET INN	OAK ST ABD BAY AVE	BAY SHORE	NY
LION YACHT SERVICES INC	PENATAQUIT AV	BAY SHORE	NY
MATTYS SEA FOOD HOUSE INC	BAY WALK	BAY SHORE	NY
SHORELINE MARINE INC	MAPLE AV	BAY SHORE	NY
BAYPORT MARINE CO INC	BROWNS RVR RD	BAYPORT	NY
WATCH HILL CONCESSIONS	GILLETTE AV	BAYPORT	NY
CLUB HOUSE MARINA	CLUBHOUSE RD	BELLMORE	NY
KENS BAY MARINE CO INC	BELLMORE AV	BELLMORE	NY
MONTES MARINA	PUBLIC HWY	BELLMORE	NY
BLUE POINT MARINA INC	COREY AV	BLUE POINT	NY
TABAT MARINE INC	BOYLAN LN	BLUE POINT	NY
WATCH HILL CONCESSIONS INC	P O BOX 128	BLUE POINT	NY
CHANNEL MARINE SALES INC	20TH RD	BROAD CHANNEL	NY
3RS MARINA CORP	CLARENCE AV	BRONX	NY
ADELINO STEFANIE	KIRBY ST	BRONX	NY
BARRONS MARINE SERVICES INC	FORDHAM PL	BRONX	NY
BRIDGE BOAT SALES LTD	CITY ISLAND AV	BRONX	NY
CONSOLIDATED YACHTS INC	PILOT ST	BRONX	NY
LOCUST POINT MARINA INC	REYNOLDS AV	BRONX	NY
MARINA DEL-RAY	MARINE ST	BRONX	NY
MARINELAND INC	PENNYFIELD AV	BRONX	NY
MARITIME LANDINGS INC	CITY ISLAND AV	BRONX	NY
MINNEFORD MARINA INC	CITY ISLAND AV	BRONX	NY
PELBAMAR CORP	OUTLOOK AV	BRONX	NY
PORTSIDE MARINA	BRIDGE ST	BRONX	NY
ROSENBERGERS BOAT HOUSE INC	CITY ISLAND AV	BRONX	NY
SAGMANS MARINE INC	CITY ISLAND AV	BRONX	NY
SEASHORE REST & MARINA	CITY ISLAND AV	BRONX	NY
SS KEANSBURG	CITY ISLAND AV	BRONX	NY
SUNRISE MARINA INC	OUTLOOK AV	BRONX	NY
THWAITES SS KEANSBURG INC	CITY IS AV	BRONX	NY
TOOKERS BOAT YARD INC	NEWY LANE	BROOKHAVEN	NY
BARREN ISLAND MARINA INC	FLATBUSH AV	BROOKLYN	NY
BAY END DOCK INC	EMMONS AV	BROOKLYN	NY
BROOKLYN MARINE CORP	68TH ST	BROOKLYN	NY
BROWN H P INC	KINGS HWY	BROOKLYN	NY
EASTWIND MARINA	68TH ST	BROOKLYN	NY
FUTURA YACHT & SHIPBUILDING	KNAPP ST	BROOKLYN	NY
JAMS MARINE REPAIR	BANNER AV	BROOKLYN	NY

L Q MARINA INC	AVENUE U	BROOKLYN	NY
LANDYS BOAT YARD & MARINE	69TH ST	BROOKLYN	NY
MARINE BASIN MARINA	SHORE PKWY	BROOKLYN	NY
MARINE PARK MARINA INC	FLATBUSH AV	BROOKLYN	NY
MILL BASIN MARINA INC	68TH ST	BROOKLYN	NY
RIVIERA MARINE	LACON CT	BROOKLYN	NY
SEA TRAVELERS MARINA INC	FLATBUSH AV	BROOKLYN	NY
SHOREWAY MARINE INC	KNAPP ST	BROOKLYN	NY
STELLA-MARIS MARINE CO INC	EMMONS AV	BROOKLYN	NY
TABAKMAN MARINA	OCEAN AV	BROOKLYN	NY
VENICE MARINA OPERATING CO	EMMONS AV	BROOKLYN	NY
VIKING MARINA & HARDWARE CO	STRICKLAND AV	BROOKLYN	NY
YACHTS FOR SAIL INC	WASHINGTON AV	BROOKLYN	NY
YANKEE SKIPPER BOAT SALES INC	FLATBUSH AV	BROOKLYN	NY
CATSKILL MARINA CORPORATION	FOOT OF GREEN ST	CATSKILL	NY
HOP-O-NOSE MARINE INC	WEST MAIN ST	CATSKILL	NY
RIVERVIEW MARINE SERVICES INC	LOWER MAIN ST	CATSKILL	NY
CENTERPORT MARINA	CENTERSHORE RD	CENTERPORT	NY
CHELSEAS CTTAGE LANDING MARINA	FRONT ST	CHELSEA	NY
HARBOR NORTH MARINA	CLAM STEAM RD	CLIFTON PARK	NY
FINKE MARINE INC	WESTERLO ST	COEYMANS	NY
ALBANY MARINE SERVICE	NEW LOUDEN RD	COHOES	NY
CAPITOL DISTRICT MARINA	DELAWARE AVE	COHOES	NY
GEORGES BODY SHOP INC	PINE ST	COHOES	NY
SANFORD BOAT LIVERY MARINA	LOUDON RD	COHOES	NY
POWLES H & M MOTOR AGENCY	HARBOR RD	COLD SPG HBR	NY
KLEIN EVERETT	15TH AV	COLLEGE POINT	NY
MAYER BOAT WORKS INC	119TH ST	COLLEGE POINT	NY
SKYLINE MARINA INC	119TH ST	COLLEGE POINT	NY
T & W MARINE SERVICE	110TH ST	COLLEGE POINT	NY
ATLANTIC YACHT ASSOCIATES INC	FIRST AND PLANTATION STS	CONNELLY	NY
CERTIFIED MARINE SERVICE INC	1ST & SPRING ST	CONNELLY	NY
COOPERSTOWN MARINE SALES INC	LAKE FRONT MOTEL	COOPERSTOWN	NY
C B C REALTY CORP	LAKE VIEW RD	COPAKE	NY
HARBOR MARINE CORP	GREAT NECK RD	COPIAGUE	NY
HIDDEN HARBOR MARINE	SCHMEELK PL	COPIAGUE	NY
LA SALA BOAT YARD	SCHMEELK PL	COPIAGUE	NY
DICK COPAKE MARINA INC	COPAKE LAKE	CRARYVILLE	NY
STEVES MARINA OF COPAKE LAKE	LAKE SHORE RD	CRARYVILLE	NY
B & M MARINE	OCEAN AV	CTR MORICHES	NY
HARBOR LEE BOAT YARD	OCEAN AV	CTR MORICHES	NY
MARINELAND INC	OLD NECK RD	CTR MORICHES	NY
ROTH WALTER J	CHICHESTER AV	CTR MORICHES	NY
SENIX MARINA	SENIX AVE	CTR MORICHES	NY
BOATMANS HARBOR MARINA	CREEK AV	CUTCHOGUE	NY
DOCKSIDE 500 MARINA INC	COLONIAL DR	E PATCHOGUE	NY
PATCHOGUE SHORES MAIRNA	CORNELL RD & LAURA AVE	E PATCHOGUE	NY
SHORES YACHT BASIN INC	CORNELL ROAD	E PATCHOGUE	NY
HALSEYS MARINA INC	MILLER CT	EAST HAMPTON	NY
J V G LTD	BOAT YARD RD	EAST HAMPTON	NY
MAIDSTONE BOATYARD INC	MILLER CT	EAST HAMPTON	NY

SEACOAST ENTERPRISES ASSOC	3 MILE HBR	EAST HAMPTON NY
THREE MILE HARBOR BOAT YARD	MILLER CT	EAST HAMPTON NY
LAS BRISAS MARINA	ATLANTIC AVE	EAST MORICHES NY
MORICHES INLET MARINE INC	W/S OF ATLANTIC AVENUE	EAST MORICHES NY
ALDRICH BOAT YARD INC	E/S WEESUCK AVENUE	EAST QUOGUE NY
DAVISON'S BOAT YARD INC	ATLANTIC AV	EAST ROCKAWAY NY
FRAN RUSS REALTY CO INC	ATLANTIC AV	EAST ROCKAWAY NY
SALT AIR MARINA INC	MARJORIE LN	EAST ROCKAWAY NY
SALTAIRE MARINE SERVICE INC	FRONT ST	EAST ROCKAWAY NY
MARINE CENTER SETAUKET LTD	SHORE RD	EAST SETAUKET NY
SETAUKET HARBOR BOAT BASIN	SHORE RD	EAST SETAUKET NY
SEATUCK COVE MARINA INC	SO BAY AVE	EASTPORT NY
LEE MARINE INC	225 BEACH 3RD STREET	FAR ROCKAWAY NY
SEABORN MARINA INC	ALLEN BL	FARMINGDALE NY
PIRATES COVE MARINE INC	FISHERS ISLAND	FISHERS IS NY
WORLDS FAIR MARINA	WORLDS FAIR MRN	FLUSHING NY
11 HUDSON AVENUE CORP	HUDSON AV	FREEPORT NY
155 LIBERTY CORP	SOUTHSIDE AV	FREEPORT NY
ANGLERS MARINE INC	MAIN ST	FREEPORT NY
AQUA MARINE ASSOCIATES INC	HUDSON AV	FREEPORT NY
BALDWIN YACHT BASIN INC	WEST END RAY STREET	FREEPORT NY
CHARON MARINE INDUSTRIES INC	HUDSON AV	FREEPORT NY
EDGO MARINA INC	FOOT OF SOUTH MAIN STREET	FREEPORT NY
F C MARINE REPAIR INC	FOOT OF GORDEN PLACE	FREEPORT NY
FORSBERG ANDREW G	WOODCLEFT AVENUE	FREEPORT NY
GROVERS AL HIGH & DRY MARINA	MAIN ST	FREEPORT NY
GROVERS AL MARINE BASE INC	WOODCLEFT AV	FREEPORT NY
HUDSON YACHT SERVICE INC	FT OF GUY LOMBARDO AVE	FREEPORT NY
JEFFERSON MARINE SERVICES INC	JEFFERSON ST	FREEPORT NY
MARINE WIZE INC	CARY PL	FREEPORT NY
OUTBOARD BARN OF FREEPORT	WOODCLEFT AV	FREEPORT NY
ROMEOS MARINA	BEDELL ST	FREEPORT NY
SEA DOOR MARINA INC	WOODCLEFT AV	FREEPORT NY
SEA DOOR MARINA INC	WOODCLEFT AV	FREEPORT NY
SHELTER POINT SERVICE CORP	WOODCLEFT AV	FREEPORT NY
TRAVELERS MARINE SERVICE	HUDSON AV	FREEPORT NY
TRITON YACHT SALES INC	WOODCLEFT AV	FREEPORT NY
W D MARINE INC	HUDSON AV	FREEPORT NY
WASSERMAN SANDY	PRESIDENT ST	FREEPORT NY
WAVE CREST MARINE CORP	HUDSON AV	FREEPORT NY
YACHTSMENS COVE INC	FT OF S MAIN ST	FREEPORT NY
BREWER MARINA INC	SHORE RD	GLEN COVE NY
GLEN COVE MARINA ASSOCIATES	SHORE RD	GLEN COVE NY
GLEN COVE YACHT SERVICE & REPR	SHORE RD	GLEN COVE NY
SEACOAST MARINE SERVICE INC	GARVIEYS POINT RD	GLEN COVE NY
BURTIS BOAT WORKS INC	MAPLE PL	GLEN HEAD NY
VILLAGE HANDYMAN INC	ARRANDALE AV	GREAT NECK NY
S E MARINE SERVICE	GREAT RV RD	GREAT RIVER NY
BREWER YACHT YARD AT GREENPORT	MANHASSET AVE	GREENPORT NY
CLAUDIO WILLIAM F INC	MAIN ST	GREENPORT NY
GREENPORT YACHT SHIPBUILDING	CARPENTER ST	GREENPORT NY

STERLING HBR SHIPYARD & MARINA	MANHANSSET AVE	GREENPORT	NY
TOWNSEND MANOR INN INC	MAIN ST	GREENPORT	NY
YOUNGS BOAT YARD AND MARINA	SAGE BL	GREENPORT	NY
BOBS MARINA	STERLING ROAD	GREENWOOD LK	NY
DE FEOS COVE MARINE INC	JERSEY AV	GREENWOOD LK	NY
DEVCO ENTERPRISES INC	JERSEY AVENUE R R 4	GREENWOOD LK	NY
NAIROBI MARINA INC	JERSEY AVE	GREENWOOD LK	NY
NORTHSHORE MARINA	WINDERMERE AV	GREENWOOD LK	NY
OLDE POINT MARINA	EYCK AV	GREENWOOD LK	NY
KNUTSONS MARINA INC	EAST SHORE ROAD	HALESITE	NY
SPORT BOATS INC	NEW YORK AV	HALESITE	NY
COLONIAL SHORES	TIANA RD	HAMPTON BAYS	NY
CORRIGANS YACHT YARD	NEWTOWN RD	HAMPTON BAYS	NY
FRANKS LANDING OF HAMPTON BAYS	RAMPASTURE RD	HAMPTON BAYS	NY
HAMPTON BOAT WORKS INC	SPRINGVILLE RD	HAMPTON BAYS	NY
JACKSONS MARINA ENTERPRISES	TEPEE STREET	HAMPTON BAYS	NY
MILL RIVER BOAT WORKS INC	FOSTER AV	HAMPTON BAYS	NY
MODERN YACHTS INC	NEWTOWN RD	HAMPTON BAYS	NY
SPRINGVILLE HOUSE INC	SPRINGVILLE RD	HAMPTON BAYS	NY
STUBELEK WILLIAM	FOSTER AV	HAMPTON BAYS	NY
TOLLEFSON ENTERPRISES INC	MONTAUK HIGHWAY	HAMPTON BAYS	NY
HIGHLAND FALLS MARINA	STATION HILL RD	HIGHLAND FLS	NY
MARINA ROSE	MAIN ST	HOLBROOK	NY
LIL CRICKET MARINA INC	CROSS BAY BL	HOWARD BEACH	NY
LYNNS BOAT YARD	CROSS BAY BL	HOWARD BEACH	NY
M Z MARINE INC	CROSS BAY BL	HOWARD BEACH	NY
GUZZI JAMES & JOHN	COLD SPRING ROAD	HUDSON	NY
AMSTERDAM ASSOCIATES	SHORE RD	HUNTINGTON	NY
CASTLE COVE MARINA INC	WEST SHORE ROAD	HUNTINGTON	NY
CONEYS MARINE CORP	NEW YORK AV	HUNTINGTON	NY
DORNIC MARINA INC	SHORE RD	HUNTINGTON	NY
HUNTINGTON MID HARBOR MARINA	SHORE RD	HUNTINGTON	NY
THREE HARBOR MARINE INC	MAIN ST	HUNTINGTON	NY
WEST SHORE MARINA	WEST SHORE RD	HUNTINGTON	NY
AERO MARINE	ISLAND PARKWAY W	ISLAND PARK	NY
ANDYS MARINE SERVICE INC	ISLAND PK PLC/SHRIDAN AVE	ISLAND PARK	NY
AUSTIN MARINA	BROADWAY ST	ISLAND PARK	NY
G & J MARINE INC	BROADWAY ST	ISLAND PARK	NY
ILAND BAY MARINA	FT OF JAMAICA AVE	ISLAND PARK	NY
K & K OUTBOARD INC	LONG BEACH RD	ISLAND PARK	NY
NOLLS BOAT YARD INC	JAMAICA AV	ISLAND PARK	NY
ROJJ CORP	EMPIRE BL	ISLAND PARK	NY
SACKENS BOAT YARD	RAILROAD PL	ISLAND PARK	NY
ULTZEN BOAT SERVICE	RAILROAD PL	ISLAND PARK	NY
ARNOTTS BOAT YARD INC	ATHASCA RD	ISLIP	NY
EDGEWATER MARINE INC	ATHASCA RD	ISLIP	NY
OUTBOARD BARN OF ISLIP INC	MAIN ST	ISLIP	NY
REILLYS YACHT CLUB	RUSSELL ST	JAMAICA	NY
KAUNEONGA KOVE MARINA	RTE 55	KAUNEONGA LK	NY
HIDEAWAY MARINA INC	ABEEL ST	KINGSTON	NY
KINGSTON POWER BOAT ASSN	ABEEL ST	KINGSTON	NY

LOUIS BOAT BASIN	RTE 213	KINGSTON	NY
BEER LOTHAR BOAT BUILDERS	LIDO PROM ST	LINDENHURST	NY
BOATLAND INC	WELLWOOD AV	LINDENHURST	NY
HERBYS BOAT YARD	9TH ST	LINDENHURST	NY
RAYBO MARINE INC	MONTAUK HWY	LINDENHURST	NY
RUTHERIG MARINE SERVICE INC	ROOSEVELT AV	LINDENHURST	NY
SURFSIDE-3 MARINA INC	WELLWOOD AV	LINDENHURST	NY
TANK KARL INC	ROOSEVELT AV	LINDENHURST	NY
LANDMARK BOAT TRANSPORTING INC	VALLEY ST	LK RONKONKOMA	NY
MILL NECK BAY MARINE SERVICE	HERMAN AV	LOCUST VALLEY	NY
LONG BEACH SPORTS MARINA INC	PARK AV	LONG BEACH	NY
HARDER CUSTOM BLDRS	OCEAN AV	LYNBROOK	NY
MAC DONALD MARINE INC	LAKE BL	MAHOPAC	NY
MAHOPAC AUTO MARINE INC	BOX 446	MAHOPAC	NY
BREWER YACHT YARD INC	POST RD	MAMARONECK	NY
DERECKTOR ROBERT E INC	BOSTON POST RD	MAMARONECK	NY
MAMARONECK BOATS & MOTORS INC	RUSHMORE AV	MAMARONECK	NY
MC MICHAEL YACHT YARD INC	BOSTON POST RD	MAMARONECK	NY
NICHOLS YACHT YARD INC	RUSHMORE AV	MAMARONECK	NY
POST ROAD BOAT YARD INC	POST RD	MAMARONECK	NY
TOTAL MARINE ENTERPRISES INC	RUSHMORE AV	MAMARONECK	NY
KELBAN & STONE INC	ALHAMBRA RD	MASSAPEQUA	NY
ZIEGES RESTAURANT INC	ALHAMBRA RD	MASSAPEQUA	NY
CAPTAIN ANDYS FISHING STATION	VIOLET ROAD	MASTIC BEACH	NY
STIRIZ WILLIAM	FLORAL CT	MASTIC BEACH	NY
MATT-A MAR INC	WICKHAM AVE	MATTITUCK	NY
MATTITUCK INLET MRINA SHIPYARD	MILL RD	MATTITUCK	NY
DYER CHARLES F	HUDSON ST	MECHANICVILLE	NY
RIVERSIDE MARINA	R R 2 BOX 349	MECHANICVILLE	NY
SARATOGA LK BOAT & TACKLE SUP	RR 1 BOX 376	MELROSE	NY
A B M S INC	WHALENECK DR	MERRICK	NY
CHARLIE S BOAT BASIN	LOINES AV	MERRICK	NY
LEEWARD VENTURES LIMITED	BAYBERRY DR	MERRICK	NY
NANIA ANTHONY S	BAYBERRY DR	MERRICK	NY
NICKS DRY LAND MARINA INC	WHALENECK DR	MERRICK	NY
NICKS MARINA	BAYBERRY DR	MERRICK	NY
OSM SERVICE CENTER INC	WHALENECK DR	MERRICK	NY
SOUTH MERRICK MARINE INC	WHALENECK DR	MERRICK	NY
R DORAN BOAT HAULING	HARBOR BEACH RD	MILLER PLACE	NY
BROOKWOOD MARINA	291 RURAL 02	MILLERTON	NY
SWINGING BRIDGE LAKE LODGE	MONGAUP DR	MONGAUP VLY	NY
CAPTAINS COVE MARINA LTD	LAKE DR	MONTAUK	NY
GONE FISHING MARINA	RD 1 BOX 61	MONTAUK	NY
GONE FISHING MARINA INC	EAST LAKE DRIVE	MONTAUK	NY
KEELERS ANCHOR MARINA LTD	WEST LAKE DRIVE	MONTAUK	NY
MONTAUK MARINE BASIN INC	WEST LAKE DRIVE	MONTAUK	NY
OFFSHORE SPORTS MARINA INC	WEST LAKE DRIVE	MONTAUK	NY
UIHLEIN MARINA & BOAT RENTAL	FLAMINGO DR	MONTAUK	NY
SCOTT ALLAN C	STARBRIGHT RD	MONTICELLO	NY
LAS BRISAS LTD INC	ATLANTIC AV	MORICHES	NY
CRYSTAL HARBOR YACHT	JONI DR	MOUNT SINAI	NY

NORTH SHORE ENTERPRISES INC	SHORE ROAD	MOUNT SINAI	NY
RALPHS FISHING STATION INC	HARBOR BCH RD	MOUNT SINAI	NY
WHITES HUDSON RIVER MARINA	POINT ST	NEW HAMBURG	NY
KENROB AUTO MARINE SVC	TOWN DOCK RD	NEW ROCHELLE	NY
MANCUSO F BOATYARD INC	HUNTINGTON PLACE	NEW ROCHELLE	NY
NEPTUNE BOAT SERVICE INC	DAVENPORT AV	NEW ROCHELLE	NY
POLYCHRON MARINA CO	HUDSON PARK RD	NEW ROCHELLE	NY
NEW SUFFOLK SHIPYARD INC	NEW SUFFOLK ROAD	NEW SUFFOLK	NY
FLOTA MERCANTE GRNCLMB	WORLD TRADE CTR	NEW YORK	NY
LITTLE DIX BAY CORP DEL	ROCKEFELLER PLZ	NEW YORK	NY
NEW YORK SKYPORTS INC	23RD ST & EAST RIVER	NEW YORK	NY
SLOAN MARINE ASSOCIATES L/P	PARK AV	NEW YORK	NY
SLOAN MRN ASSCTS	PARK AV	NEW YORK	NY
THE STEPHEN SLOAN MARINE CORP	PARK AV	NEW YORK	NY
BA-MAR INC	LITTLE BRITN RD	NEWBURGH	NY
MACRIS MARINA	RIVER RD	NEWBURGH	NY
NORTHPORT HOLDING CORP	ROUTE 25A	NORTHPORT	NY
NORTHPORT MANAGEMENT SERVICES	BAYVIEW AV	NORTHPORT	NY
SAYMOUR BOAT YARD	BAYVIEW AV	NORTHPORT	NY
SEYMOUR BOAT SHOPS INC	BAYVIEW AV	NORTHPORT	NY
PETERSEN JULIUS INC	VANHOUTEN ST	NYACK	NY
POWELL BOAT YARD INC	PIERMONT AV	NYACK	NY
MARINE CORPS LEAGUE	ONTARIO AV	NYC RICHMOND	NY
AIRBORNE ENTERPRISES INC	VANDERBILT BL	OAKDALE	NY
CAPTREE BOAT BASIN	MONTAUK HWY	OAKDALE	NY
HOWIES MARINA	VANDERBILT BL	OAKDALE	NY
NICOLLS POINT MARINA INC	SHORE DR	OAKDALE	NY
OAKDALE POWER AND SAIL INC	SHORE DR	OAKDALE	NY
OAKDALE YACHT SERVICES INC	SHORE ROAD & CENTRAL BLVD	OAKDALE	NY
BAILEYS MARINA LTD	BARTZ ST	OCEANSIDE	NY
BARNETTS BOAT YARD INC	NEW ST	OCEANSIDE	NY
BAY PARK YACHT HARBOR INC	REINA ST	OCEANSIDE	NY
BEDELLS BOAT YARD INC	MOTT ST	OCEANSIDE	NY
ERIKSENS CROWS NEST MARINA	WOOD ST	OCEANSIDE	NY
MOORING	3280 BROWER AVENUE	OCEANSIDE	NY
N W W ASSOCIATES	WOOD ST	OCEANSIDE	NY
OCEANSIDE BAY MARINA INC	BOTHNER ST	OCEANSIDE	NY
OREILLYS COVE INC	ROYAL AV	OCEANSIDE	NY
SKIPS MARINA INC	NEW ST	OCEANSIDE	NY
SLIMS BOATS	WEIDNER AV	OCEANSIDE	NY
WYKERT ETHELYN	MOTT ST	OCEANSIDE	NY
TNEIRO MARINA CORPORATION	NARROW RIVER ROAD	ORIENT	NY
SAMALOT MARINE INC	WESTERLY RD	OSSINING	NY
WESTERLY MARINA INC	WESTERLY ROAD	OSSINING	NY
LONG ISLAND COAL CO	SOUTH ST	OYSTER BAY	NY
MULTIHULL ENTERPRISES INC	SOUTH ST	OYSTER BAY	NY
DOCKSIDE 500 MARINA	COLONIAL DR	PATCHOGUE	NY
MOORINGS AT PIER 66 LTD INC	RIVER AV	PATCHOGUE	NY
RIVER POINT BOAT SALES INC	PRICE ST	PATCHOGUE	NY
RIVER POINT MARINE INC	PRICE ST	PATCHOGUE	NY
WEEKS FRANK M YACHT YARD	RIVERVIEW CT	PATCHOGUE	NY
TAPPEN-ZEE MARINA	MAPLESHADE AV	PEARL RIVER	NY

LANDLUBBERS INC	PIERMONT AVE	PIERMONT	NY
TWIN OAK FARM & MAR CHANDLERS	PIERMONT AV	PIERMONT	NY
SCOTTYS MARINA INC	BAYSIDE DR	POINT LOOKOUT	NY
WESTCHESTER AVE MARINA REALTY	WESTCHESTER AV	PORT CHESTER	NY
WESTCHESTER MARINA	WESTCHESTER AV	PORT CHESTER	NY
D & B MARINE	WEST BROADWAY	PRT JEFFERSON	NY
D AN B MARINE	BROADWAY ST	PRT JEFSN STA	NY
BAY MAINTENANCE CORP	MAIN ST	PRT WASHINGTON	NY
COW BAY CHANDLERY LTD	SHORE RD	PRT WASHINGTON	NY
COW BAY MARINE SERVICE INC	SHORE RD	PRT WASHINGTON	NY
COWBAY SAND CO	WEST SHORE ROAD	PRT WASHINGTON	NY
FEARON MARINE SERVICE INC	SHORE RD	PRT WASHINGTON	NY
FLAGSHIP YACHTS LTD	MAIN ST	PRT WASHINGTON	NY
GOLD COAST MARINE INC	MATINECOCK AV	PRT WASHINGTON	NY
GULFWAY MARINE SERVICE INC	SHORE RD	PRT WASHINGTON	NY
INTER MARITIME INDUSTRIES LTD	MAIN ST	PRT WASHINGTON	NY
L B COMMERCIAL CORP	MAIN ST	PRT WASHINGTON	NY
LA MOTTA GUY BOATS INC	MATINECOCK AV	PRT WASHINGTON	NY
SEAMAN YACHT SERVICE INC	MAIN ST	PRT WASHINGTON	NY
SIGSBEE MARINE CO INC	CAPI LANE	PRT WASHINGTON	NY
TOMS POINT MARINA	1 SAGAMORE HILLS DRIVE	PRT WASHINGTON	NY
VENTURA YACHT SERVICES INC	ORCHARD BCH BL	PRT WASHINGTON	NY
W & W MARINE INC	ORCHARD BCH BL	PRT WASHINGTON	NY
WESTEND MARINA CORP	MATINECOCK AV	PRT WASHINGTON	NY
GATEWAY OF FLANDERS INC	FLANDERS RD	RIVERHEAD	NY
PECONIC RIVER MARINA	BAY AV	RIVERHEAD	NY
PECONIC RIVER YACHT BASIN INC	MAIN ST	RIVERHEAD	NY
EBB TIDE MARINA	370 BEACH 85TH ST	ROCKAWAY BCH	NY
SEAWAY MARINE CORP	THURSBY AV	ROCKAWAY BCH	NY
BAYHEAD MARINA INC	BAYVIEW AV	ROSEDALE	NY
MARCON INC	MILTON RD	RYE	NY
TIDE MILL YACHT BASIN INC	KIRBY LN	RYE	NY
GREAT PECONIC BAY YACHT BASIN	WASHINGTON AVE	S JAMESPORT	NY
MC AULIFFE MARINE INC	MAIN STREET	SAG HARBOR	NY
NOYAC MARINA INC	RD 1 BOX 537	SAG HARBOR	NY
REDWOOD BOAT BASIN INC	REDWOOD RD	SAG HARBOR	NY
SAG HARBOR EQUITIES INC	WEST WATER STREET	SAG HARBOR	NY
SAG HARBOR YACHT YARD INC	BAY ST	SAG HARBOR	NY
SHIP ASHORE MARINA INC	REDWOOD RD	SAG HARBOR	NY
SAUGERTIES MARINA	FERRY ST	SAUGERTIES	NY
BROWNS RIVER MARINE INC	RIVER ROAD AND TERRY ST	SAYVILLE	NY
WESTINS DOUG BOAT SHOP INC	RIVER ROAD	SAYVILLE	NY
ARROWHEAD MARINA & R V PARK	RT 4 BOX 300 LN	SCHENECTADY	NY
J & A MARINE ENTERPRISES INC	SARNOWSKI DR	SCHENECTADY	NY
MOHAWK VALLEY MARINE INC	AMSTERDAM RD	SCHENECTADY	NY
SCOTIA MARINE INC	SARNOWSKI DR	SCHENECTADY	NY
KREMERS BOAT YARD INC	JACKSON AV	SEAFORD	NY
MANANNAN LTD	ADLER CT	SEAFORD	NY
MARINA DEL MAR INC	MARINO PARK DRIVE	SEAFORD	NY
PRECISION MARINE	ARROWHEAD PL	SEAFORD	NY
SEAFORD HARBOR BOAT YARD INC	SHORE RD	SEAFORD	NY

SEAFORD TRANSPORT INC	OCEAN AV	SEAFORD	NY
T I MARINA ASSOCIATES	OCEAN AV	SEAFORD	NY
VIKING MARINA	OCEAN AV	SEAFORD	NY
COECLES HBR MARINA & BOAT YARD	HUDSON AVENUE	SHELTER IS	NY
ISLAND BOAT YARD INC THE	SOUTH MENANTIC ROAD	SHELTER IS	NY
SHELTER ISLAND MRINA FSHING ST	SOUTH FERRY ROAD	SHELTER IS	NY
DONS YACHT YARD	SLEEPY HOLLW DR	SHIRLEY	NY
DANS OUTBOARD SERVICE	MENANTIC RD	SHLTR IS HTS	NY
JACKS MAR & TRUE VALUE HDWR	FERRY RD	SHLTR IS HTS	NY
JERICO BOATS OF SMITHTOWN	JERICO TPKE	SMITHTOWN	NY
BEST BOAT WORKS	LITTLE NECK RD	SOUTHAMPTON	NY
BOFILL DAVE MARINE INC	NORTH HWY	SOUTHAMPTON	NY
PECONIC MARINA INC	N/S NOYAC ROAD	SOUTHAMPTON	NY
SPELLMANS MARINE INC	NORTH HWY	SOUTHAMPTON	NY
SWORDFISH MARINA INC	PECONIC RD	SOUTHAMPTON	NY
TEAM MARINE LTD	NORTH HWY	SOUTHAMPTON	NY
ALBERTSON MARINE INC	MAIN ROAD	SOUTHOLD	NY
BUDDS POND MARINA NC	ROUTE 25	SOUTHOLD	NY
GOLDSMITHS BOAT SHOP INC	ROUTE 25	SOUTHOLD	NY
SOUTHOLD MARINE CENTER INC	MAIN RD RT 25	SOUTHOLD	NY
STACHNIK MARINE LTD	DOCK ROAD	SPEONK	NY
KLEMT ARTHUR & SON INC	NORRIE POINT	STAATSBURG	NY
GREAT LKES DRDGE DOCK COMPANY	RICHMOND TER	STATEN ISLAND	NY
MANSION MARINA INC	MANSION AV	STATEN ISLAND	NY
MARINE POWER & LIGHT CORP	RICHMOND TER	STATEN ISLAND	NY
MCLAIN MARINE INC	RICHMOND TER	STATEN ISLAND	NY
MORAN TOWING & TRNSP CO	RICHMOND TER	STATEN ISLAND	NY
PORT ATLANTIC MARINA INC	ELLIS ST	STATEN ISLAND	NY
STATEN ISLAND BOAT SALES INC	MANSION AV	STATEN ISLAND	NY
TOTTENVILLE MARINA INC	ELLIS ST	STATEN ISLAND	NY
ADMIRALS MARINA	HUDSON AVE	STILLWATER	NY
STONY BROOK BOAT WORKS CORP	SHORE ROAD	STONY BROOK	NY
BA-MAR INC	EAST MAIN STREET	STONY POINT	NY
BOATLAND ON THE HUDSON INC	EAST MAIN ST	STONY POINT	NY
BOLLINO JOSEPH EST	BEACH RD	STONY POINT	NY
STONY POINT BAY CORP	HUDSON DRIVE	STONY POINT	NY
STONY PT MARINA & YACHT CLUB	HUDSON DR	STONY POINT	NY
WILLOW COVE MARINA INC	HUDSON DR	STONY POINT	NY
KAPLAN WILLIAM AND MARINA	LIME KILN RD	SUFFERN	NY
HAVERSTRAW MARINA CORP	WHITE PLN RD	TARRYTOWN	NY
TARRYTOWN MARINA INC	FOOT OF WHITE STREET	TARRYTOWN	NY
WAKELEE DONALD W	CLINTON AV	TROY	NY
NARROW RIVER MARINA CORP	EDGEWOOD RD	VALLEY STREAM	NY
OCEANSIDE MARINE BASIN IN	GREENWAY BL	VALLEY STREAM	NY
KINGS FERRY MARINA	KINGS FERRY RD	VERPLANCK	NY
VIKING BOAT YARD	KINGS FERRY ROAD	VERPLANCK	NY
HAVERSTRAW MARINA CORP	BEACH ROAD	W HAVERSTRAW	NY
NASSAU COUNTY OF	MERRICK RD	WANTAGH	NY
BERGEN POINT YACHT BASIN INC	BERGEN AV	WEST BABYLON	NY
SEA GULL MARINA CORP	BERGEN AV	WEST BABYLON	NY
MID HUDSON YARD	FLOYD ACKERT RD	WEST PARK	NY
HARRYS MARINE INC	ATLANTIC AVE	WEST SAYVILLE	NY

SOUTH SHORE BOATS OF SUFFOLK	LIBRARY AVE	WESTHMPN BCH NY
CRESTHAVEN COUNTRY CLUB	150TH STREET & 6TH AVE	WHITESTONE NY
FERRETTI ANDREW	4TH AV	WHITESTONE NY
GAMMERS BOAT YARD	RD 1 BOX 257C	AIRVILLE PA
BRODECKI EDWARD J BOAT YARD	TOTEM RD	BENSALEM PA
ECKART ALBERT G	BROWNS LN	BENSALEM PA
JACKS MARINE A CLOSE CORP	TOTEM RD	BENSALEM PA
JACKS MARINE A CLOSE CORP	6TH AV	BENSALEM PA
JACKS MARINE A CLOSE CORP	RIVER RD CR	BENSALEM PA
SNUG HARBOR MARINA	MAIN AV	BENSALEM PA
LAKE MEAD MARINA	RD 1	EAST BERLIN PA
ANCHORAGE MARINA INC	FRONT & JANSEN STS	ESSINGTON PA
PHILADLPHIA SPLANE BASE MAR DI	DELAWARE AV/WANAMAKER AVE	ESSINGTON PA
ROSSE BOAT REPAIR & STOR YARD	FRONT ST & LA GRANGE AVE	ESSINGTON PA
TINICUM YACHT YARD	FRONT ST & SAUDE AVE	ESSINGTON PA
GOLDSBORO MARINA	BOX 142 END OF RIVER ST	ETTERS PA
NEWPORT MARINE	OAK LN	GLENOLDEN PA
STEPHEN N GORDON	DEER LN	LANCASTER PA
HALL HARBOR YACHT BASIN INC	SHERRIE JOHN MANOR	MECHANICSBURG PA
AGNEW CORPORATION	PAOLI CT	PAOLI PA
PEACH BOTTOM MARINA	RD 1 BOX 82	PEACH BOTTOM PA
BARCELONA MARINA INC	CARPENTER ST	PHILADELPHIA PA
MARLIN SERVICE CORP PA	FAIRMOUNT AV	PHILADELPHIA PA
PHILADELPHIA MARINE SERVICES	PIER 12 NORTH DEL AVE	PHILADELPHIA PA
UNITED STATES DEPARTMENT DEF	PHILADELPHIA NAVAL BASE	PHILADELPHIA PA
MORROWS MARINA INC	SWARTHMORE AV/DARBY CREEK	RIDLEY PARK PA
PHILS BOAT REPAIR	WALNUT ST	SPRING CITY PA
FREDS OUTBOARD SALES INC	RD 1 BOX 334	WILLOW STREET PA
LAKE CLARKE MARINE	RTE 6245	WRIGHTSVILLE PA
SUSQUEHANNA BOAT WORKS LIMITED	RD 1	WRIGHTSVILLE PA
SUSQUEHANNA MARINA	RR 1 BOX 51	WRIGHTSVILLE PA
MARINA NUT & BOLT		WYCOMBE PA
COVE HAVEN CORP	NARRAGANSETT AV	BARRINGTON RI
LAVINS MARINA INC	SHORE DR	BARRINGTON RI
STANLEYS BOAT YARD INC	BARTON AV	BARRINGTON RI
STRIPER MARINA INC	TYLER POINT RD	BARRINGTON RI
BLOCK ISLAND BOAT BASIN INC	JOBS HILL	BARRINGTON RI
CHAMPLINS MARINA INC	NEW HARBOR	BLOCK ISLAND RI
PAYNE DOCK INC	OCEAN AVE	BLOCK ISLAND RI
BRISTOL MARINE COMPANY	POPPASQUASH RD	BRISTOL RI
GIBBINS PAUL P INC	TUCKER ROAD	CHARLESTOWN RI
OCEAN HOUSE MARINA INC	TOWN DOCK RD	CHARLESTOWN RI
CHAR-IS-MAR MARINA	INDIAN TRAIL	COVENTRY RI
RHODE ISLAND YACHT CLUB	OCEAN AV	CRANSTON RI
HULL MAINTENANCE & REPAIR	DIVISION ST	E GREENWICH RI
NEW ENGLAND YACHT RIGGING	WATER ST	E GREENWICH RI
NORTONS SHIPYARD & MARINA	FT OF DIVISION ST	E GREENWICH RI
OFF SHORE MARINE	FIRST & DIVISION ST	E GREENWICH RI
ANDYS OUTBOARD SERVICE	PAWTUCKET AV	E PROVIDENCE RI
OYSTER HOUSE MARINA INC	28 WATER STREET	E PROVIDENCE RI
CONANICUT MARINE SERVICE INC	FERRY WHARF ST	JAMESTOWN RI
RHODE ISLAND MOORING SERVICES	RACKQUEST RD	JAMESTOWN RI

STETTBACHER ALVIN JR	BISCUIT CITY ROAD	KENYON	RI
POINT JUDITH MARINA	GOOSEBERRY RD	KINGSTON	RI
JOHNSONS BOATYARD	ESMOND AV	N KINGSTOWN	RI
OUTBOARD MOTORS EXCHANGE INC	SCRABBLETOWN RD	N KINGSTOWN	RI
PLEASANT STREET WHARF INC	PLEASANT ST	N KINGSTOWN	RI
WICKBAY PROPERTIES INC	REYNOLDS ST	N KINGSTOWN	RI
WICKFORD SHIPYARD INC	STEAMBOAT AV	N KINGSTOWN	RI
WICKORD COVE MARINA INC	COVE & REYNOLDS	N KINGSTOWN	RI
JIMS DOCK INC	SUCCOTASH RD	NARRAGANSETT	RI
MIDDLEBRIDGE INC	RR MIDDLEBRIDGE ROAD	NARRAGANSETT	RI
STONE BRIDGE MARINA	WANSWORTH ST	NARRAGANSETT	RI
HISTORIC WHARVES ASSOCIATES	COMMERCIAL WHARF	NEWPORT	RI
MURPHY MARINE CO	COMMERCIAL WHARF	NEWPORT	RI
NEWPORT ONSHORE MARINA	THAMES ST	NEWPORT	RI
NEWPORT YACHT SERVICES INC	FAIR ST	NEWPORT	RI
TREADWAY INN OF NEWPORT INC	AMERICAS CUP AV	NEWPORT	RI
SILVER SPRING MARINE INC	PO BOX 3694	PEACEDALE	RI
COGGESHALL MARINA MANAGEMENT	LAGOON RD	PORTSMOUTH	RI
COVE HAVEN CORP	NARRAGANSETT BLVD	PORTSMOUTH	RI
LIGHT HOUSE MARINA INC	R I BLVD COMMON FENCE PT	PORTSMOUTH	RI
LITTLE HARBOR MARINE CORP	LITTLE HBR LNDG	PORTSMOUTH	RI
PIRATE COVE MARINA & YACHT SLS	POINT RD	PORTSMOUTH	RI
SKONNETT MARINA	NARRAGANSETT BLVD	PORTSMOUTH	RI
HARBORLIGHT MARINA INC	WASHINGTON PL	PROVIDENCE	RI
NARRA TERR BOAT YARD	RIVERSIDE DR	PROVIDENCE	RI
SHIPYARD MARINA INC	WASHINGTON AV	PROVIDENCE	RI
VIKING MARINA	SILVER SPG ST	PROVIDENCE	RI
BULLOCK COVE MARINE INC	RIVERSIDE DR	RIVERSIDE	RI
STANDISH BOAT YARD INC	MAIN RD	TIVERTON	RI
BILLINGTON COVE MARINA INC	POND ST	WAKEFIELD	RI
KENPORT MARINA INC	SUCCOTASH RD	WAKEFIELD	RI
MARINE SYSTEMS INC	GOOSEBERRY RD	WAKEFIELD	RI
RAM POINT MARINA INC	SALT POND RD	WAKEFIELD	RI
RAMPOINT MARINA	WINCHESTER DR	WAKEFIELD	RI
SNUG HARBOR MARINA INC	GOOSEBERRY RD	WAKEFIELD	RI
STONE COVE MARINA INC	SALT POND RD	WAKEFIELD	RI
JOES BOAT YARD	JOHNSON ST	WARREN	RI
TOUISSET POINT MARINA	JOHN J SENN CIRCUIT DR	WARREN	RI
ANGELS MARINA	BAY AV	WARWICK	RI
BAY MARINE INC	SHORE RD	WARWICK	RI
BENZAS WEST SHORE MARINA INC	SHORE RD	WARWICK	RI
BREWER YACHT YARD AT COWESETT	FOLLY LANDING	WARWICK	RI
C & J MARINE SERVICES INC	SEMINOLE ST	WARWICK	RI
DICKERSONS MARINA INC	ARNOLDS NECK DR	WARWICK	RI
HARBOR LIGHT MARINA INC	GRAY ST	WARWICK	RI
MENNELLA NICOLA	SEMINOLE ST	WARWICK	RI
PETTIS FRANK C JR	BAY LAWN AV	WARWICK	RI
PONAUG MARINA INC	ARNOLDS NECK DR	WARWICK	RI
SEA HORSE MARINA INC	2ND POINT RD	WARWICK	RI
SOUND MARINE SERVICE INC	OTTAWA AV	WARWICK	RI
STERN MICHAEL K LTD	MASTHEAD ST	WARWICK	RI
WARWICK COVE MARINA INC	SEMINOLE ST	WARWICK	RI

WHARF MARINA INC	WHARF RD	WARWICK	RI
WINSTEAD MARINA	TIFFANY AV	WARWICK	RI
LOTTERYVILLE MARINA	AVONDALE RD	WATCH HILL	RI
WATCH HILL BOAT YARD INC	PASADENA AV	WATCH HILL	RI
AVONDALE BOAT YARD	AVONDALE RD	WESTERLY	RI
HALL FRANK BOAT YARD INC	AVONDALE RD	WESTERLY	RI
LOTTERYVILLE MARINA	AVONDALE RD	WESTERLY	RI
MINERS ED BOATYARD	LOWER PAWCATUCK	WESTERLY	RI
PIER 65 MARINA	MARGIN ST	WESTERLY	RI
RIVER BEND MARINE	MARGIN ST	WESTERLY	RI
WESTERLY MARINA	MARGIN ST	WESTERLY	RI
WHEWELLS MARINE	STONINGTON RD	WESTERLY	RI
HOLIDAY MARINA	WHARF RD	ACHILLES	VA
BACKYARD BOATS INC	FRANKLIN ST	ALEXANDRIA	VA
BACKYARD BOATS-SHADYSIDE INC	FRANKLIN ST	ALEXANDRIA	VA
BELLE HAVEN MARINA INC	NO 1 BELLE HAVEN RD	ALEXANDRIA	VA
COLES POINT MARINA & GROCERY	EAGLEBROOK CT	ALEXANDRIA	VA
VITATECT CORP	CONOVER PL	ALEXANDRIA	VA
COLUMBIA ISLAND MARINA	WASHINGTON MEM PKWY	ARLINGTON	VA
PAGAN RIVER MARINE INC	ROUTE 1001	BATTERY PARK	VA
PAGEN RIVER MARINA	ADDRESS UNKNOWN	BATTERY PARK	VA
HOGGES ELECTRONIC SERVICE	SEVERN WHARF ROAD	BENA	VA
GARRETT'S MARINA INC	STATE ROUTE #684	BOWLERS WHARF	VA
LAKE ANNA BUSINESS SERVICES	RT 601	BUMPASS	VA
LAKE ANNA MARINA	STATE RT 713	BUMPASS	VA
KRENTZ MARINE RAILWAY	HWY 622	CALLAO	VA
OLVERSONS MARINA INC	HWY 623	CALLAO	VA
KINGS CREEK MARINA	OFF U S RT 13	CAPE CHARLES	VA
ATLANTIC YACHT BASIN INC	BASIN RD	CHESAPEAKE	VA
KING S LANDING MARINA	OAK DR	CHESAPEAKE	VA
SNUG HARBOR MARINA	EAST SIDE DRIVE	CHINCOTEAGUE	VA
TAYLOR & LEONARD INCORPORATED	S MAIN ST	CHINCOTEAGUE	VA
ALLENS MARINA INC	ST RD #623	CHURCH ROAD	VA
ALLENS MARINE & CAMPGROUNDS	ST RD 623	CHURCH ROAD	VA
GINNEY POINT MARINA	RT 628	COBBS CREEK	VA
B & Z MARINE INC	RT 679	COLES POINT	VA
CAPTAINS TABLE RESTAURANT	STATE ROUTE 612	COLES POINT	VA
COLES POINT MARINA	BOX 28	COLES POINT	VA
COLONIAL BEACH YACHT CENTER	CASTLEWOOD DR	COLONIAL BCH	VA
PARKER HENRY C	MONROE BAY AV	COLONIAL BCH	VA
STANFORDS MARINE RAILWAY	ROBIN GROVE LN	COLONIAL BCH	VA
DAHLGREN MARIE WORKS INC	PO BOX 704 POTOMAC DR	DAHLGREN	VA
CHESAPEAKE COVE MARINA	HWY 1110	DELTAVILLE	VA
DEAGALS MARINA	BOX 739	DELTAVILLE	VA
DEAGLE & SONS MARINE RLWY INC	HWY 1111	DELTAVILLE	VA
DELTAVILLE DOCKSIDE INN	RT 33	DELTAVILLE	VA
DOZIERS DOCKYARD	HWY #33	DELTAVILLE	VA
FISHING BAY INC	RT 1104	DELTAVILLE	VA
J C MARINE CORP	STATE ROUTE 683	DELTAVILLE	VA
MONTGOMERY & WILSON MAR RLWY	HWY 33	DELTAVILLE	VA
NORTONS MARINA INC	HWY 659	DELTAVILLE	VA
NORVIEW MARINA ASSOCIATES INC	ROUTE 33 E	DELTAVILLE	VA

RUARK MARINA INC	OFF HWY 1102	DELTAVILLE	VA
MARYLAND POINT MARINA	HWY 17	FREDERICKSBG	VA
WAUGH POINT MARINA	HWY 218	FREDERICKSBG	VA
SHELTER HARBOR MARINES INC	RTE 620	GLASS	VA
FREEPORT MARINA	RT2 BOX 1898	GLOUCESTER	VA
ABR CORPORATION	ST RT 1210	GLOUCESTER PT	VA
GLOUCESTER POINT MARINA INC	OFF HWY 216	GLOUCESTER PT	VA
JORDANS MARINE SERVICE INC	ROUTE 1205	GLOUCESTER PT	VA
INGERSOLL ENTERPRISES INC	RAILWAY RD	GRAFTON	VA
ISLANDER MOTEL & REST MARINA	HWY #633 GWYNNS ISLAND	GRIMSTEAD	VA
WRIGHTS MARINA	BOX 157	GWYNN	VA
BRANSON COVE MARINA	RT 1	HAGUE	VA
CARTERS MARINE SERVICE	HARRIS CRK RD	HAMPTON	VA
DANDY HAVEN MARINA	DANDY POINT RD	HAMPTON	VA
HAMPTON ROADS MARINA INC	MARINA RD	HAMPTON	VA
HARBOR SERVICES INC	NEWSOME PL	HAMPTON	VA
JOYS MARINA	QUEEN ST	HAMPTON	VA
MARINA COVE BOAT BASIN	HARRIS CREEK RD	HAMPTON	VA
PETES TOP SHOP	BRIDGE ST	HAMPTON	VA
SUNSET YACHTING CENTER INC	KECOUGHTAN RD	HAMPTON	VA
WALLACE B J & SON	DANDY POINT RD	HAMPTON	VA
DIV OF PERICO CORP	END OF	HAYES	VA
HUDGINS MARINE	ADDRESS UNKNOWN	HAYES	VA
PERICO CORP	HWY 17	HAYES	VA
CEDAR POINT MARINA	ST RT 639	HEATHSVILLE	VA
INGRAM BAY MARINA	END OF RT 609 EAST	HEATHSVILLE	VA
JORDAN POINT YACHT HAVEN	ROUTE 156	HOPEWELL	VA
IRVINGTON MARINA INC	CARTER CREEK ROAD	IRVINGTON	VA
CHESAPEAKE BOAT BASIN INC	END OF WAVERLY AVE	KILMARNOCK	VA
FLEETWOOD MOTOR CO	HWY 662	KING WILLIAM	VA
GUMMERSON & GUMMERSON MARINE	RT 6	KINSALE	VA
WHITE POINT MARINA INC	HIGHWAY 744	KINSALE	VA
YEOCOMICO MARINA	OFF HWY 608	KINSALE	VA
HAYWOODS DOCK INC	END OF HWY 624	LANCASTER	VA
YANKEE POINT SAILBOAT MARINA	RURAL ROUTE 2 BOX 1470	LANCASTER	VA
LEWISSETTA MARINA	BOX 44 HWY 624	LEWISSETTA	VA
CAPTAIN JOHN S BEACH MARINA	10729 OLD COLSHESTER RD	LORTON	VA
COLCHESTER MARINA	10734 OLD COLCHESTER RD	LORTON	VA
MARINA CAPT JOHN S BEACH	10719-29 OLD COLCHESER RD	LORTON	VA
COAN RIVER MARINA INC	HWY 614	LOTTSBURG	VA
WHITLOCK S EDWARD	E MAIN ST	LOUISA	VA
CAPTAINS MARINA	CASTLESTONE RD	MIDLOTHIAN	VA
KING S LANDING MARINA	TIMBER RIDGE PL	MIDLOTHIAN	VA
ANNA POINT MARINA INC	INTERSECTION RTS 208/761	MINERAL	VA
EAST RIVER BOAT YARD	1ST ST	NEWPORT NEWS	VA
JAMES RIVER MARINA INC	DEEP CREEK RD	NEWPORT NEWS	VA
NORMANS MARINE SALES & SVC	MENCHVILLE RD	NEWPORT NEWS	VA
BAY HARBOR BROKERAGE INC	BAYVILLE AV	NORFOLK	VA
BAY MARINE	PRETTY LAKE AV	NORFOLK	VA
COBBS MARINA	DUNNING RD	NORFOLK	VA
CUTTY SARK MARINA INC	PRETTY LAKE AV	NORFOLK	VA
JMS BAY MARINE INC	PRETTY LAKE AV	NORFOLK	VA

LITTLE CREEK MARINA	PRETTY LAKE AV	NORFOLK	VA
MULTIS CAPITIBUS INC	PRETTY LAKE AV	NORFOLK	VA
RIDWELL JOHN T INC	PRETTY LAKE AV	NORFOLK	VA
TUDOR MARINE INC	GRANBY ST	NORFOLK	VA
WILLOUGHBY BAY MARINA INC	BAYVILLE AV	NORFOLK	VA
WILLOUGHBY HARBOR LTD	BAYVILLE AV	NORFOLK	VA
MOBJACK BAY MARINA	HWY 662	NORTH	VA
YACHT YARD	ROUTE 617	NORTH	VA
OCCOQUAN BOAT CLUB	MILL ST	OCCOQUAN	VA
PRINCE WILLIAM MARINE SALES	MILL ST	OCCOQUAN	VA
HOPKINS & BROTHERS	MARKET ST	ONANCOCK	VA
POQUOSON MARINA	RENNS RD	POQUOSON	VA
HORN HARBOR MARINA INC	RT 710	PORT HAYWOOD	VA
KINGS LANDING MARINA	CRAWFORD PKWY	PORTSMOUTH	VA
MC DOWELL WALTER M ENTERPRISES	ACRES CIR	PORTSMOUTH	VA
MULTIS CAPITIBUS CORPORATION	WYOMING AV	PORTSMOUTH	VA
NAUTICAL DISTRIBUTORS INC	ADAMS ST	PORTSMOUTH	VA
PORTSMOUTH BOATING CENTER INC	BAY ST	PORTSMOUTH	VA
VIRGINIA BOAT & YACHT SERVICE	SHIPWRIGHT ST	PORTSMOUTH	VA
VIRGINIA BOAT & YACHTS	SHIPWRIGHT ST	PORTSMOUTH	VA
APPO MATTOX SMALL BOAT HAVOR	FINE ST END OF	PRINCE GEORGE	VA
CHAMBLEE INC	OFF HWY 360	REEDVILLE	VA
REMLIK MARINE SERVICE	HWY 656	REMLIK	VA
BROWNS MARINA	PO BOX 15	RESCUE	VA
RESCUE YACHT BASIN INC	HWY 105	RESCUE	VA
CARBONIC INDUSTRIES CORP	BELLWOOD AV	RICHMOND	VA
CULLY S MARINE & BOAT YARD	9 MILE RD	RICHMOND	VA
FALLING CREEK MARINA	SWINEFORD RD	RICHMOND	VA
RICHMOND YACHT BASIN INC	HOKE BRADY RD	RICHMOND	VA
RUDOLPH CONSTRUCTION CO	BELT BL	RICHMOND	VA
MILLS MARINA INC	BACK CRK RD	SEAFORD	VA
WILDEY MARINA INC	WILDEY RD	SEAFORD	VA
BARRS BAY HOUSE REST & MARINA	BURWELLS BAY	SMITHFIELD	VA
SMITHFIELD LANDING COMPANY	CHURCH ST	SMITHFIELD	VA
ROCKY BRANCH MARINA	RT 3 BOX 159	SPOTSYLVANIA	VA
STURGEON CREEK MARINA INC	HWY 208	SPOTSYLVANIA	VA
AQUIA CREEK MARINA	AQUIA CRK RD	STAFFORD	VA
AQUIA MARINA INC	AQUIA CRK RD	STAFFORD	VA
WILLOWS LANDING MARINA	WILLOW LNDG RD	STAFFORD	VA
BENNETTS CREEK MARINA INC	FERRY RD	SUFFOLK	VA
JOMAR CORPORATION TIDEWATER	NANSEMOND PKWY	SUFFOLK	VA
WHIPPERNOCK MARINA INC	RT1 BOX 326	SUTHERLAND	VA
HAVEN MARINA	JEANETTE DR	TAPPAHANNOCK	VA
LOCKLIES MARINA	ST RT 621	TOPPING	VA
REGENT POINT MARINA INC	END OF HWY 704	TOPPING	VA
BURRELLS MARINA & SNACK BAR	HWY 680	URBANNA	VA
JAMISON COVE INC	END OF VIRGINIA ST	URBANNA	VA
REMLIK MARINE CORP	REMLIK BRANCH PO	URBANNA	VA
SOUTHSIDE MARINE SERVICE INC	OFF CROSS ST	URBANNA	VA
URBANNA MARINE CORPORATION	RT 227	URBANNA	VA
WINDMILL POINT MARINE RESORT	MAPLE AV	VIENNA	VA
BOSSSES MARINA	SHORE DR	VIRGINIA BCH	VA

BROAD BAY MARINE SERVICE	RUTHERFORD RD	VIRGINIA BCH	VA
BUBBAS MARINA INC	SHORE DR	VIRGINIA BCH	VA
INLET STATION MARINA	MEDITERRANEAN	VIRGINIA BCH	VA
L D C INC	LASKIN RD	VIRGINIA BCH	VA
LYNNHAVEN DRY STORAGE MARINA	GREAT NECK RD	VIRGINIA BCH	VA
LYNNHAVEN MUNICIPAL MARINA	LYNNHAVEN DR	VIRGINIA BCH	VA
LYNNHAVEN WATERWAY MARINA INC	GREAT NECK RD	VIRGINIA BCH	VA
MOBILE OUTBOARD SERVICE	GREAT NECK RD	VIRGINIA BCH	VA
OCEAN GATE ENTERPRISES INC	WINSTON SALM AV	VIRGINIA BCH	VA
VIRGINIA BCH FISHING CTR LTD	WINSTON SALM AV	VIRGINIA BCH	VA
WEST NECK MARINA	NECK RD	VIRGINIA BCH	VA
WACHAPREAGUE HOTEL & MARINA	VA ST RT 180	WACHAPREAGUE	VA
TANGIER & CHESAPEAKE CRUISES	RICHMOND RD	WARSAW	VA
MATTAPONI MARINA INC	7TH STREET	WEST POINT	VA
ANCHORAGE	HWY 775	WHITE STONE	VA
LEES YACT SERVICE	PO BOX 262	WHITE STONE	VA
WINDMILL POINT MARINE RESORT	RT 695	WHITE STONE	VA
WINEGARS MARINE RAILWAY	R 1 BOX 640	WHITE STONE	VA
JAMESTOWN MARINA	NECK OLAND RD	WILLIAMSBURG	VA
TRACOR MARINE INC	ROUTE 199	WILLIAMSBURG	VA
VERMILLION THOMAS R ENTPS	YORK & PAGE STS	WILLIAMSBURG	VA
E-Z CRUZ INC	JEFF DAVIS HWY	WOODBIDGE	VA
EASY CRUZ MARINA	NEABSCO RD	WOODBIDGE	VA
HAMPTONS LANDING	NEABSCO RD	WOODBIDGE	VA
HOFFMASTERS MARINA INC	SWAN POINT RD	WOODBIDGE	VA
PIER ONE INC	DAVIS FORD RD	WOODBIDGE	VA
PILOT HOUSE REST & MARINA	NEABSCO RD	WOODBIDGE	VA
TYME N TYDE INC	FEATHERSTONE RD	WOODBIDGE	VA
WORMLEY CREEK MARINA CORP	WATERVIEW RD	YORKTOWN	VA

APPENDIX B
LIST OF STATION LOCATIONS AND TYPES

Following is a SAS listing of station locations by system. Definitions of systems and terms are as follows:

Sta #

This is the station identification number. For the database management system, this number will be prefixed with VA90 to designate that samples were collected in the Virginian Province in 1990.

** following the station number for an LTDO station indicates that the DataSondes are deployed only during the first interval. In intervals 2 and 3 DO monitoring activities are conducted at these stations, however, no DataSondes are deployed.

Size

This denotes the EMAP-NC size classification for the water body in which the station is located as follows:

L = Large system

TR = Tidal river

O= All others

TYPE

This column lists the station type as follows:

LTDO = These are long-term DO monitoring stations

BSS = These are Base Sampling Sites

ITE = These are Indicator Testing and Evaluation Stations

IND = These stations are Index Stations which are associated with Base Sampling Sites.

Supp = These stations are "Spatial Supplemental" Stations.

Rep = These stations are "Scalar Supplemental" Stations.

TYPE	NUMBER	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
BSS	80	36.9	80	36.9
BSS/ITE	2	0.9	82	37.8
BSS/ITE/LTDO	6	2.8	88	40.6
IND	57	26.3	145	66.8
ITE	15	6.9	160	73.7
LTDO/BSS	24	11.1	184	84.8
REP	24	11.1	208	95.9
SUPP	9	4.1	217	100.0

SAL

The salinity classifications are as follows:

P = Polyhaline > 18ppt

M = Mesohaline from 5 to 18 ppt

TFO = Tidal Fresh/oligohaline < 5ppt

TEAM 1 STATIONS

System

This is the general system into which the station can be categorized.

BB = Buzzards Bay
 BIS = Block Island Sound
 ELI = Eastern Long Island
 HR = Hudson River
 LIC = Long Island Coast
 LIS = Long Island Sound
 NB = Narragansett Bay
 NS = Nantucket Sound

Number of LTDO stations is 8.

----- System in which Station is located=BB -----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
069	LTDO/BSS	L	P	41	30	32.40	70	57	33.00
099	BSS/ITE/LTDO	O	P	41	38	33.00	70	54	42.00
132	IND	O	P	41	38	30.00	70	55	15.00

----- System in which Station is located=BIS-----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
072	BSS	L	P	41	21	18.60	71	30	14.40
073	BSS	L	P	41	12	43.20	71	36	18.60
074	BSS	L	P	41	12	19.80	71	49	31.80
075	BSS	L	P	41	11	54.60	72	2	45.00

----- System in which Station is located=ELI-----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
104	LTDO/BSS	O	P	40	57	24.00	72	30	12.00
105	IND	O	P	40	55	52.80	72	31	5.40
156	BSS	O	P	41	0	0.00	72	24	42.00
157	IND	O	P	41	0	0.00	72	25	1.80
159	LTDO/BSS	O	P	41	3	42.00	72	0	6.00
160	IND	O	P	41	4	12.00	72	2	6.00

----- System in which Station is located=HR-----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
101	BSS/ITE	TR	TFO	41	23	0.00	73	57	22.80
177	BSS	TR	M	40	53	0.00	73	56	34.20
198	IND	TR	M	40	53	0.00	73	56	0.00
199	BSS	TR	M	41	9	0.00	73	52	58.20
212	IND	TR	M	41	9	0.00	73	53	45.00
214	IND	TR	M	41	23	0.00	73	57	12.00
215	BSS	TR	M	41	44	0.00	73	56	42.60
216	IND	TR	M	41	44	0.00	73	56	36.00
217	BSS	TR	M	42	0	0.00	73	56	19.80
218	IND	TR	M	42	0	0.00	73	56	30.00

----- System in which Station is located=LIC-----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
023	BSS	L	M	40	44	27.00	72	59	52.20
161	BSS	O	P	40	52	18.00	72	28	24.00
162	IND	O	P	40	51	34.80	72	28	51.00

----- System in which Station is located=LIS-----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
021	BSS	L	P	41	1	49.20	72	48	13.80
022	LTDO/BSS	L	P	41	9	58.20	72	55	33.00
024	BSS	L	P	41	1	16.80	73	1	23.40
025	BSS	L	P	41	0	43.20	73	14	32.40
026	LTDO/BSS	L	P	41	0	7.80	73	27	40.80
028	BSS	L	M	40	50	46.20	73	46	31.80
076	BSS/ITE	L	P	41	11	27.60	72	15	57.60
077	BSS	L	P	41	10	59.40	72	29	9.60
078	BSS	L	P	41	2	19.80	72	35	3.60
079	BSS	L	P	41	10	29.40	72	42	21.60
093	ITE	O	M	41	20	48.00	72	22	42.00
095	ITE	O	M	41	18	48.00	72	53	9.00
096	ITE	O	P	40	55	13.20	73	38	42.00
098	ITE	O	P	41	9	34.80	73	12	37.20
106	LTDO/BSS	O	M	41	21	52.80	71	57	52.20
107	IND	O	M	41	19	30.00	71	58	36.00
108	SUPP	O	M	41	20	18.00	71	58	30.00
169	BSS	O	M	41	17	12.00	73	4	19.20
170	IND	O	M	41	10	0.00	73	5	30.00

----- System in which Station is located=NB-----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
070	LTDO/BSS	L	P	41	38	28.80	71	18	0.60
071	BSS	L	P	41	29	54.00	71	24	8.40

----- System in which Station is located=NS-----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
027	BSS	L	P	41	31	30.00	70	4	18.60
029	BSS	L	P	41	23	0.00	70	10	36.00
037	BSS	L	P	41	31	18.00	70	17	37.80
038	BSS	L	P	41	22	47.40	70	23	53.40
052	BSS	L	P	41	31	4.80	70	30	56.40
068	BSS	L	P	41	22	16.80	70	50	27.00
166	BSS	O	P	41	25	36.00	70	31	0.00
167	IND	O	P	41	24	30.00	70	28	54.00

TEAM 2 STATIONS

System

This is the general system into which the station can be categorized.

CBMD = Chesapeake Bay, Maryland

DB = Delaware Bay

HR = Hudson River

NJC = New Jersey Coast

Number of LTDO stations is 12.

----- System in which Station is located=CBMD -----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
058	BSS	L	M	39	7	45.00	76	16	52.80
062	LTDO/BSS	L	M	38	59	12.00	76	21	28.80
065	LTDO/BSS	L	M	38	33	27.00	76	24	4.80
066	BSS	L	M	38	50	17.40	76	26	34.20
080	ITE	L	M	38	53	22.80	76	24	3.60
083	ITE	O	M	38	52	42.00	76	30	54.00
089	ITE	O	TFO	39	22	42.00	76	0	0.00
090**	BSS/ITE/LTDO	O	TFO	39	16	12.00	76	26	36.00
091	ITE	O	TFO	39	26	36.00	76	14	45.00
112	BSS	O	M	38	52	42.00	76	31	6.00
113	IND	O	M	38	51	13.20	76	31	6.00
114	BSS	O	M	38	44	42.00	76	14	30.00
115	IND	O	M	38	44	36.00	76	14	30.00
134	LTDO/BSS	O	M	39	14	46.80	76	33	25.20
135	IND	O	M	39	13	9.60	76	32	34.80
136	BSS	O	TFO	39	18	18.00	76	24	36.00
137	IND	O	TFO	39	18	34.20	76	24	30.60
139	IND	O	TFO	39	15	17.40	76	26	37.20
140	SUPP	O	TFO	39	16	30.00	76	27	0.00
254	LTDO/BSS	O	TFO	39	28	46.80	75	56	30.00
255	IND	O	TFO	39	25	41.40	76	0	49.20

----- System in which Station is located=DB-----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
001	REP	L	P	38	51	43.20	75	6	31.20
002	REP	L	P	39	9	16.20	74	55	30.60
003	REP	L	P	39	8	54.60	75	1	51.60
004	REP	L	P	39	8	43.20	75	8	7.20
005	REP	L	P	39	8	15.00	75	15	13.80

006	REP	L	P	39	7	58.20	75	20	24.00
007	REP	L	M	39	12	14.40	75	17	42.00
008	REP	L	M	39	16	37.20	75	14	58.20
009	REP	L	M	39	16	12.60	75	22	18.60
010	REP	L	M	39	20	13.80	75	26	16.20
011	REP	L	M	39	27	51.60	75	33	43.20
012	REP	L	P	38	51	22.20	75	12	55.80
013	REP	L	M	39	24	12.60	75	29	27.00
014	REP	L	P	38	56	19.80	75	4	1.80
015	REP	L	P	38	55	28.80	75	16	46.80
016	REP	L	P	39	0	42.60	75	1	31.20
017	REP	L	P	39	0	19.20	75	8	0.00
018	REP	L	P	38	59	55.80	75	13	55.80
019	REP	L	P	39	4	58.80	74	59	8.40
020	REP	L	P	39	4	6.60	75	11	45.60
031	BSS	L	P	39	4	36.00	75	5	16.20
032	BSS	L	P	38	55	45.60	75	10	33.00
033	LTDO/BSS	L	P	39	12	36.00	75	12	43.20
035	BSS	L	P	39	3	45.60	75	18	0.00
036	BSS	L	M	39	20	36.00	75	20	12.00
124	BSS	O	M	39	30	6.00	75	32	0.00
125	IND	O	M	39	30	12.00	75	32	3.60
178	BSS	TR	M	40	10	0.00	74	43	40.80
179	IND	TR	M	40	10	0.00	74	43	45.00
219	BSS	TR	M	39	35	0.00	75	34	54.00
220	REP	TR	M	39	40	0.00	75	32	5.40
221	IND	TR	M	39	35	0.00	75	33	30.00
223**	LTDO/BSS	TR	M	39	45	0.00	75	29	0.00
224	REP	TR	M	39	50	48.60	75	20	0.00
225	IND	TR	M	39	45	0.00	75	29	18.00
227	BSS	TR	M	39	52	52.80	75	11	0.00
228	REP	TR	M	39	58	24.60	75	6	0.00
229	IND	TR	M	39	52	54.60	75	11	0.00
231	LTDO/BSS	TR	M	40	3	1.80	74	58	0.00
232	REP	TR	M	40	6	0.00	74	50	21.60
233	IND	TR	M	40	3	10.20	74	58	0.00
250	BSS	O	M	39	16	37.20	74	58	42.00
251	IND	O	M	39	12	42.60	75	2	19.20
252	BSS	O	M	39	34	49.80	75	29	43.20
253	IND	O	M	39	34	11.40	75	30	50.40

----- System in which Station is located=HR-----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
094	ITE	O	M	40	37	18.00	74	12	12.00
102	BSS/ITE/LTDO	O	TFO	40	45	0.00	74	5	12.00
103	ITE	O	TFO	40	45	0.00	74	9	54.00
122**	LTDO/BSS	O	P	40	27	36.00	74	4	30.00
123	IND	O	P	40	26	30.00	74	1	36.00
147	IND	O	M	40	45	0.00	74	5	0.00
173	BSS	O	M	40	38	48.00	74	3	30.00
174	IND	O	M	40	40	0.00	74	2	42.00

----- System in which Station is located=NJC-----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
100	BSS/ITE/LTDO	O	TFO	40	20	36.00	73	59	12.00
111	IND	O	P	40	20	33.00	74	0	0.00
118	BSS	O	M	39	32	30.00	74	24	30.00
119	IND	O	M	39	31	6.00	74	24	42.00
120	SUPP	O	M	39	33	6.00	74	24	54.00
158	BSS	O	P	40	11	22.80	74	1	54.00
168	IND	O	P	40	11	36.00	74	2	24.00
256	LTDO/BSS	O	M	39	56	36.00	74	6	6.60
257	IND	O	P	39	46	42.60	74	7	30.00

TEAM 3 STATIONS

System

This is the general system into which the station can be categorized.

CBMD = Chesapeake Bay, Maryland
 CBVA = Chesapeake Bay, Virginia
 DB = Delaware Bay
 DEC = Delaware Coast
 MDC = Maryland Coast
 VAC = Virginia Coast

Number of LTDO stations is 10.

----- System in which Station is located=CBMD -----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
039	BSS	L	M	37	53	43.20	75	46	39.00
040	BSS	L	M	37	44	49.80	75	51	42.00
041**	LTDO/BSS	L	M	38	1	40.80	75	54	6.00
043	BSS	L	M	37	52	46.80	75	59	8.40
045	BSS	L	M	38	9	37.80	76	1	33.60
050	BSS	L	M	38	0	43.80	76	6	36.00
056	BSS	L	M	38	8	40.20	76	14	5.40
081	ITE	O	M	39	14	36.00	76	29	29.40
082	ITE	O	M	39	15	12.00	76	33	6.00
088	BSS/ITE/LTDO	O	TFO	38	52	10.80	76	59	51.00
128	BSS	O	M	38	22	25.20	77	2	19.80
129	IND	O	M	38	25	0.60	77	1	33.00
130	BSS	O	M	37	59	54.00	75	37	18.00
133	IND	O	M	37	57	48.00	75	38	45.00
172	IND	O	TFO	38	51	31.20	77	1	0.00
180	BSS	TR	M	38	4	12.60	76	27	52.80
181	IND	TR	M	38	3	3.60	76	27	51.60
182	BSS	TR	M	38	13	6.00	76	47	8.40
183	IND	TR	M	38	12	13.20	76	47	8.40
184	LTDO/BSS	TR	M	38	23	53.40	77	5	2.40
185	IND	TR	M	38	24	0.00	77	5	0.00
186	BSS	TR	M	38	30	0.00	77	16	29.40
187	IND	TR	M	38	30	0.00	77	17	4.80
188	BSS	TR	M	38	44	12.00	77	2	0.00
189	IND	TR	M	38	45	0.00	77	2	9.60

----- System in which Station is located=CBVA -----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
042	BSS	L	M	37	35	56.40	75	56	43.20
044	BSS	L	P	37	10	10.80	75	59	15.60

046	BSS	L	P	37	27	1.80	76	1	42.60
047	BSS	L	P	37	43	52.80	76	4	9.60
048	BSS	L	P	37	1	16.20	76	4	11.40
051	BSS	L	P	37	18	7.80	76	6	40.20
053	BSS	L	P	37	34	58.80	76	9	9.00
054**	LTDO/BSS	L	P	37	9	12.60	76	11	36.60
055	BSS	L	P	37	51	49.80	76	11	37.20
057	LTDO/BSS	L	P	37	26	4.20	76	14	6.60
059	BSS	L	P	37	0	18.00	76	16	31.20
060	BSS	L	P	37	42	55.20	76	16	36.60
061	LTDO/BSS	L	P	37	17	9.00	76	19	3.00
084	ITE	TR	P	37	37	24.00	76	27	54.00
085	ITE	L	P	37	4	0.00	76	10	0.00
086	BSS/ITE/LTDO	O	P	36	49	54.60	76	17	37.80
087	ITE	TR	P	37	0	0.00	76	20	0.00
141	BSS	O	TFO	37	40	30.00	76	54	40.20
142	IND	O	TFO	37	31	41.40	76	47	10.80
143	SUPP	O	TFO	37	36	54.00	76	50	48.00
164	IND	O	M	36	55	30.00	76	20	42.00
165	SUPP	O	M	36	51	6.00	76	21	24.00
190	BSS	TR	M	37	44	12.00	76	35	4.20
191	IND	TR	M	37	44	0.00	76	35	6.60
192	LTDO/BSS	TR	M	37	57	54.00	76	52	1.80
193	IND	TR	M	37	58	0.00	76	51	42.60
194	BSS	TR	M	38	6	37.80	77	0	0.00
195	IND	TR	M	38	6	36.60	77	0	0.00
196	BSS	TR	M	38	9	54.00	77	8	31.80
197	IND	TR	M	38	10	0.00	77	8	15.60
200	BSS	TR	M	38	12	1.20	77	15	6.00
201	IND	TR	M	38	12	0.00	77	15	7.80
202	BSS	TR	P	36	55	18.00	76	21	2.40
203	IND	TR	P	36	56	6.00	76	21	2.40
204	BSS	TR	P	37	1	55.20	76	34	19.80
205	IND	TR	P	37	2	0.00	76	35	0.00
206	BSS	TR	P	37	12	33.00	76	47	53.40
207	IND	TR	P	37	12	33.00	76	47	30.60
208	BSS	TR	P	37	16	12.00	77	4	15.00
209	IND	TR	P	37	16	6.00	77	4	15.00
210	LTDO/BSS	TR	P	37	20	0.00	77	16	22.20
211	IND	TR	P	37	20	0.00	77	16	30.00

----- System in which Station is located=DEC-----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
150	LTDO/BSS	O	P	38	35	36.00	75	6	42.00
151	IND	O	P	38	36	6.00	75	7	44.40
152	SUPP	O	P	38	35	0.60	75	10	35.40
153	SUPP	O	P	38	36	8.40	75	8	13.20
154	SUPP	O	P	38	36	37.20	75	5	39.00
155	SUPP	O	P	38	36	40.20	75	6	34.80

----- System in which Station is located=MDC-----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
034	BSS	L	P	38	4	22.20	75	16	31.80

----- System in which Station is located=VAC-----

STA #	TYPE	SIZE	SAL	LATITUDE (DDMMSS.ss)			LONGITUDE (DDMMSS.ss)		
144	BSS	O	P	37	7	48.00	75	54	54.00
145	IND	O	P	37	10	0.00	75	55	16.20
258	BSS	O	P	37	17	58.80	75	50	0.00
259	IND	O	P	37	18	9.60	75	48	6.00

APPENDIX C
EQUIPMENT LIST AND CHECK LISTS

Equipment List

Each team is provided with the following equipment and supplies. This list can serve as a daily checklist to assure the crew is properly equipped.

Four wheel drive pickup truck (1)

camper shell (1)

bed liner (1)

front bumper winch (1)

Mobile laboratory (1)

work bench (1)

shelves for storing supplies

marine band VHF radio (1)

cellular telephone (1)

GRiD computer with printer, power cables, phone cord and keyboard skin (1)

bar code reader (1)

first aid kit (1)

jumper cables (1)

tool box (1)

Hach DO test kit with spare BOD bottles (2)

flashlight (1)

10 pound fire extinguisher (1)

24 foot Chesapeake-style boat

155 hp commercial Johnson engines (2)

trailer with power winch, spare tire and spare rollers (1)

mast and boom assembly (1)

hydraulic winch & capstan (1)

self-contained power supply for winch (1)

windshield wipers

marine band VHF radios (2)

Loran navigation instrument (1)

GPS navigation instrument (1)

compass (1)

hand-held compass (1)

Radar unit (1)

depth finder (1)

spare propellers (2)
GRiD computer with printer, power cables, phone cable and keyboard skin (1)
bar code reader (2)
anchor with chain and line (2)
first aid kit (1)
fire extinguishers (2)
oar (1)
personal flotation devices with lights (1 per person)
survival suits (1 per person)
ring buoy (1)
life sling (1)
Emergency Position and Information Radio Beacon (1)
boat hook (1)
tool box including cable cutter and Nicopress tool (1)
garbage pail (1)
emergency eye wash (1)
jumper cables (1)
binoculars (1)
hardhats
spotlight (1)
flashlight (1)
flares (1kit)
fish totes
nautical charts
spare oil
spare shackles
siezing wire
spare Nicopress sleeves
spare cable for winch
fenders
spare line

Sampling gear

trawl net with doors (2)
Young-modified Van Veen grab sampler (2)
grab stand (1)
Rocking-chair dredge (1)
Sea-Bird CTD with data cable (1)
Hydrolab DataSonde 3 units (approximately 13 - depends on # of LTDO
stations that team is responsible for) with data cable
moorings for the DataSondes

Go-Flo water sampling bottles (2)
spare parts for the *Go-Flo* bottles
0.5 mm stainless steel sieve (2)
sieve box (2)
Teflon mixing beaker for sediments (3)
Teflon spatula for sediments (3)
fish cutting and measuring board (2)
filtering syringes and filter holder for chlorophyll
refractometers (2)
field thermometers (4)
Hach DO test kit with spare BOD bottles (1)
pingers for all deployed gear
filet knives
coolers
fish scales (2)
Petersons fish guide (2)
Petersons guide to shells (2)
other fish keys

Supplies

sediment chemistry sampling bottles
sediment toxicity sampling bottles
bottles for benthic species composition and biomass
cubitainers - 1 and 5 gallon
zip lock bags - multiple sizes
cheesecloth for wrapping preserved fish
cores for grain size samples (60 ml syringes)
filter pads for chlorophyll samples
filter forceps (4)
625 ml containers for suspended solids samples
spare parts for CTD and DataSonde 3
spare DataSonde 3 low flow membranes
aluminum foil
Dietrich's fixative
formalin
long forceps for fish preserved in Dietrich's
wide mouth funnels (3)
centimeter ruler (3)
Alconox detergent
acetone
gloves
paper towels

Kimwipes®
alkaline batteries - AA and D
pH 7 and 10 buffers
KCl for calibrating conductivity
Federal Express shipping labels
3.5" high density diskettes with mailers
data sheets (packs including bar code labels)
field notebooks (log)
plastic clipboards (2)
number 2 pencils
pens and waterproof markers
waterproof tags for fish
shipping boxes - multiple sizes
strapping tape
"blue ice bottles"
dry ice
insulated gloves
buckets for fish preserved in Dietrichs (2)
buckets for sorting fish (10)
boating yellow pages (depends on the team)
tap water
DI water
squirt bottles
brushes for cleaning gear
scissors
hole punches
whirlpacks - multiple sizes
tubing for *Go-Flo* bottles
dessicant packages for DataSonde 3
sodium sulfite for zeroing DO
protective glasses
Viton gloves
particle masks
gear lube
outboard engine oil
grease guns
computer-generated maps
60 ml syringes for sediment cores (same as for chlorophyll filtration)
this manual (2)

LAUNCHING CHECKLIST

1. Remove trailer tie-down strap.
2. Install scupper plugs
3. Check brass boat plug and the two plugs on the bottom of the outboard bracket.
4. Drop the engine trailering brackets.
5. Lower the speedometer pick-up unit.
6. Rotate battery switch to 1 for odd days and 2 for even days.
7. Make sure the keys are in the ignition.
8. Raise all antennas.
9. Raise the mast and boom assembly and secure all stays.
10. Make sure hydraulic hoses are not pinched.
11. Install all electronics.
12. Load all gear and supplies.
13. Remove the Briggs and Stratton exhaust cover.
14. Disconnect trailer wiring.
15. Check the ramp for obstacles.
16. Have wheel chocks and winch handle available.
17. Attach bowline.
18. Check oil and gasoline levels.
19. Launch boat.

RETRIEVAL CHECKLIST

1. Engage the front hubs on the truck, place in 4WD LOW, back down the ramp, and chock the wheels.
2. Raise engines and haul boat onto trailer.
3. Disconnect winch power cable.
4. Attach safety chain.
5. Drive up the ramp, removing wheel chocks.
6. Lower engine trailering bar.
7. Remove the scupper plugs.
8. Check gas level. Fill before next launching.
9. Lower and secure mast and boom assembly.
10. Lower and secure antennas.
11. Turn off batteries.
12. Install trailering strap.
13. Close forward hatch.
14. Remove gear and electronics as appropriate. (Electronics are ALWAYS removed at night).
15. Secure all gear not removed.
16. Install Briggs and Stratton exhaust cover.
17. Check lock on the trailer tongue.
18. Reconnect trailer lighting and check lights.

20. Check all safety chains.
21. Take out of 4WD and disengage wheel hubs.

APPENDIX D

HAZARDOUS MATERIALS SAFETY
AND
HANDLING INFORMATION

This appendix consists of Materials Safety Data Sheets for all hazardous materials carried by the lab or boat crews. The permit issued to the Environmental Research Laboratory, Narragansett for handling and generating hazardous wastes covers EMAP field operations.

The EPA Generator ID # is RID075721639

APPENDIX E
PERMIT FOR OPERATING MARINE-BAND
VHF RADIO

APPENDIX F
INSTRUCTIONS FOR FISH PATHOLOGY EXAMINATION

FIELD EXAMINATION OF FISH

The field examination of finfish for gross pathology abnormalities is conducted using two somewhat different field procedures corresponding to the two types of field sampling conducted during the Near Coastal EMAP Virginian Province Demonstration. These two types of samples are base sampling and indicator testing and evaluation sampling. The two corresponding gross pathology methods are described below.

Base Sampling (Base Sampling Sites and Supplemental Sites)

I. Gross examination of fishes:

At each of the Base Sampling and Supplemental Sites visited at which fish trawls are taken, a gross examination of the contents of the trawl is completed for pathological abnormalities. The examination is intended to be a rapid scan of the trawl contents to be completed while other fish measures are being completed (i.e., identifying, enumerating, measuring). This scan should take no longer than 10-15 seconds per fish.

At each station, all species greater than 75 mm in fork length taken in the trawl, are examined to assess gross pathological problems. While each fish is still alive or fresh dead, a thorough external inspection of the body surfaces, fins, eyes, and branchial chamber is performed. All observations are recorded on data sheets and then entered into the computer on the following day.

- A. Body surfaces and fins: Note any discolorations of body surfaces (i.e., darkening, hemorrhaging, cloudiness), raised scales, white spots, or parasites visible to the naked eye. Also look for any lumps, bumps, or other growths, ulcerations, fin erosion, deformities of the vertebral column and/or mandibles, swelling of the anus, or any other abnormal conditions.
- B. Eyes: Check the eyes for cloudiness, hemorrhage, exophthalmia (i.e., pop eye), and/or depression into the orbits. Note any of these abnormalities.
- C. Branchial chamber: Examine opercula for any perforations or deformities. Lift opercula and examine gills. Note color, look for erosion of gills, clubbing or other deformities, and parasitic infestations. Examine internal surfaces of the chamber for lumps, bumps, papillomas or other growths, ulcerations, or any other abnormal conditions. Note any of these abnormalities.

II. Selection, killing and fixation for transfer:

Proper fixation of specimens is critical to the ultimate quality of the data obtained. Fish should be examined and fixed while still alive or shortly after death. Specimens should not be frozen or kept on ice at any time.

- A. All specimens with gross lesions or other suspect conditions, as identified in Section I above, will be processed and coded individually. All these fish will be transferred as indicated below (Section III) to the Gulf Breeze ERL for subsequent examination.
 1. Carefully cut the entire length of the abdominal cavity open using scissors or a sharp knife. Gently insert the instrument into the abdomen near the anus and make an incision to the operculum. Cut with a lifting motion so that the incision is made from the inside outward, taking care not to injure the visceral organs. Make one or two cuts through the livers of fishes larger than 15 cm and remove opercula prior to immersion in fixative.
 2. If the total length of the fish exceeds 15 cm, only a portion of the fish will be saved for laboratory analysis. Carefully cut, through the entire thickness of the fish, from the top of the operculum back along the spine and down to the anus. The head and visceral cavity are then saved. Any abnormalities found on the remaining portion of the fish (which is to be discarded) are excised along with the surrounding tissue, and saved with the head and visceral cavity.
 3. For fishes smaller than 15 cm, the entire fish is saved.
 4. If an external growth is present, measure it and slice through the lesion with one clean cut using a sharp razor blade. Note texture and color of masses and lesions (both external and internal).
 5. Place the sample (whole fish or head, visceral cavity and abnormalities excised) in a perforated zip-lock bag. The perforations must be large enough to permit a flow of fixative through the bag. Assign an appropriate sample number to each fish. Record this number in the notebook, along with all other pertinent information on that fish, and include a numbered tag in the bag with the fish. Place the bag in a tight sealing plastic container with sufficient fixative to completely cover the specimen. Specimens should be fixed in Dietrich's fixative.

- Dietrich's Fixative (to make ~5 gals.)
 - 37-40% Formalin 1500 ml
 - Glacial Acetic Acid 300 ml
 - 95% Ethanol 4500 ml
 - Distilled water 9000 ml

6. Carefully record pertinent information relating to each individual sample on the data sheet.

III. Shipping of formalin-fixed specimens:

Wrap each specimen in cotton or cheese-cloth and saturate with Dietrich's fixative. Clearly label individual specimens with code tags wrapped up with the fish. Place wrapped fish in zip-lock plastic bags and assure that they are completely saturated with fixative. Pack wrapped and bagged specimen in coolers or other suitable containers and ship via appropriate carrier.

Indicator Testing and Evaluation Sampling

IV. Gross examination of fishes:

At each station, all fish greater than 75 mm taken in each trawl are examined to assess gross pathological problems. While each fish is still alive or fresh dead, a thorough external inspection of the body surfaces, fins, eyes, branchial chamber, and buccal cavity is performed. Record all observations and measurements on the data sheet, and transcribe into the computer on the following day.

- A. Body surfaces and fins: Note any discolorations of body surfaces (i.e., darkening, hemorrhaging, cloudiness), raised scales, white spots, or parasites visible to the naked eye. Also look for any lumps, bumps, or other growths, ulcerations, fin erosion, deformities of the vertebral column and/or mandibles, swelling of the anus, or any other abnormal conditions.
- B. Eyes: Check the eyes for cloudiness, hemorrhage, exophthalmia (i.e., pop eye), and/or depression into the orbits. Note any of these abnormalities.

- C. Branchial chamber: Examine opercula for any perforations or deformities. Lift opercula and examine gills. Note color, look for erosion of gills, clubbing or other deformities, and parasitic infestations. Examine internal surfaces of the chamber for lumps, bumps, papillomas or other growths, ulcerations, or any other abnormal conditions. Note any of these abnormalities.
- D. Buccal cavity: Open mouth and examine for any deformities, ulcerations, lumps, bumps, papillomas and/or growths. Note any of these abnormalities. (This examination should be performed on all larger fish other than flatfishes.)

V. Selection, killing and fixation for transfer:

Proper fixation of specimens is critical to the ultimate quality of the data obtained. Fish should be examined and fixed while still alive or shortly after death. Specimens should not be frozen or kept on ice at any time.

- A. All specimens with gross lesions or other suspect conditions, as identified in section I above, are processed and coded individually. All these fish will be transferred as indicated below (Section VI) to the Gulf Breeze ERL for subsequent examination.
 - 1. Carefully cut the entire length of the abdominal cavity open using scissors or a sharp knife. Gently insert the instrument into the abdomen near the anus and make an incision to the operculum. Cut with a lifting motion so that the incision is made from the inside outward, taking care not to injure the visceral organs. Make one or two cuts through the livers of fishes larger than 15 cm and remove opercula prior to immersion in fixative.
 - 2. If the total length of the fish exceeds 15 cm, only a portion of the fish will be saved for laboratory analysis. Carefully cut, through the entire thickness of the fish, from the top of the operculum back along the spine and down to the anus. The head and visceral cavity are then saved. Any abnormalities found on the remaining portion of the fish (which is to be discarded) are excised along with the surrounding tissue, and saved with the head and visceral cavity.
 - 3. For fishes smaller than 15 cm, the entire fish is saved.

4. If an external growth is present, measure it and slice through the lesion with one clean cut using a sharp razor blade. Note texture and color of masses and lesions (both external and internal).
5. Place the sample (whole fish or head, visceral cavity and abnormalities excised) in a perforated zip-lock bag. The perforations must be large enough to permit a flow of fixative through the bag. Assign an appropriate sample number to each fish. Record this number in the notebook, along with all other pertinent information on that fish, and include a numbered tag in the bag with the fish. Place the bag in a tight sealing plastic container with sufficient fixative to completely cover the specimen. Specimens should be fixed in Dietrich's fixative.

- Dietrich's Fixative (to make ~5 gals.)
 37-40% Formalin 1500 ml
 Glacial Acetic Acid 300 ml
 95% Ethanol 4500 ml
 Distilled water 9000 ml

6. Carefully record pertinent information relating to each individual sample on the data sheet.

B. In addition to those specimens collected with visual abnormalities, a random, representative subset of specimens are collected from those fish that do not have visual abnormalities. All specimens of target fish species (Table 13.4) that "pass" the gross pathological inspection, up to a maximum of 25 individual fish, are forwarded to GB-ERL as described in Section VI. Up to ten (10) specimens of each non-target species that "pass" visual inspection are selected randomly from the trawls conducted at each field stations. Process and code as sample sets from each collection site. The number of "non-diseased" fishes collected at these sites is limited by the amount of fixative that can be carried on-board the boats. Each boat will carry four 6-gallon pails of fixative.

1. Open visceral cavity as described above (section II, A, 1).
2. Fix specimens in Dietrich's fixative as described above (section II, A, 3).

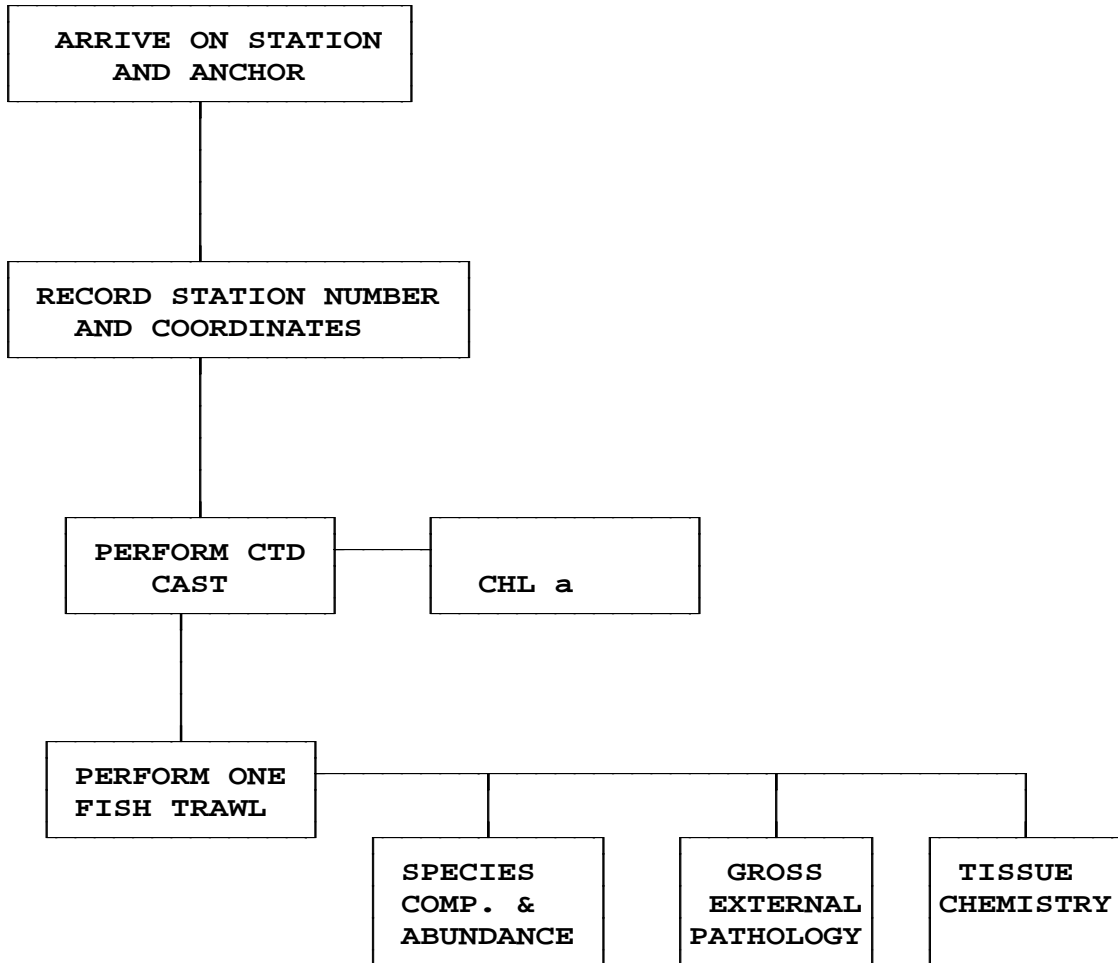
3. Carefully code samples and/or sample subsets with pertinent information, providing labels on and in containers.

VI. Shipping of formalin-fixed specimens:

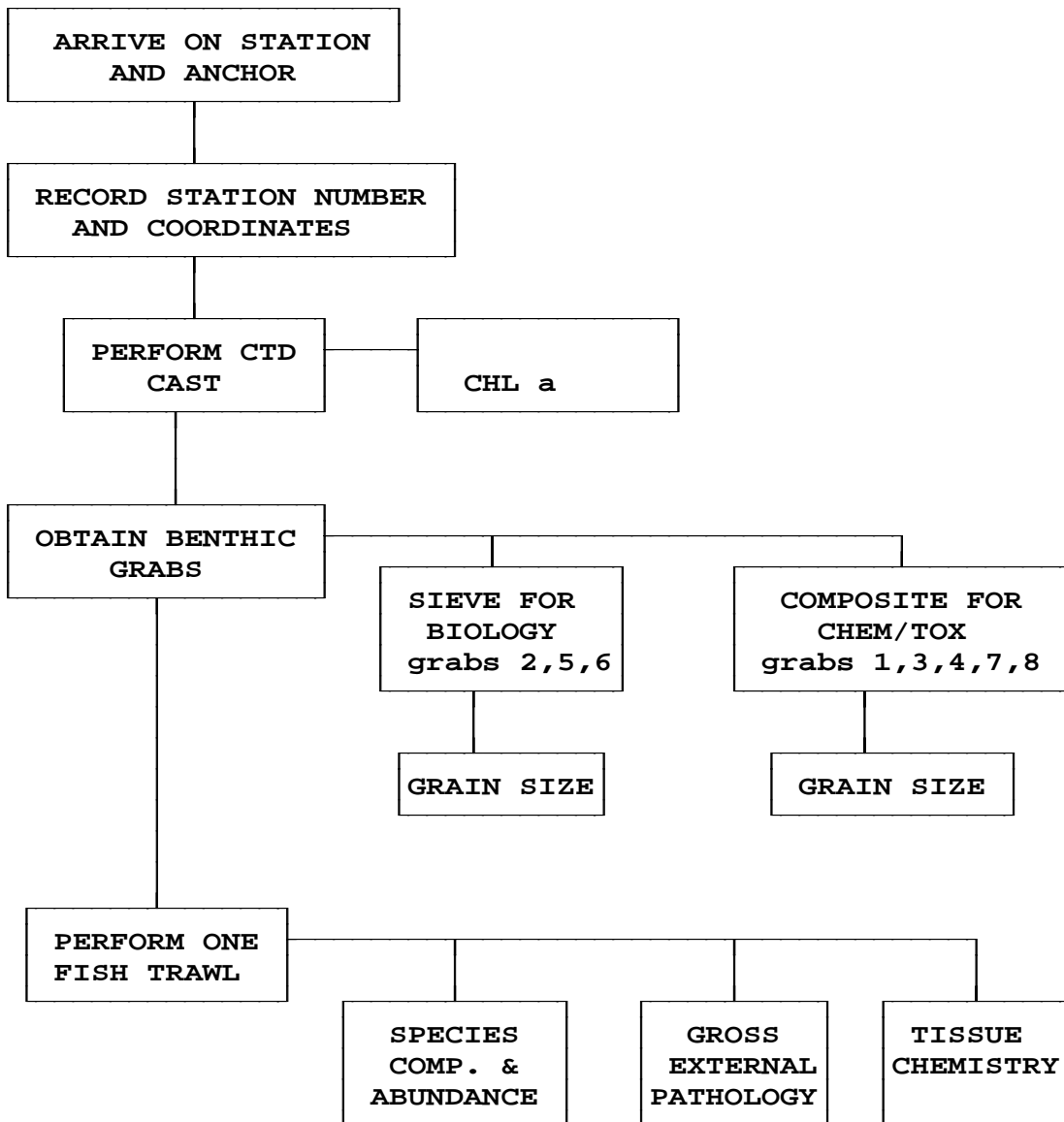
Wrap each specimen in cotton or cheese-cloth and saturate with Dietrich's fixative. Specimens making up a single sample (i.e., random "normal" fish") should then be wrapped as a group with additional cheese cloth. Clearly label individual specimens (i.e., abnormal fish) and grouped samples (i.e., normal fish) with code tags wrapped up with the fish. The tags should be the same ones that were assigned in the field. Place wrapped fish in zip-lock plastic bags and assure that they are completely saturated with fixative. Pack wrapped and bagged specimen in coolers or other suitable containers and ship via appropriate carrier.

APPENDIX G
FLOW CHARTS DESCRIBING THE ACTIVITIES
PERFORMED AT EACH STATION TYPE
AND THE PROCEDURES FOR
COLLECTING SAMPLES

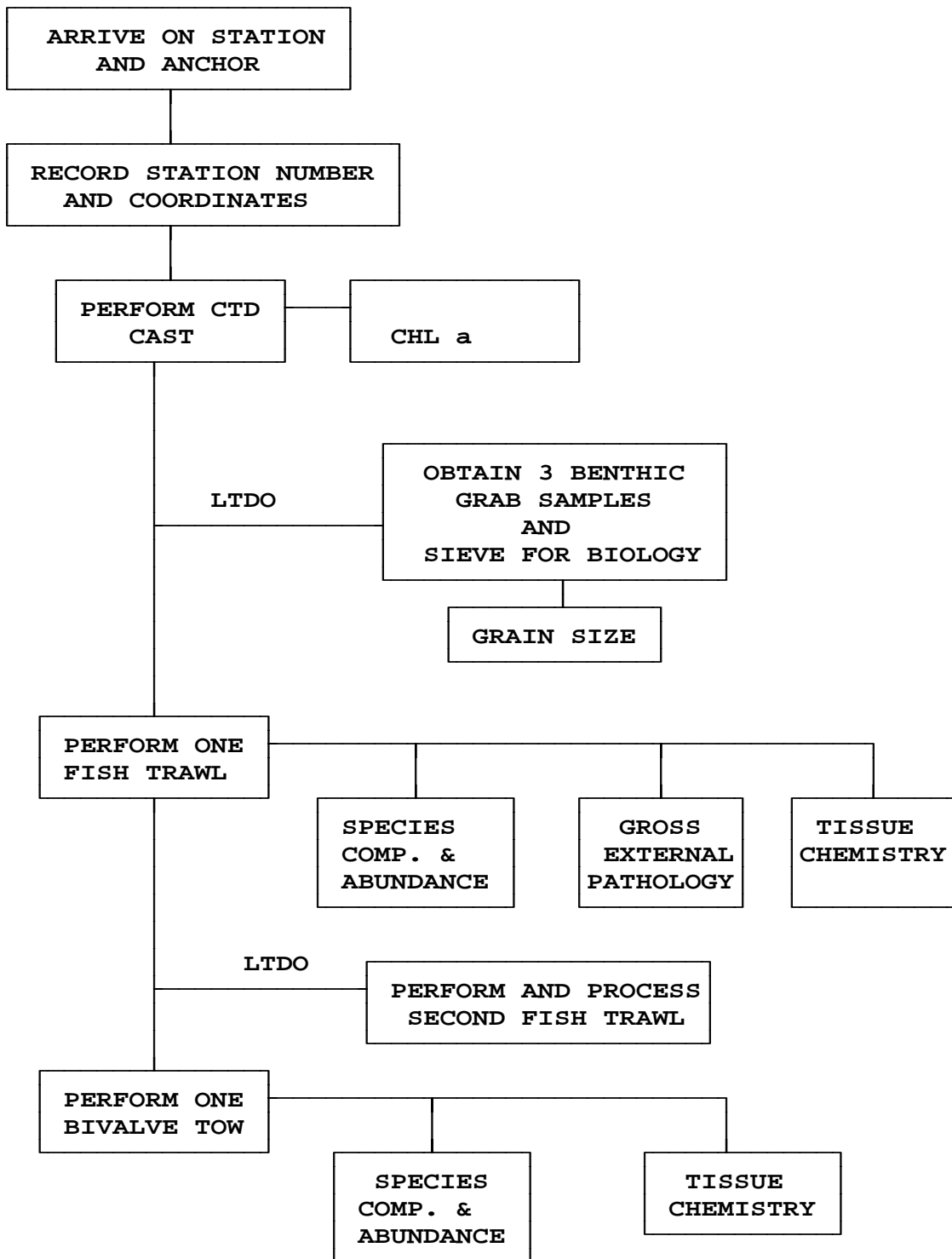
FIELD SAMPLING ACTIVITIES BASE SAMPLING SITES - INTERVAL 1



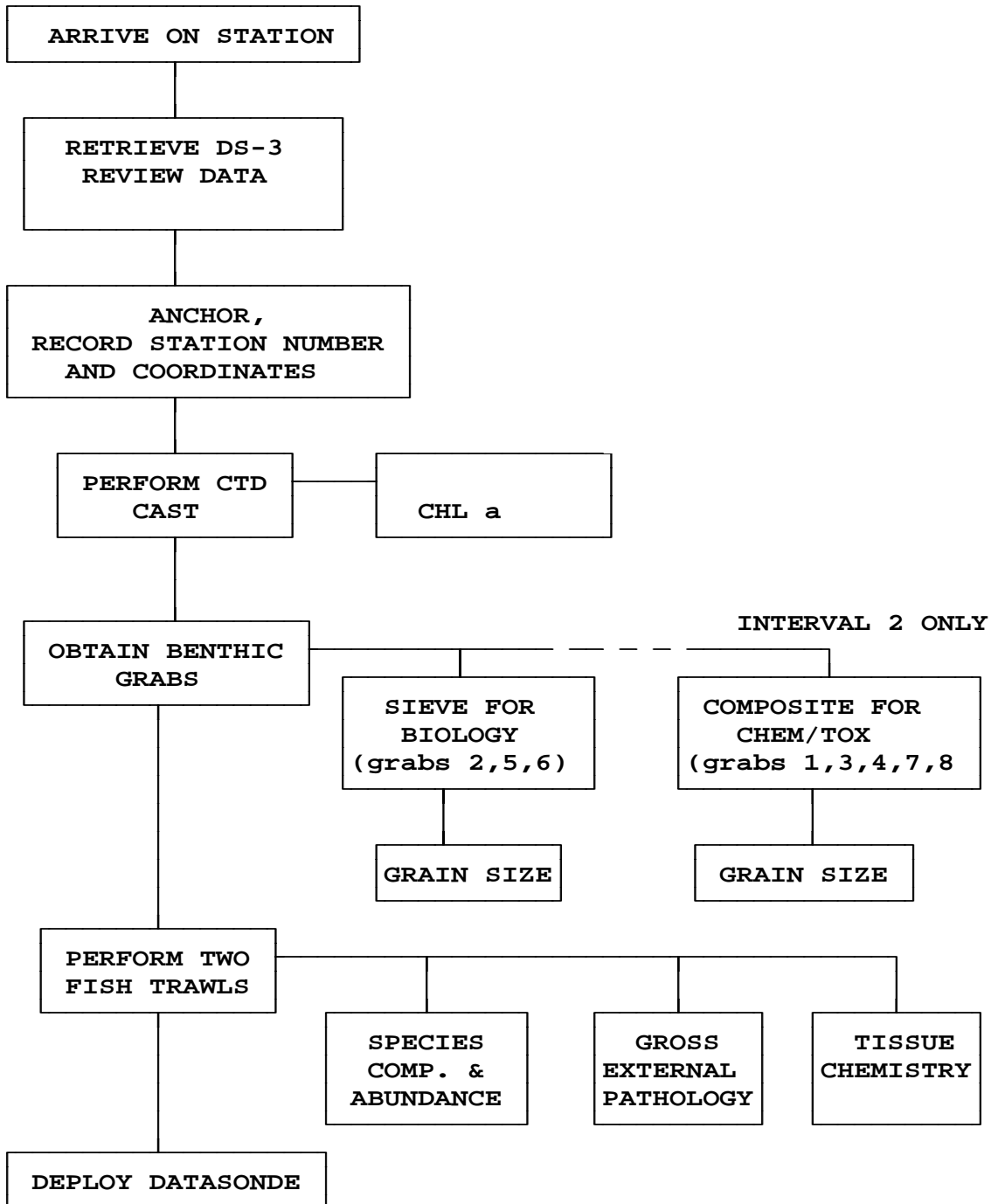
FIELD SAMPLING ACTIVITIES BASE SAMPLING SITES - INTERVAL 2



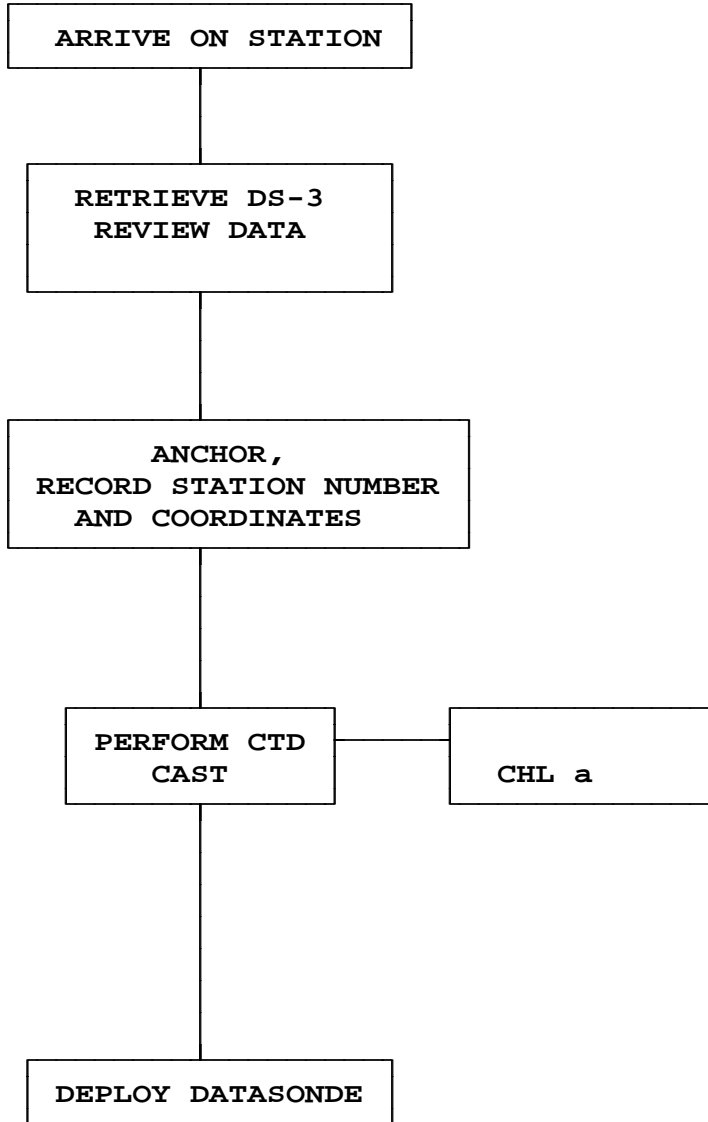
FIELD SAMPLING ACTIVITIES
 BASE SAMPLING SITES - INTERVAL 3
 (and LTDO sites - Interval 3)



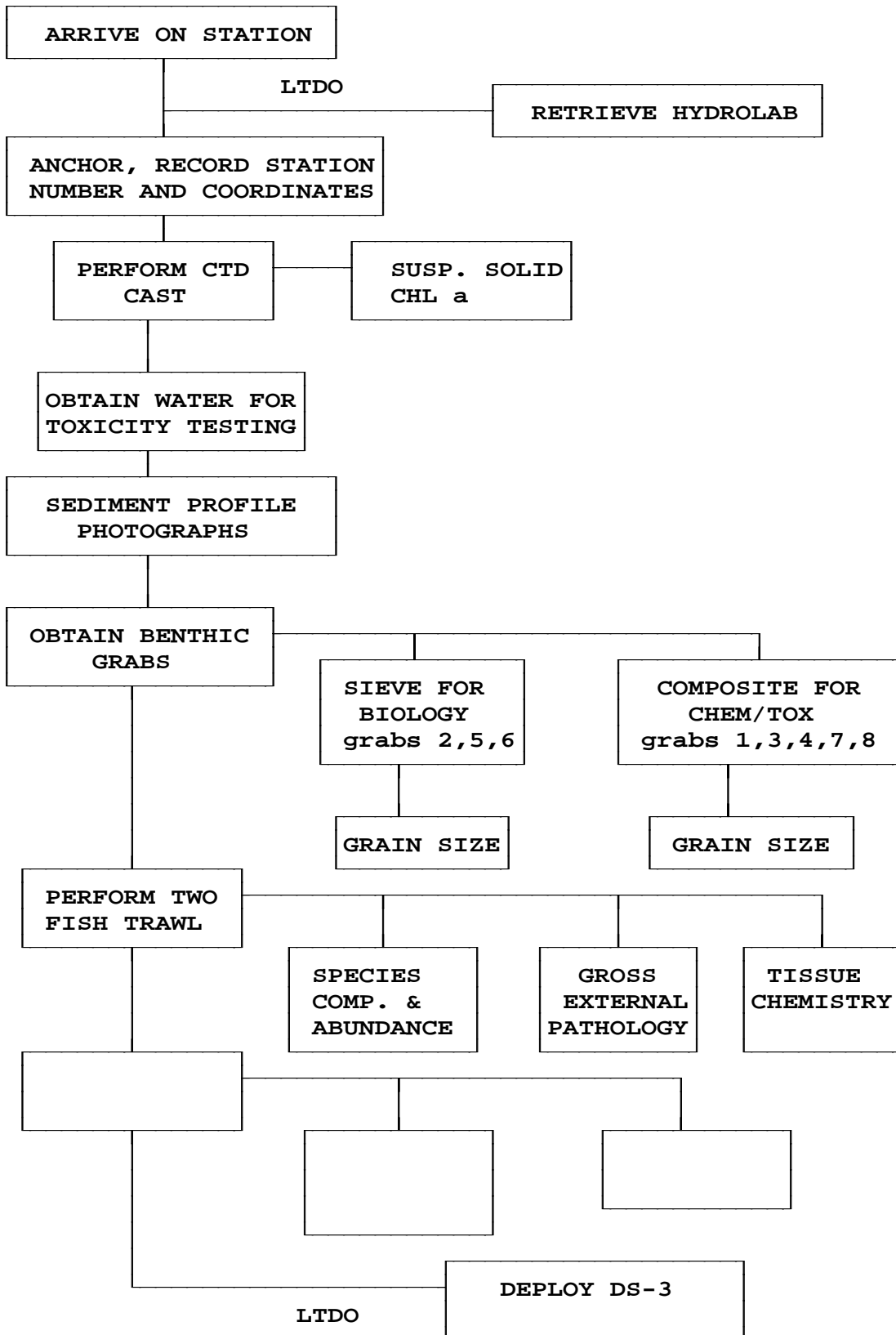
FIELD SAMPLING ACTIVITIES
 LTDO MONITORING SITES
 DO MONITORING ACTIVITIES
 SAMPLING INTERVALS 1 AND 2



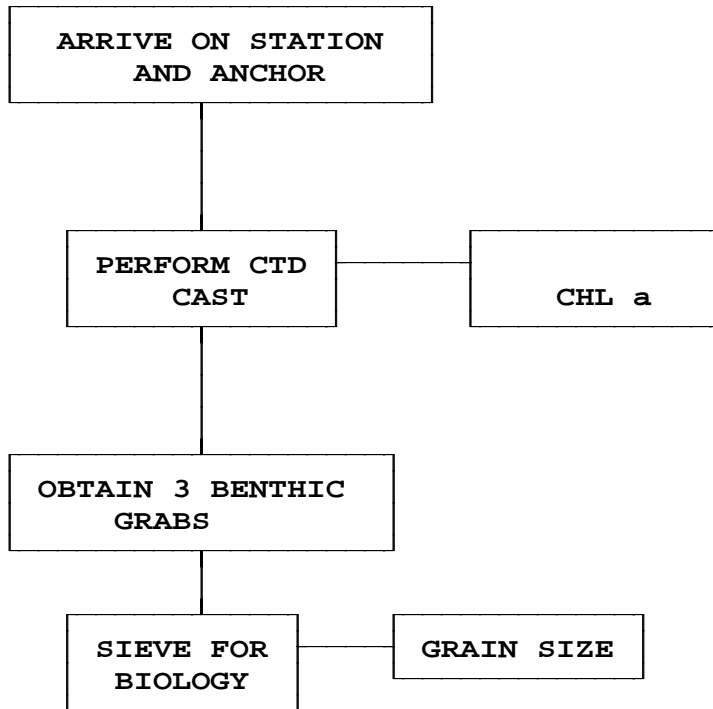
FIELD SAMPLING ACTIVITIES
LTDO MONITORING SITES
DO SERVICE ACTIVITIES



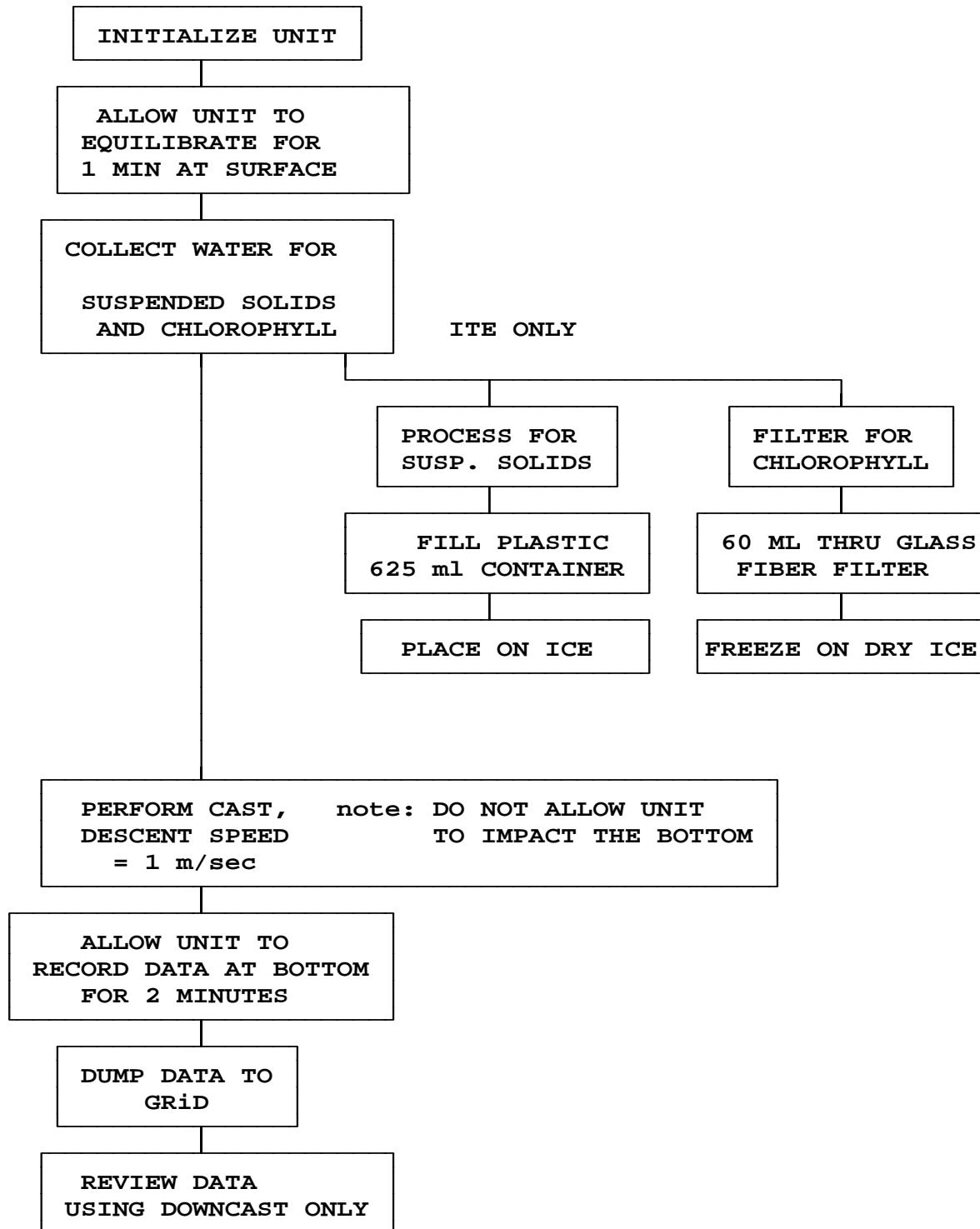
FIELD SAMPLING ACTIVITIES INDICATOR TESTING AND EVALUATION SITES - INTERVAL 2



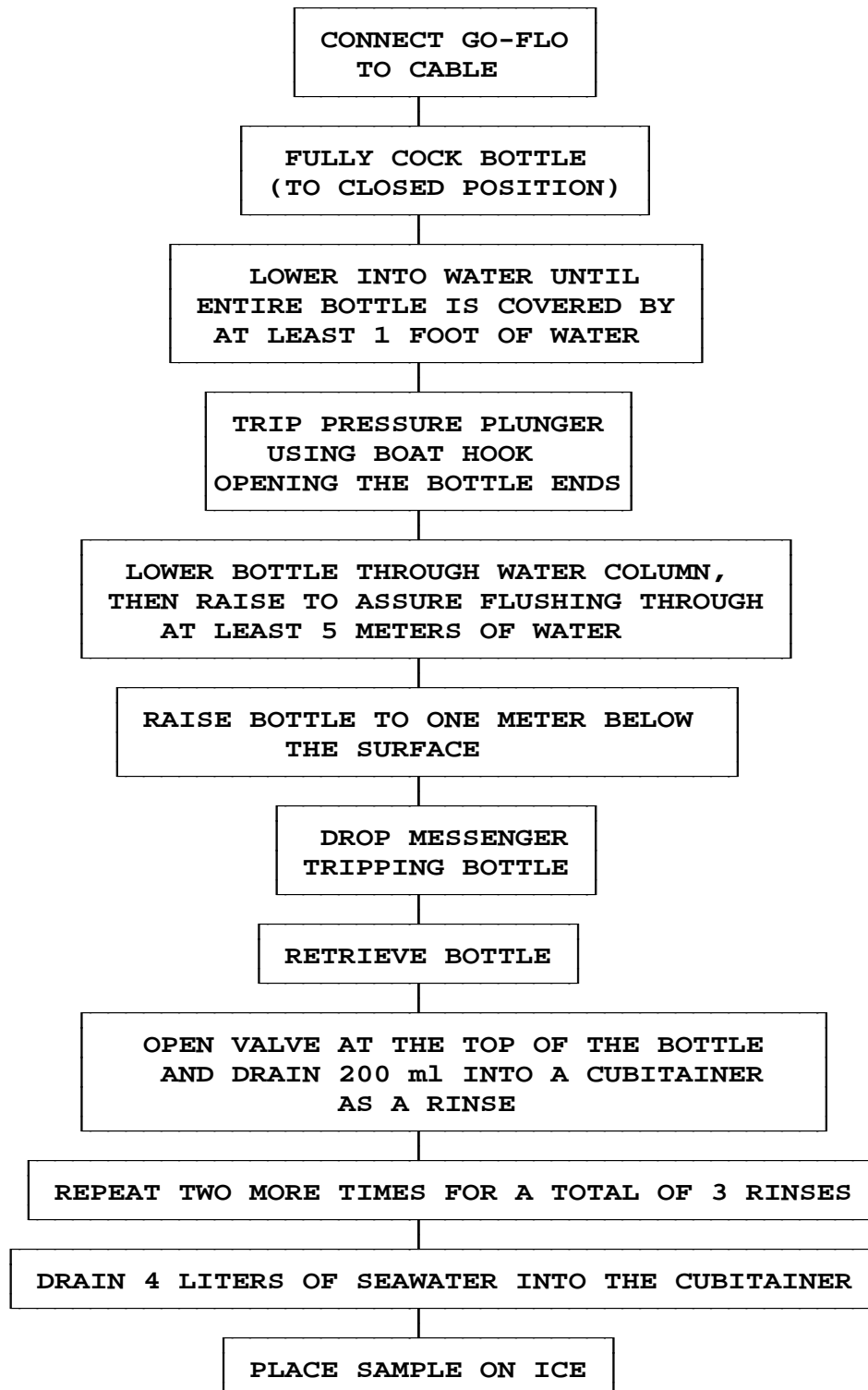
FIELD SAMPLING ACTIVITIES INDEX STATIONS - INTERVAL 2



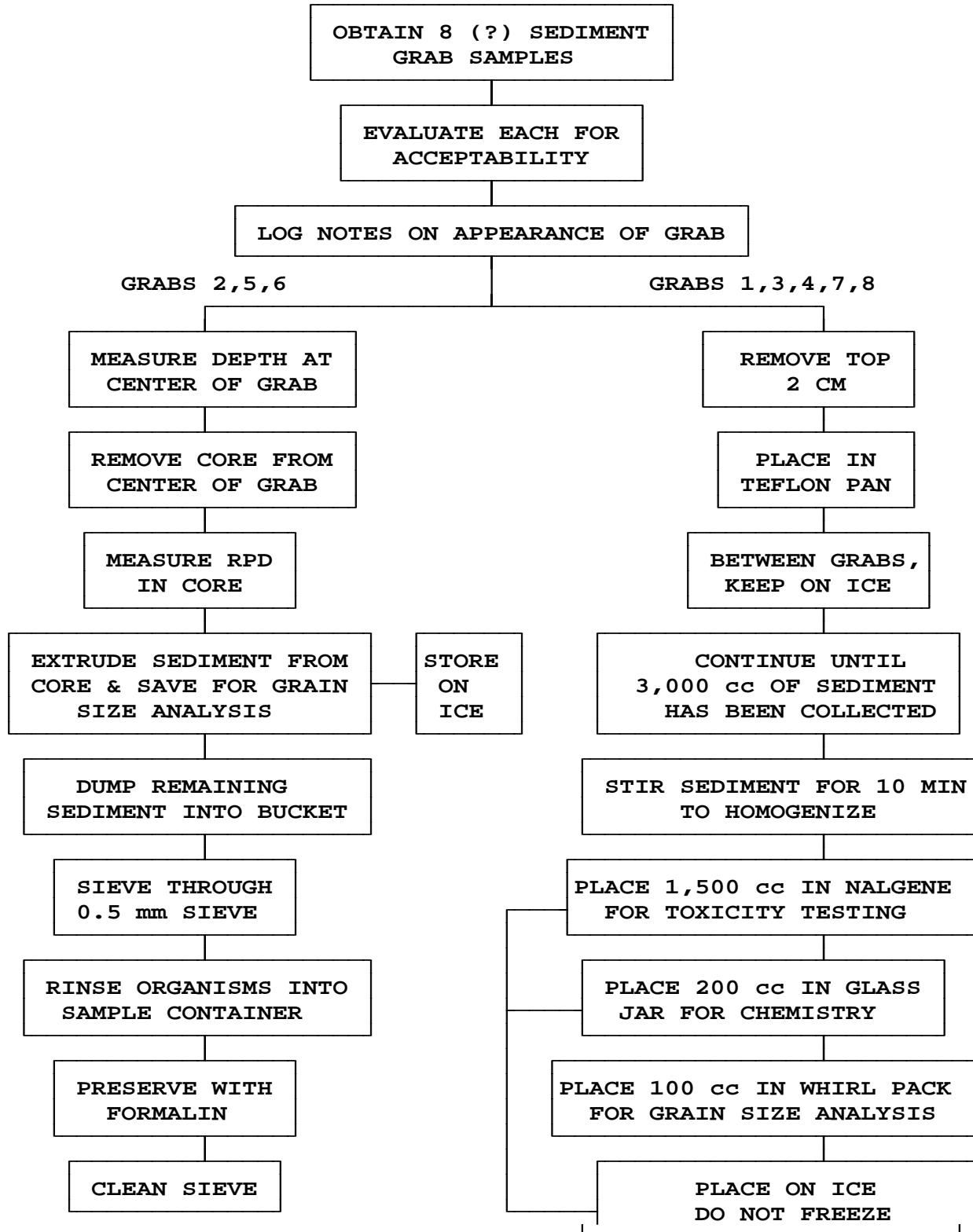
PERFORMING A CTD CAST



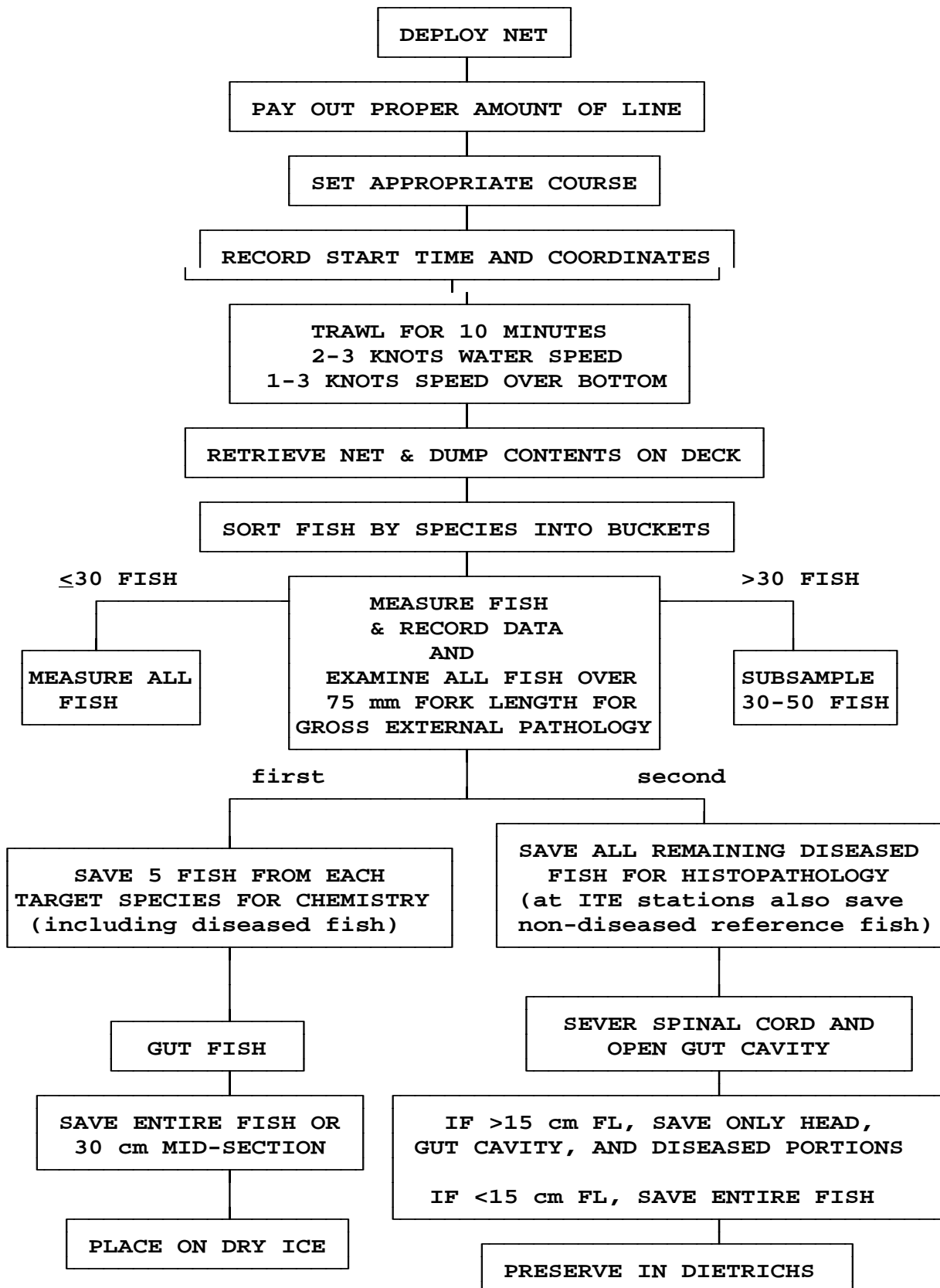
COLLECTION OF WATER FOR TOXICITY TESTING



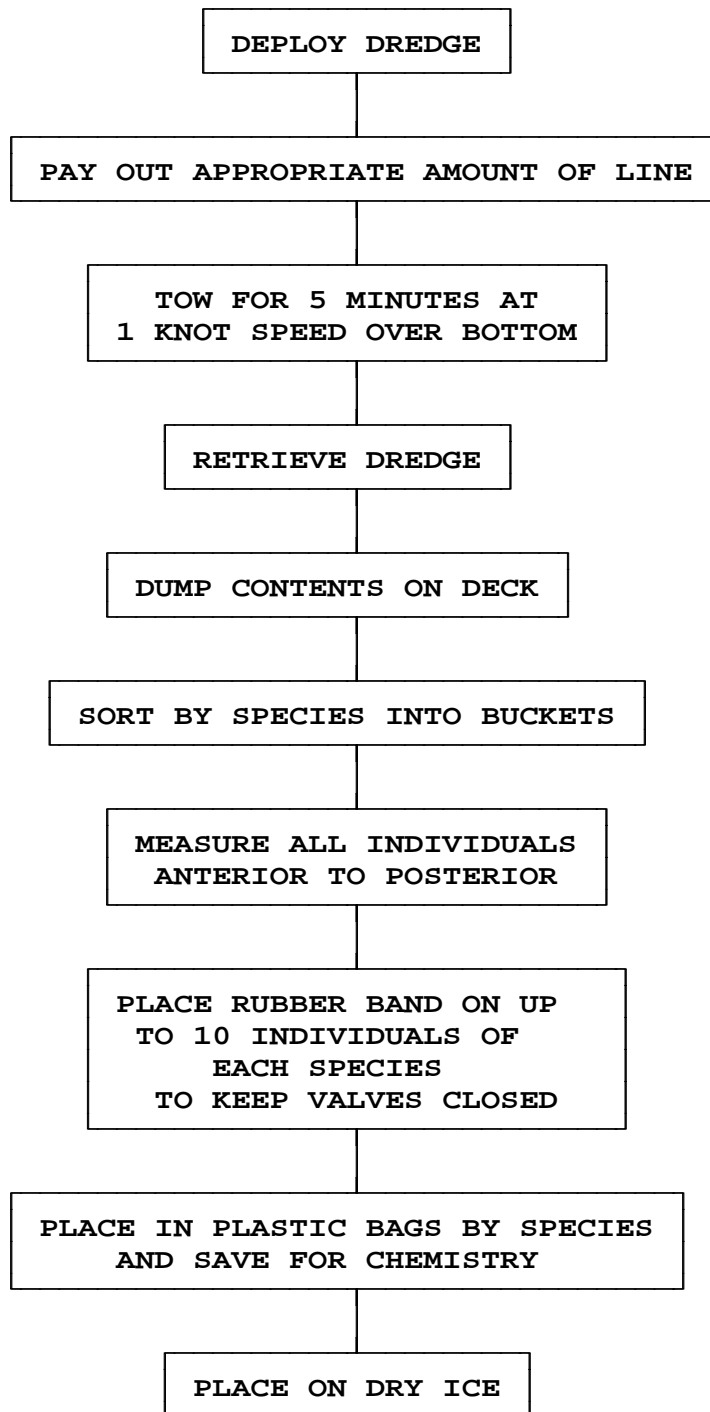
SEDIMENT COLLECTIONS



FISH COLLECTIONS



COLLECTION OF BIVALVES



APPENDIX H
OPERATION OF THE SEA-BIRD
SBE 25 SEALOGGER

This appendix details the setup, deployment, calibration, and care of the SBE 25 SeaLogger CTD.

1.0 INITIAL SETUP AND QC CHECK

- 1.** Plug one end of the data cable into the CTD and the other into the serial port of the GRiD computer. Be certain that the fat pin on the CTD matches the raised bump on the cable, and be careful NOT to bend the CTD pins. Check that the magnetic switch on the CTD is in the OFF position.
- 2.** Remove all the probe covers, including the tube around the conductivity probe, the PAR sensor cap, the pH cover, and any stoppers. Connect the tube from the oxygen sensor to the conductivity cell. Prepare the winch, and raise the CTD to the rail. Note that the data cable should remain attached for the QC Check.
- 3.** Select "Environmental Systems" from within the navigation program, then select "CTD deployment", "Calibrate CTD / QC Check", and "CTD Realtime". You will then be prompted to 'Turn on CTD'. Immediately after turning the CTD on, lower it into the water. Once the switch is on, the screen will show a fixed display of numbers as they are received from the CTD, up-dated once each second. The CTD should be held at the surface for 2 minutes (1 minute for pump turn on, and 1 for equilibration).
- 4.** Lower the Go-Flow bottle beside the CTD, and close the bottle with the messenger. When the bottle is tripped, the screen display should be paused by typing <CTRL F10>. Write down the temperature, pH, oxygen, salinity, fluorometer, and percent light transmission values on the CTD field data sheet. Release the screen display by typing <CTRL F10> again. Bring the water bottle and CTD back on deck, draw two Winkler samples (write down the bottle numbers), measure the water temperature with the thermometer and the salinity with the refractometer. Record these values on the field sheet. Draw off samples for suspended solids chlorophyll a, noting the correct sample ID's on the field sheet. The chlorophyll sample should be filtered at this time.
- 5.** With the CTD back on deck, check the pH sensor using the pH 7.0 buffer. A small gauge wire should be run from the top of the pH/oxygen probe into the buffer solution. This wire can either be held to the top of the sensor, or tightened under one of the phillips head screws. Record the pH reading on the field sheet.
- 6.** The CTD may now be turned off. Quit the realtime program by typing <CTRL F1>, and answering "no" to the restart question. This will return you to the CTD menu.

2.0 SETUP PROFILES AND DOWNLOAD DATA

1. Attach the data cable, and make sure the CTD is OFF.
2. Select "Setup CTD / Download data" from the CTD menu. Hit the <RETURN> key several times to wake up the CTD. The connection is complete when the "S>" prompt is displayed on the screen.
3. Type <IL> at the prompt to **I**nitialize the **L**ogger. The CTD will ask if you want to "initialize logging Y/N ?", respond with a <Y>. To be certain this is what you want to do, the CTD will ask "are you sure ^Y/N ?". Type <CTRL Y> to confirm your answer. The CTD will return the "S>" prompt.
4. Type <DS> to **D**isplay the **S**tatus of the CTD. Check the voltage of the main batteries by finding the words "vmain = XXXX", where XXXX will be the battery voltage. If the voltage is below 10.2, the batteries should be changed and logging re-initialized.
5. Type <QS> to **Q**uit the **S**ession and put the CTD into a low power mode. Be careful NOT to hit any keys after this, since this will wake up the CTD again.
6. Disconnect the data cable from the CTD and replace the dummy plug over the data port. Fasten the locking sleeve securely.
7. Prior to deploying the CTD, run through the following checklist:
 - A. Remove the distilled water loop from the conductivity cell, and connect the tube from the oxygen probe. Remove all stoppers.
 - B. Check the transmissometer and fluorometer lens to make sure they are clean. Use only Kimwipes or lens paper to clean them.
 - C. Carefully unscrew the bottom of the bottle covering the pH probe, and slide it straight down off the probe. If you can't reach the plastic bottle, first remove the sensor guard cage by unscrewing it.
 - D. Remove the black plastic cap covering the PAR light sensor.
 - E. Secure the winch shackle to the metal ring at the top of the frame, and raise the CTD to the rail.
 - F. Slide the magnetic switch DOWN into the ON position, and immediately lower the CTD into the water.

3.0 DEPLOYMENT

During the CTD deployment the following precautions should be observed:

- 1.** Hold the CTD just under the water surface for 2 minutes to allow the probes to equilibrate and the pump to stabilize. The CTD should be kept sufficiently deep for the water surface to reach the bottom of the shackle ring on the frame.
- 2.** Attempt to position the boat so that the PAR sensor (the small white sphere) is NOT shaded. This may involve holding the CTD away from the boat with a boat hook. If the PAR sensor becomes shaded during the deployment (particularly near the surface) make a note on the field data sheet.
- 3.** Lower the CTD at a slow, steady rate through the water column. Optimum lowering rates are between 0.5 to 1.5 m/s (1.6 to 5 ft/s). Since most of our stations are shallow, the slower rates are preferred.
- 4.** When you feel the CTD touch bottom, bring it up 0.5 to 1 m and hold it there for 1 minute. Pay careful attention to the wire, and make sure the CTD isn't bounced or dragged across the bottom.
- 5.** As the CTD comes out of the water, slide the magnetic switch UP to the OFF position. Check the conductivity and temperature probes for damage and/or obstructing mud or stones. Reconnect the distilled water loops to the oxygen and conductivity sensors, and carefully cap the pH and PAR probes. Remove the dummy plug from the data port, re-connect the cable, and download the data (see below).
- 6.** NOTE: To make multiple profiles during a day, you only need turn the magnetic switch DOWN to ON, and follow the procedures for deployment and downloading data. Do NOT re-initialize the CTD between profiles; this will keep all of the day's casts in the CTD memory, and gives you one more chance to recover them at the end of the day.
- 7.** After sampling is finished for the day, the CTD should be thoroughly rinsed down with freshwater.

4.0 DOWNLOADING DATA

1. If the computer is still in terminal mode, reconnect the data cable and press <RETURN> several times to wake up the CTD. If the terminal program was exited during the profile, select the menu option "Setup CTD / Download data", connect the cable, and press <RETURN> several times, until you see the 'S>' prompt.
2. Type <DH> to **D**isplay the **H**header. The header will list all the casts contained in the CTD's memory. Note that the cast numbers begin with "0" NOT "1".
3. Press the <F9> key. The terminal program will ask if you want to "dump all casts Y/N?". Answer <N>, since you will only want to dump the most recent cast. Select the appropriate cast number. Next you will be asked to provide a file name. Type **EMAP**, and press <RETURN>. Dots will display across the screen as the data is imported from the CTD. When finished, type <QS>, <RETURN>, and press the <F10> key to end communications with the CTD. It's important that you exit the program correctly - this will be the key for the computer to continue processing the data.
4. If you have properly downloaded the EMAP file, the computer will start the next program. While this is happening you will see a message like "BIN = xxx" where xxx is an incrementing number.
5. Following this, the computer will run the program to visually display the CTD profile plots. Answer <N>o when the program asks if you want to change display parameters. Accept all the default parameters. The program will ask for a file name and display a list of all the archived files with the .DAT extension. (There should be only one file, called EMAP). Enter "EMAP" and accept the default parameters. The screen will display three side-by-side graphs showing temperature, salinity, and dissolved oxygen, with their numeric values at the bottom. The screen can be paused and restarted at any point by toggling the <CTRL F10> keys. Pay close attention to dissolved oxygen in the vicinity of the bottom. If it drops to 0 mg/l, the station will be considered anoxic and the HydroLab DataSonde should not be deployed.
6. Return to the CTD menu by typing <CTRL F1>, and answer <N>o when the program asks if you want to restart (unless you wish to re-display the graphs). NOTE: there will be a significant delay (20-40 seconds), while the computer works to rename and backup the data files.

5.0 CALIBRATION OF WATER QUALITY PARAMETERS.

Calibrations should be performed **at least** monthly, but more often if necessary. Calibration is required whenever the CTD does not pass the daily QC check. The oxygen and pH probes can be calibrated independent of each other, as needed. If any probes beside the pH or oxygen sensors fail, they will have to be replaced and/or recalibrated back at EMAP HQ.

OXYGEN CALIBRATION

- 1.** Fill a large plastic container with fresh water at least 10 hours before calibration. Set up the air pump and air stone, and allow the water to bubble.
- 2.** Within the navigation system, select "CTD", "QC Check / Calibration", and "CTD Realtime". Do not turn on the CTD yet.
- 3.** Remove the water loop from the conductivity probe, and attach the tube from the oxygen probe. Put the CTD in the water, allow the air to bubble out of the system, then turn the switch ON (DOWN).
- 4.** Allow the CTD to equilibrate in the water. This may take up to 15 minutes. Equilibration is complete when the 'Temperature' and 'Oxygen temperature' are within 0.5 degrees Celcius of each other. You can speed this process up by stirring the bucket with your hand.
- 5.** Pause the screen with <CTRL F10>, and record the temperature, oxygen temperature, and oxygen current on the calibration data sheet. These values are your air-saturated numbers. Press <CTRL F10> again to release the screen.
- 6.** Remove the CTD from the water bath, remove the tube from the conductivity cell, and fill it with the Sodium Sulfite (Zero Oxygen) solution. Allow the zero reading time to equilibrate (1-2 minutes), and record the oxygen current. You can now quit realtime with <CTRL F1>.
- 7.** From the CTD Menu, select "OX calibration parameters". Enter 1022.01 for atmospheric pressure (or get the local barometer reading in millibars, not corrected to sealevel). Enter each of the parameters asked for. Use the water temperature, not the oxygen temperature. Record the values of BOC and SOC on the data sheet. Press <RETURN> to get back to the CTD menu.

8. From the "QC Check / Calibrate CTD" menu, select "Enter and Save Parameters". Select choice 2 ('Change calibration'), then press <RETURN> to scroll through the calibration parameters until reaching SOC and BOC. Enter the appropriate values, then continue scrolling through the parameters until the numbered options reappear. If you have made a mistake, select choice 2 again and repeat the process. If you are finished, select choice 6 ('Change all *.CFG files'). Following this, the program will return to the CTD menu.
9. Once the configuration file has been updated, get back into realtime with the CTD in the bucket and compare the new oxygen reading with the saturated value taken from the xeroxed table of oxygen concentrations (the screen display should match the tabulated oxygen to the first decimal place). If you are satisfied that the oxygen readings are correct, the calibration is finished. If the displayed numbers are too high or too low, the air saturation should be re-calibrated. Note: it is not necessary to do the zero point a second time. This will involve repeating steps 4, 5, and 7-9, above.

pH CALIBRATION

1. Calibration of the CTD pH sensor requires 3 buffers, of pH 4, 7, and 10. These should be made up from the HydroLab pH calibration kits according to directions accompanying the buffer packets.
2. Within the navigation system, select "CTD", "QC Check / Calibration", and "CTD Realtime". Do not turn on the CTD yet.
3. Attach a small gage wire to the top of the pH/oxygen probe. The wire can be held in place by tightening it under one of the phillip's head screws on the probe.
4. Remove the cover from the pH probe, and turn the CTD on (push the magnetic switch DOWN). The computer screen should now be displaying realtime data.
5. Immerse the pH probe and the free end of the wire into the pH 7.0 buffer. Record the pH voltage from the screen display onto the CTD calibration sheet. The pH voltage is found directly beneath the pH reading on the realtime display. To freeze the screen, use the <CTRL F10> toggle. Measure the temperature of the buffer solution, and record this on the calibration sheet.
6. Repeat step 5 for the pH 4 and 10 buffers. Between buffer solutions, carefully rinse the sensor with a small amount of the next buffer. Quit from realtime with <CTRL F1>.

7. From the "QC Check / Calibrate CTD" menu select "PH Calibration Parameters". Enter the pH probe serial number, and the value for the 'voltage offset (B)' coefficient (both the serial number and 'B' are found in the CTD operator's manual under the 'Calibration' section).
8. Next enter the buffer temperature and Vout (voltage output) for the pH 7.0 buffer. After this, the program will prompt you for both the pHs and the voltage outputs. For pH 4 and 10 enter the appropriate values and voltage outputs. When finished, press <RETURN> at the 'pH= ' prompt (otherwise the program will continue to ask for more pH values).
9. The screen will now display the parameters 'pHvref' and 'm', followed by a list of residuals. Copy only 'pHvref' and 'm' onto the CTD calibration data sheet.
10. From the "QC Check / Calibrate CTD" menu, select "Enter and Save Parameters". Select choice 2 ('Change calibration'), then press <RETURN> to scroll through the calibration parameters until reaching 'pHref' and 'm'. Enter the appropriate values, then continue scrolling through the parameters until the numbered options reappear. If you have made a mistake, select choice 2 again and repeat the process. If you are finished, select choice 6 ('Change all *.CFG files'). Following this, the program will return to the CTD menu.

6.0 CTD MAINTAINENCE AND CLEANING

1. As often as possible, flush the entire CTD with fresh water.
2. Keep the distilled water loop on the conductivity cell, and keep the oxygen sensor moist (it does not need to be full of water, just in a humid environment).
3. To clean the conductivity cell and the oxygen probe, put a few drops of the Triton X-100 cleaner into their respective tubes, and allow to soak over night. The tubes should be flushed with water before deployment. NEVER use a brush or tool to clean the inside of the conductivity cell.
4. When the data cable is not in use, keep it coiled.

**APPENDIX I
PERFORMING WINKLER TITRATIONS
USING THE HACH DO KIT**

At each station, a QC check on the performance of the Sea-Bird CTD is required. This includes evaluating the calibration of the DO probe. The Hach company model OX-DT Dissolved Oxygen Test Kit has been selected for use in these QC checks.

The Hach kit uses the Winkler titration method for determining dissolved oxygen levels. A full 300 ml sample is collected and fixed, and a subsample (100 ml) titrated with 0.2N sodium thiosulfate using the included digital titrator. The advertised resolution of this kit is 0.1 mg/l.

The methods for performing a Winkler titration using this kit are as follows:

1. Insert the tube from the *Go-Flo* bottle approximately $\frac{3}{4}$ of the way down into a 300 ml BOD bottle. Open the top valve on the *Go-Flo* bottle and allow the sample to slowly enter the BOD bottle, being careful to avoid the introduction of air bubbles.
2. Allow at least two volumes (600 ml) to overflow, then crimp the hose and gently remove it, allowing just enough water to enter the bottle to displace the volume of the hose. Make sure there are no air bubbles trapped in the BOD bottle.
3. Carefully add the contents of one Manganous Sulfate Powder Pillow, then one Alkaline Iodide-Azide Reagent Powder Pillow. Carefully insert the stopper so that no air is trapped in the bottle.
4. Firmly hold the stopper in place and gently shake the bottle enough times to thoroughly mix the reagents.
5. A flocculent precipitate will form. Allow it to settle, then invert the bottle again to ensure proper mixing.
6. The sample can now be stored in the dark for up to eight hours before titration. If the sample is not titrated immediately, store upright and seal the top by pouring a small amount of water into the flared lip area.
7. Allow the precipitate to settle (at least half way down the bottle).
8. When you are ready to perform the titration, remove the stopper and add the contents of the Sulfamic Acid Powder Pillow (do not re-mix the sample before adding the sulfamic acid). After adding the sulfamic acid powder, replace the stopper without trapping air and invert the bottle several times to mix. The color of the sample should now be clear yellow.

9. Prepare the digital titrator as per the directions in the Hach manual. Attach a clean delivery tube to the titration cartridge and twist the cartridge into the titrator body.
10. Turn the delivery knob to eject a few drops of titrant (this purges the delivery tube of any old titrant). Reset the counter to zero and wipe the tip with a clean Kimwipe®.
11. Pour off exactly 100 ml of the sample using the graduated cylinder and pour into the erlenmeyer flask. The erlenmeyer flask should be placed on the battery-powered mixing stand and a stir bar should be added to mix the sample.
12. While the sample is mixing with the stir bar, completely submerge the end of the delivery tube into it and titrate by turning the delivery knob on the titrator. Continue to add Sodium Thiosulfate until the sample turns a pale yellow color.
13. Add one or two droppersful of the Starch Indicator Solution and allow it to mix into the sample. The sample will turn dark blue when the starch is added.
14. Carefully continue titration until the sample turns colorless. The titration is finished when the sample first turns completely colorless. The blue color may re-develop, but no further titration should be done.
15. Read the number from the digital counter. It may be necessary to apply a correction factor to this reading, if an accuracy check on the strength of the sodium thiosulfate titrant was performed using the iodate-iodide standard solution (see the instructions which follow this section). When a corrected reading is calculated, multiply the reading by 0.02 to determine the DO concentration in mg/l (e.g. a reading of 300 means the DO concentration is 6.00 mg/l).
16. Record this value on the appropriate data sheet.
17. Discard the remainder of the sample and rinse all glassware with deionized water.

INSTRUCTIONS FOR DETERMINING THE ACCURACY OF THE HACH WINKLER TITRATIONS USING THE IODATE-IODIDE STANDARD SOLUTION

The accuracy of the Hach Winkler titrations can be checked by using an iodate-iodide standard solution which has a constant dissolved oxygen concentration of 10 mg/l. The periodic use of this standard solution provides a check both on the strength of the sodium thiosulfate titrant and the accuracy of the digital titrator. One titration with the iodate-iodide standard should be performed every time a new titration cartridge is used. In addition, it is good practice to check the strength of the titrant at regular intervals (every two or three days) and apply the appropriate correction factors to the titration results for the actual field samples. The procedure for performing the titration of the iodate-iodide standard and calculating the correction factor is given below.

1. The titration of the iodate-iodide standard solution basically follows the same procedure as a normal Winkler titration. First, measure 100 ml of the iodate-iodide standard solution using the graduated cylinder and pour it into the erlenmeyer flask. Place the flask on the mixing stand and add a stir bar.
2. While the solution is mixing, add the contents one Sulfamic Acid powder pillow (Hach kit reagent 3). The solution will turn clear yellow. Wait a few minutes for all the sulfamic acid crystals to dissolve.
3. Titrate the solution following the instructions for the Winkler titration given in the previous section (begin at step 12, after you have prepared the digital titrator).
4. When the titration is complete, record the number on the digital titrator. Ideally, this number should be 500, which is equivalent to a dissolved oxygen concentration of 10 mg/l (the expected value). If the reading is 500, there is no need to apply a correction factor. If the reading on the digital titrator is between 475 and 525 (i.e., between 9.50 to 10.50 mg/l), then the digital titrator readings for actual field samples must be corrected. The calculation for determining a corrected digital titrator reading involves using a simple proportion, as follows:

$$\frac{a}{b} = \frac{c}{d}$$

Where:

a = digital titrator reading following titration of iodate-iodide standard

b = 500 (the expected value following the iodate-iodide solution titration)

c = digital titrator reading following titration of actual sample

d = "corrected" digital titrator reading following titration of actual sample

The equation is solved for "d" (the corrected digital titrator reading following titration of a sample). The corrected reading is then multiplied by 0.02 to give the oxygen concentration in mg/l.

Example:

You titrate the iodate-iodide standard solution and get a reading of 480 on the digital titrator. You then titrate a normal field sample and get a reading of 350. You would correct this field sample reading as follows:

$$\frac{480}{500} = \frac{350}{d}$$

Rearranging the equation:

$$d = \frac{500 \times 350}{480}$$

$$d = 364.6$$

To get the dissolved oxygen concentration of the field sample in mg/l, multiply 364.6 by 0.02. This gives a final dissolved oxygen concentration in the sample of 7.29 mg/l.

5. If the reading on the digital titrator is less than 475 or greater than 525 following the titration of the iodate-iodide standard solution, the thiosulfate cartridge should be discarded and a new one should be used. Readings less than 475 or greater than 525 generally indicate that the titrant is too strong or too weak to give accurate results, even if you use corrected digital titrator readings. A second source of inaccuracy in the Hach Winkler kit is the digital titrator itself. If the digital titrator readings are still less than 475 or greater than 525 when the iodate-iodide titration is performed with a new cartridge, the digital titrator is suspect and a backup one should be used.
6. Whenever the digital titrator readings are "corrected" using the above equation, the calculations should be recorded on the back of the data sheet in the field, so that they can be checked when the data sheet is sent to the Field Operations Center.

**APPENDIX J
OPERATION OF THE HYDROLAB
DATASONDE 3 DATA LOGGER**

1.0 INITIAL SETUP AND COMPUTER INSTRUCTIONS

1. Attach the 6-pin female end of the data cable to the DataSonde unit. Match the raised bump on the connector to the fat pin on the unit.
2. Plug the 9 pin female connector on the Y-cable into the 9 pin male port at the back of the GRiD computer (this is identified as port "3", RS232 Serial, on the GRiD case).
3. Plug the external power cable (the round four pin metal connector) into corresponding plug on the Y-cable.
4. Connect the external power cable to the appropriate socket on the boat's dash board or the mobile laboratory work bench. In the event that this socket is not available, use the cigarette lighter adapter.
5. From within the navigation system select "Hydrolab". The Hydrolab menu will present the following options:

"Download Hydrolab"
 "Set-up Hydrolab Logging"
 "QC Check / Calibrate Hydrolab"

Select the appropriate menu choice.

6. At the PROCOMM+ opening screen, hit any key to enter terminal mode.
7. See the following sections for the indicated activities:
 - 2.0 12 HOURS PRIOR TO CALIBRATION
 - 3.0 CALIBRATING WATER QUALITY PARAMETERS
 - 4.0 LOGGING SET-UP AND DEPLOYMENT INSTRUCTIONS
 - 5.0 RECOVERY AND DOWNLOAD INSTRUCTIONS
 - 6.0 HYDROLAB QC CHECKS
 - 7.0 HYDROLAB'S LoFlow DO MEMBRANE
 - 8.0 BATTERY PACK INSTALLATION AND REPLACEMENT
 - 9.0 FIELD REPLACEMENT OF PROBES / D.O. BATTERIES
8. To exit PROCOMM+ type <ALT X>, and answer <Y>es to the prompts.
9. For additional instructions on using PROCOMM+ and the electronic transfer of data, see Sections 10 and 11.

2.0 12 HOURS PRIOR TO CALIBRATION

The following procedures should be done in the mobile laboratory on the afternoon or evening of the day before the unit is calibrated.

1. Install new batteries in the battery pack (see Section 8.0 BATTERY PACK INSTALLATION, below).
2. Invert and clamp the DataSonde in the ringstand, and establish communications using the "QC Check / Calibrate Hydrolab" menu choice (see Section 1.0). Be sure to use an external power supply, so the internal batteries are not drained. Remove the old oxygen membrane, shake out the electrolyte, and dry off the gold ring. While the membrane is off, confirm that the oxygen reading is nearly zero (>1 mg/l), and record this value on the Hydrolab calibration data sheet.
3. Remove the white conductivity block (attached with 2 phillips head screws), and dry off the six conductivity pins. (If they are darkly tarnished, remove the six little O-rings and buff the pins with emory cloth, then rinse with distilled water and dry.)
4. Re-attach the small O-rings (if the pins were buffed) and the conductivity block. Put on a new LoFlow oxygen membrane (see section 7.0 HYDROLAB'S LoFlow DO MEMBRANE, below, for details).

3.0 CALIBRATING WATER QUALITY PARAMETERS

3.1 pH CALIBRATION

1. Rinse the probes thoroughly with deionized water and then with the pH 7.0 buffer solution. This is done by filling the calibration cup with a small amount of solution, then covering with the black rubber cap and shaking vigorously. Discard the water and pH rinses when finished.
2. Invert the DataSonde and clamp it to the ringstand (probes will now be pointed upwards). Fill the calibration cup with pH 7.0 solution until the pH reference probe is completely covered. Note that pH 7.0 should always be the first buffer calibrated.
3. Let the readings stabilize for 1-2 minutes.

4. Return to the Hydrolab main menu (hit space bar) and type <C>alibrate.
5. Type <p>H and enter the pH of the buffer solution (7.00). Hit <RETURN> and the pH will be calibrated. At this point the computer will default to the real-time mode, and the pH readings should be stable at 7.0. If the readings are not stable, you may need to repeat steps 4-5. If the Hydrolab does not accept your calibration value, several things could be wrong:
 - A. You may have used the incorrect pH solution. Be sure you have entered the correct value for the solution in the calibration cup.
 - B. The reference electrode may need to be refilled or replaced. Refer to the Hydrolab manual, section 3-5, the first three paragraphs.
 - C. The batteries for the DO probe may need to be replaced. These batteries also power the pH circuits so that no warm-up is required.
6. Repeat steps 1-5 with the pH 10.0 solution. Rinse the calibration cup and probes with deionized water between each pH solution.

3.2 CONDUCTIVITY CALIBRATION

1. Rinse the calibration cup with deionized water, then with two rinses of the KCl standard. Fill the cup with KCl standard, to just below the level of the oxygen membrane. Allow the probe 1-2 minutes to stabilize, and make sure there are no air bubbles in the conductivity block.
2. Return to the main menu (hit space bar), type <C>alibrate, then type <C>conductivity.
3. Enter the correct conductivity value. For the 0.5M KCL solution this value should be 58.64. Hit <RETURN> to calibrate conductivity.

3.3 DISSOLVED OXYGEN

1. Rinse the calibration cup and probes with deionized water.

2. Clamp the unit (in an inverted position) and fill the calibration cup with water until the level is just below the oxygen membrane. Wipe away any droplets on the membrane with the corner of a tissue.
3. Lay the white calibration cup cover upside down (concave upward) on calibration cup and let the apparatus equilibrate for 2-5 minutes. Equilibration may take some time; either a pH or conductivity standard may be used to double up the calibration process.
4. Once the readings stabilize, return to the menu (press the space bar) and type <C>alibrate. Select <%> to calibrate oxygen percent saturation. Enter the correct barometric pressure (760 mmHg for sea level). Hit <RETURN> and DO will be calibrated. The Percent Saturation value should read 102.5% (The values for the low-flow membrane are artificially increased 2.5% to compensate for the thickness of the membrane). If the Hydrolab does not accept the calibration, check the following:
 - A. The DO probe has had sufficient time to stabilize.
 - B. The Lo-flow membrane (not the standard membrane) is installed, and that it has had at least 12 hours to 'relax'.
 - C. The batteries for polarizing the DO probe are installed.

4.0 LOGGING SET-UP AND DEPLOYMENT INSTRUCTIONS

1. Hook up the DataSonde to the computer (see Section 1.0 INITIAL SETUP AND COMPUTER INSTRUCTIONS, above). From the menu select "Setup Logging". As Procomm+ boots up, you will see the Hydrolab messages coming across the screen. Wait for these to stop scrolling.
2. Enter the file name of the logging file you are setting up. The correct name is LTDO.PRN. This should also be the default file name.
3. Enter the start date (MMDDYY), start time (HHMMSS), finish date (MMDDYY), and finish time (HHMMSS) for the logging file. The finish date should be set for 20 days ahead, and the finish time can be set to match the start time. These parameters should also be recorded on the Hydrolab deployment data sheet.

4. Set the time interval between readings (this should be 30 minutes, written as 003000, and should be the default value).
5. Type <N>o to disable warmup. This is not necessary since the DO probe batteries will always keep the oxygen and pH sensors 'warm'.
6. Hit the <space bar> to go back to the Hydrolab menu. Disconnect the external power supply at this time.
7. Confirm your setup by typing <L>ogging and <T> (for status). There should be only 2 log files: the AUTOLOG and LTDO.PRN. If there are any others, they should be erased. Also note the amount of battery life remaining for the AA cells (this will only be correct if the external power was disconnected before asking for Status).
8. Disconnect the cable, and re-attach the dummy plug. Note: Once the unit has been programmed it will "sleep" after the data cable is disconnected until the entered start time.
9. Exit Procomm+ (see section 1.0), and <ESC>ape to the navigation system. Set up the Hydrolab mooring system at this time and prepare Hydrolab for deployment: remove the storage cup and replace it with the screw-on weight. Insert the entire unit into the mooring and secure.
10. When ready to deploy the Hydrolab, select the "Hydrolab deployment" option and follow the screen prompts for taking a fix at the moment the mooring is set on the bottom. This will also involve recording the Hydrolab serial number (or using the bar code reader). Position, time, and serial number information should also be recorded on the Hydrolab deployment data sheet.

5.0 RECOVERY AND DOWNLOAD INSTRUCTIONS

1. Before the Hydrolab is pulled from the water, recover the yellow float and excess line, so that the boat is nearly over the unit itself. From within the Nav system select the menu option "Hydrolab Retrieval", and follow the screen prompts. This will involve taking a fix as the Hydrolab is recovered, and after it is on deck, recording the serial number. Position, time of recovery, and serial number should also be recorded in the Hydrolab retrieval data sheet.

2. Hook up the DataSonde to the computer (see Section 1.0 INITIAL SETUP AND COMPUTER INSTRUCTIONS, above). Select the menu option "Hydrolab Set-up", then "Download Hydrolab". This will automatically work through some of the Hydrolab screen menus (wait for the menus to stop scrolling), until you are asked to select the number of the file to download. Normally you select <1>, which should be 'LTDO.PRN'.
3. Select <S>preadsheet ready, <F>ollow calibration changes, and <N>o power down probes. The screen will then display the message "XMODEM transfer initiated".
4. Hold the <Fn> key and press <PgDn>. PROCOMM+ will list a menu of data transfer options. Select <1> for "XMODEM" (this will normally be the default).
5. The computer will ask for a file name, and should display 'LTDO.PRN' as the default name. Type in the name if it is not displayed. A window will open and you will see numbers counting up as the file is transferred. If nothing happens after a minute, try <ESC>aping and start over again.
6. When the transfer is completed successfully, the computer will close the window, and the Hydrolab will go back into real-time sampling.
7. To view the file you just downloaded, type <ALT V> and the name of the file (LTDO.PRN). When finished viewing, return with <ESC>. If all was well, exit Procomm+ with <ALT X>. NOTE: it is important to exit correctly, since this will cause the file just downloaded to be moved into the appropriate subdirectory. This process may be slow, so be patient while the files are backed up and renamed.

6.0 HYDROLAB QC CHECKS

QC (Quality Control) checks need to be done on both the retrieval and deployment units. If the deployed unit does not pass, it will have to be re-calibrated prior to deployment. If for some reason the main unit cannot be re-calibrated, then the backup Hydrolab will be QC checked, and if necessary re-calibrated. There are separate Hydrolab field data sheets for the deployed and retrieved units, and these should be filled out during the QC checks.

1. Attach the data cable to the computer and the Hydrolab. From within the Nav system select the "Hydrolab" menu, then choose "QC Check / Calibrate Hydrolab". This will start Procomm+ (hit a key to enter terminal mode).

2. Attach the open-ended calibration cup, and rinse with the pH 7.0 buffer twice. Fill the cup with buffer to below the oxygen membrane but above the reference electrode. Gently wipe the oxygen membrane dry, place the white cap over the end of the cup, and allow the pH readings to stabilize. Record the pH value. If the unit is to be **deployed** and the pH is incorrect (see data sheet for tolerances), re-calibrate pH (see section 3.1).
3. The oxygen percent saturation can now be checked if the readings have stabilized. NOTE: this may take over 10 minutes, so try to secure the unit upright and work on something else. Record the stable oxygen percentage. If the unit is to be **deployed** and the oxygen is incorrect (see data sheet for tolerances), re-calibrate percent saturation (see section 3.3).
4. Empty the pH solution, rinse the calibration cup with 0.5M KCl twice, and fill it with the KCl. Place the thermometer in the calibration cup. Record the screen values of temperature and conductivity. Record the thermometer temperature (conductivity should read 58.6 mS/cm). Acceptable tolerances for the deployed unit are found on the Hydrolab deployment field sheet. Recalibrate if the unit unit to be deployed does not meet QC standards.
5. When finished with the QC Checks, exit Procomm+ (<ALT X>) to return to the Hydrolab menu, and <Esc>ape to the navigation system.

7.0 HYDROLAB'S LoFlow DO MEMBRANE

Every time a DataSonde unit is serviced (every 10 days) the LoFlow DO membrane must be replaced. Calibration of the probe must not be performed for at least 12 hours after replacement of the membrane. During long-term storage of a Hydrolab, the oxygen electrolyte should be removed and a dry membrane put over the oxygen sensor.

1. Remove the white DO sensor guard and the O-ring securing the clear Teflon membrane.
2. Remove the old membrane and gently shake out the old electrolyte fluid. Rinse sensor with deionized water then with fresh electrolyte. Shake out the old electrolyte and clamp the unit in the inverted position for easier handling. Refill the probe with fresh electrolyte (fill sensor

until there is a perceptible meniscus of electrolyte rising above the entire electrode surface of the sensor). Rap the sonde housing firmly with a hard object (like a screw-driver handle) to release any bubbles trapped on the inner wall of the oxygen probe.

3. Cut a square piece of LoFlow membrane about 1.5" x 1.5" (big enough to cover the probe end and leave extra membrane). Place the membrane on top of the electrolyte meniscus, being careful not to trap any bubbles underneath.
4. Set the O-ring on the membrane above the probe, and using your thumb and index finger, roll the O-ring down over the probe until it is seated. Try not to touch the membrane surface while doing this. Gently tug at the exposed corners to remove any wrinkles, then trim away any excess membrane below the O-ring and replace the white DO sensor guard. Inspect the membrane to make sure there are no bubbles, wrinkles, or cuts.
5. Put the safety cup back on with fresh tap water, and allow the membrane at least 12 hours before calibration.
6. The time and date of membrane change should be noted in the calibration log sheet.

8.0 BATTERY PACK INSTALLATION AND REPLACEMENT

1. Clean the entire transmitter with soapy water and a soft brush.
2. Once cleaned and properly dried, remove the two hex head Allen screws that hold the battery pack on to the transmitter housing located at the top (6 prong end) of the unit.
3. Grasp the battery pack and, with a slight back-and-forth twisting motion, pull it from the transmitter tube.
4. Once the battery pack is free of the housing, gently pull the wiring loose from the connector inside the housing.
5. Turn over the battery pack and remove the two large hex head Allen screws that hold the battery pack together. Remove and properly discard the spent batteries.

6. Install 10 new AA alkaline batteries, paying close attention to the polarity of the batteries and the battery pack.
7. Reassemble the battery pack.
8. Carefully examine the O-rings sealing the top of the DataSonde. Replace these if any nicks or deterioration are noted. Make sure that the surfaces of the battery pack and the inside of the DataSonde walls are clean and free of debris.
9. LIGHTLY coat the O-rings with silicone grease, reconnect the wiring (being careful to note the orientation of the prongs) and re-install the battery pack.
10. Connect the DataSonde to the computer. Momentarily disconnect it from external power to make sure that the internal batteries are operating properly. Observe the battery voltage and note it in the Hydrolab calibration data sheet.

9.0 FIELD REPLACEMENT OF PROBES / D.O. BATTERIES

If the temperature, pH, DO, or conductivity probes become obviously damaged or fail completely, it will be necessary to replace the entire probe unit. Replacing the probes is a last resort, to be done only after all other methods to fix the problem have been tried. If the DO probe fails to calibrate, or exhibits large changes in apparent oxygen concentration just after the DataSonde is turned on, it may be necessary to replace the polarizing batteries. The general instructions for replacing the DataSonde probes and/or DO batteries are as follows:

1. Remove the two hex head screws at the bottom (probe end) of the unit, and gently pull the probe end from the housing with a back-and-forth twisting motion.
2. Disconnect the rectangular battery/data connector from one of the interior boards. This is the connector with the multicolored wires running all the way to the top of the housing. Release the two black latches over the connector by swinging them down, then pull the connector away from the board. You can now set the housing aside. [At this point if you are just replacing the DO batteries, remove the old batteries and install the new ones. Be careful to observe the correct polarity, and use only mercury 2.7 volt batteries. Reassemble the DataSonde using proper precautions with the O-rings.]

3. Remove the 6 phillips head screws holding the two boards together, then gently pull the boards apart (they are joined at the top by pins) and away from their supporting frame. One board will now be completely free, and can be set aside along with the dessicant packets found between the boards.
4. The second board will still be attached by wiring at the bottom, but it can be gently moved out of the way to access the probe connections on the inside of the end cap.

A. TEMPERATURE / CONDUCTIVIITY / DO PROBE (T/C/DO)

1. To remove the T/C/DO probe, first pull out the white paper-like connection strip where it slides into the small rectangular blue jumper between the mercury batteries. NOTE that the strip has a half-twist in it; this is the correct orientation for re-attaching the strip when you are putting the unit together again.
2. Next, remove the T/C/DO probe cable from the board in the same manner that you released the Data/Battery cable (release the black latches and pull the connector out).
3. Release the retaining ring over the end of the T/C/DO. Use a pair of needle-nose pliers to pop this ring off.
4. Grasp the T/C/DO probe and pull it firmly down and out from the end cap. The data cable and connector will slide through the hole.
5. Reverse this procedure to replace the probe unit, first making sure that the O-rings on the new probe are lightly greased and free of dirt or cuts.
6. Reassemble the DataSonde with the new T/C/DO probe by reversing steps A-D.

B. pH PROBE

1. Remove the phillips head retaining screw and washer on the inside of the endcap, just offset from the bottom of the pH probe.
2. Firmly pull the pH probe up into the housing.

3. With a small flathead screwdriver, release the two wires attaching the pH probe to the green screw-down strip on the board (the black cable attaches to the 'pH' connection, and the thin black-and-white cable goes into the 'shld' connection).
4. Reassemble the DataSonde with a new pH probe by reversing steps A-C. Make sure the three small O-rings are on the pH probe, and that they are lightly greased.
5. Before completely reassembling the DataSonde, reattach the data/battery cable, and make certain that you can establish communications with the computer. If you cannot, double check all your connections and battery voltages.

APPENDIX K
DATA SHEETS AND INSTRUCTIONS

STATION INFORMATION DATA SHEET

1. **EVENT-** Fill in the **EVENT NUMBER** printed on the outside of Event envelope. The event number on each form of a set should match. Events are assigned based on the type of station and the sampling period. Refer to the Event Numbering Scheme for event numbers associated with each station class.
2. **ERROR-** In case there is a mistake in the event coding, the correct event number can be entered here.
3. **PAGE -** After completing all data sheets for the event, enter the total number of completed data sheets.
4. **DATE -** Enter the date. Enter the date as MMDD. The year will be filled in.
5. **STATION #-** Enter the station #. Use all boxes. Precede a station number by zeros, if necessary.
6. **INTERVAL -** Enter the interval in which the event is occurring (1, 2 or 3).
7. **STATION CLASS -** Use the list of provided codes. Check the appropriate code(s) for the Station Class(es) occurring during the event. In some cases, more than one code will be appropriate.
8. **LTDO -** For LTDO Stations, check whether the event is for monitoring activities (DOM) or Hydrolab servicing activities only (DOS).
9. **DISKETTE -** Scan the barcode on the diskette which is going to be used to record the data for the day. The Sample Number (000) should match that shown on the form. Enter the Event Number for the first Event of the day to complete the Sampleid. Write the same Event Number in the DISKETTE space on all other Boat Location Data Sheets used for the same date. If there is a discrepancy, record the barcode on the diskette in the ERROR field.
10. **BOAT NAME -** Enter the name of the boat.
TEAM # - Enter the number of the team conducting the sampling.
11. **CREW CHIEF -** Enter the name of the person in charge of activities for the Event (Last name, first initial).
12. **CREW MEMBER -** Last name, first initial of crew member.

13. CREW MEMBER - Last name, first initial of crew member.
14. LAND CREW - Last name, first initial of the person assigned to perform duties in the field laboratory.
15. VISITOR #1 - Last name, first initial of official visitor.
16. VISITOR #2 - Last name, first initial of official visitor.
17. PURPOSE - Reason for visit.
18. WEATHER - Give description of weather and sea conditions. Describe clouds, sun, precipitation, wave height.
19. TIME ON - Enter the time the computer/navigation system is turned on and logging activities begin (Use 24-hour format and Eastern Daylight Time).
20. DEPTH - Record depth at the station to the nearest 0.1 meter as seen on the depth finder.
21. NAV SYSTEM - Enter the code for the navigational system which is being used to locate the station site.
22. SITE COORDINATES - According to the system being used, enter the coordinates in the appropriate format (Read instructions in shaded area).
23. TDs - If LORAN is being used, also enter the TD x, y and z coordinates displayed on the unit.
24. TRASH - If debris is present (floating or submerged), enter "0" for No or "1" for Yes. Do not leave any fields unfilled. If a category is present that is not already defined, enter a code. Describe all types of trash present. Approximate quantity. Continue description on back of data sheet, if necessary.
25. TIME OFF - Enter the time the computer/navigation system is turned off and logging activities end (Use 24-hour format and Eastern Daylight Time).
26. COMMENTS - Indicate if there are more comments on the back.
27. # DATA SHEETS - After completing all the appropriate forms for an event, list the total number of data sheets completed.

28. **EVENT COMPLETE** - Indicate whether or not the event was completed successfully.
29. **REVIEWED BY** - Last name, first initial of the person conducting a QC check for completeness and accuracy of all the forms for the Event.
30. **COMPLETED BY** - Initials of person completing this form.

CTD FIELD AND WATER TOXICITY DATA SHEET

1. **EVENT** - Fill in the Event Number. The number should agree with that printed on page 1 (Station Information Data Sheet). If there is a discrepancy, enter the EVENTNUM from Page 1 in the ERROR field.
2. **PAGE** - Enter the page number and total number of data sheets for the Event.
3. **EQUIPMENT BARCODE** - Enter either the barcode number or the EPA serial number from the unit. The EPA serial number is
4. **EQUIPMENT SERIEL #** - found both on an EPA barcode label and etched only the unit.
5. **CTD CAST SAMPLEID** - Complete the Sampleid for the Cast by entering the Event Number. If there is a problem, enter a Sampleid into the ERROR field.

QUALITY CONTROL CHECK BEFORE CAST

6. **CTD pH** - Record the pH reading from the CTD. Compare the value to the pH 7.0 buffer.
7. **DIFFERENCE** - Enter the difference between the two pH readings.
8. **CTD SALINITY**-Record a salinity from the CTD.
9. **REFRACTOMETER** - Enter a salinity from the *GO-FLO* grab sample, read from a refractometer.
10. **DIFFERENCE** - Enter the difference between the two salinities.
11. **CTD TEMP** - Enter a temperature from the CTD.
12. **THERMOMETER** - Enter a temperature from the *GO-FLO* grab sample, read from a thermometer.
13. **DIFFERENCE** - Enter the difference between the two temperatures.
14. **CTD OXYGEN** - Enter an oxygen reading from the CTD.
15. **BOTTLE # 1** - Take a water sample from the grab sample to be analyzed later for oxygen. Enter an identification number from the bottle to be used for the Winkler titration.

16. WINKLER # 1 - Record the Winkler titration result as DO concentration in mg/l.
17. DIFFERENCE - Enter the difference between the two oxygens.
18. BOTTLE # 2 - Take a second, duplicate water sample from the grab sample to be analyzed later for oxygen. Enter an identification number from the bottle to be used for the Winkler titration.
19. WINKLER # 2 - Record the Winkler titration result as DO concentration in mg/l.
20. DIFFERENCE - Enter the difference between the two oxygens.
21. MAXIMUM DIFFERENCES - Enter 0 or 1, depending on the outcome of the QC Check. Fill out on boat or after completion of oxygen measurements.
22. SUSPENDED SOLIDS - Complete the Sampleid for the Suspended Solids sample after collection of water from the *GO-FLO* grab sample. Enter an ERROR Sampleid, if necessary.
23. CHLOROPHYLL A - Complete the Sampleid for the Chlorophyll *a* sample after filtering a water sample from the *GO-FLO* grab sample. Enter an ERROR Sampleid, if necessary.
24. VOLUME - Enter the volume filtered for the Chlorophyll *a* sample.
25. BOTTOM DO - After downloading the data into the computer and reviewing it, determine the minimum DO value. Enter a "0" or "1", if the DO fell to Zero.
26. BOTTOM SALINITY - After reviewing the data on the computer, determine the bottom salinity and record. This will determine whether a second toxicity test sample will be taken at appropriate stations.
27. COMMENTS - Enter "0" or "1", depending on whether there are comments on the cast.
28. COMMENTS - Record any comments on the CTD cast.

WATER TOXICITY

NOTE: Water toxicity samples are only collected at ITE and ITE/BSS Stations in the Second Interval.

29. WATER TOXICITY SAMPLEID - Complete the Sampleid by entering the Event Number.

30. COMPLETED BY - Initials of person completing form.

HYDROLAB RETRIEVAL FIELD DATA SHEET

1. **EVENT** - Fill in the Event Number. The number should match the event number on Page 1 (Boat Location Data form). If there is a discrepancy, enter the Event number from Page 1 in the ERROR field.
2. **PAGE** - Fill in the page number. At the end of the event, fill in the total number of data sheets required.
3. **NAV SYSTEM** - Enter the code of the navigation system in use.
4. **DATE** - Enter the Date the Hydrolab was retrieved.
5. **TIME** - Enter the Time (24 HR) the Hydrolab was retrieved.
6. **COORDINATES** - Enter the location of the Hydrolab retrieval.
7. **EQUIPMENT ID** - Enter the barcode or serial number on the retrieved unit.
8. **SAMPLEID** - Complete the Sampleid by entering the Event Number. If there is an error, enter a code into the ERROR field.
9. **DATA DOWNLOADED** - Enter "0" or "1", depending on whether or not the data were successfully downloaded into the computer.
10. **DO MEASUREMENT** - Indicate whether or not the DO dropped to 0 mg/L. Enter a "0" or "1".
11. **COMMENTS** - Enter a "0" or "1", depending on whether or not there are comments on the data.
12. **OXYGEN MEASUREMENT** - Set up the Hydrolab with the calibration cup. Enter an oxygen reading from the Hydrolab.
13. **DIFFERENCE** - Enter the difference between the Hydrolab oxygen and the expected value.
14. **CONDUCTIVITY** - Enter the conductivity reading from the Hydrolab (0.1 milliSiemens/cm).
15. **DIFFERENCE** - Enter the difference between the two conductivities.
16. **TEMPERATURE** - Enter a temperature from the Hydrolab.

17. THERMOMETER - Enter a temperature for the water in the calibration cup, read from a thermometer.
18. DIFFERENCE - Enter the difference between the two temperatures.
19. pH - Fill the calibration cup with the pH 7 buffer solution. Record a pH reading from the Hydrolab.
20. DIFFERENCE - Enter the difference between the Hydrolab and expected pH.
21. COMMENTS - Enter comments on the Hydrolab data.
22. COMPLETED BY - Enter the initials of person completing form.

HYDROLAB DEPLOYMENT FIELD DATA SHEET

1. **EVENT** - Fill in the Event Number. The number should match the event number on Page 1 (Boat Location Data form). If there is a discrepancy, enter the Event number from Page 1 in the ERROR field.
2. **PAGE** - Fill in the page number. At the end of the event, fill in the total number of data sheets required.
3. **DEPLOYMENT SAMPLEID** - Fill in the Event Number to complete the Sampleid. If there is an error, enter the number in the ERROR field.
4. **EQUIPMENT ID** - Enter the barcode number or EPA serial number of the primary unit considered for deployment.

DEPLOYED HYDROLAB QC CHECK

5. **OXYGEN SATURATION** - Fill the calibration cup on the Hydrolab with seawater. Enter an oxygen reading from the Hydrolab.
6. **DIFFERENCE** - Enter the difference between the Hydrolab oxygen and the expected value.
7. **RECALIBRATE** - Enter a "0" or "1" to indicate if the maximum difference was exceeded and recalibration is necessary.
8. **CONDUCTIVITY** - Record a conductivity reading from the Hydrolab.
9. **DIFFERENCE** - Enter the difference between the Hydrolab and the expected conductivity.
10. **RECALIBRATE** - Enter a "0" or "1" to indicate if the maximum difference was exceeded and recalibration is necessary.
11. **TEMPERATURE** - Enter a temperature from the Hydrolab.
12. **THERMOMETER** - Enter a temperature of the seawater in the calibration cup, read from a thermometer.
13. **DIFFERENCE** - Enter the difference between the two temperatures.
14. **pH** - Fill the calibration cup with pH 7 buffer solution. Record a pH reading from the Hydrolab.

15. DIFFERENCE - Enter the difference between the Hydrolab and expected pH.
16. RECALIBRATE - Enter a "0" or "1" to indicate if the maximum difference was exceeded and recalibration is necessary.
17. LOG FILE - Enter the Log File name as "LTDO.PRN"
18. INTERVAL - Enter the Interval as "003000"
19. START DATE - Enter the Start Date into the Log File as MMDDYY.
20. START TIME - Enter the Start Time into the Log File as HHMMSS.
21. STOP DATE - Enter the Stop Date into the Log File as MMDDYY.
22. STOP TIME- Enter the Stop Time into the Log File as HHMMSS.

NOTE: IF A MAXIMUM DIFFERENCE IS EXCEEDED, AND THE UNIT CANNOT BE RECALIBRATED, PERFORM A QC CHECK ON THE BACKUP UNIT, FOLLOWING THE PROCEDURE DETAILED ABOVE.

23. EQUIPMENT ID - Enter the barcode or EPA serial number on the unit to be deployed.
24. UNIT DEPLOYED - Enter a "1" if the primary unit is being deployed or a "2" if the backup unit is being deployed.
25. COORDINATES - Record the latitude and longitude coordinates where the Hydrolab is being deployed.
26. COMPLETED BY - Initials of person completing form.

CTD CALIBRATION DATA SHEET

1. EQUIPMENT ID - Enter the barcode or serial number on the unit.
2. TIME - Enter the time of the calibration.
3. DATE - Enter the date of the calibration.
4. SERIAL # - Enter the pH serial number from the manual.
5. OFFSET - Enter Voltage Offset (B) from manual.
6. TEMPERATURE - Enter the Buffer temperature using a thermometer.
7. VOLTAGE - Enter the voltage reading at pH 7.0
8. VOLTAGE - Enter the voltage reading at pH 4.0
9. VOLTAGE - Enter the voltage reading at pH 10.0
10. pHVREF - Enter value after the program calculates it.
11. m - Enter value after the program calculates it.
12. CURRENT - Enter the oxygen current reading in the sodium sulfite solution.
13. CURRENT - Enter the oxygen current reading in air saturated water.
14. TEMPERATURE - Enter the oxygen temperature.
15. TEMPERATURE - Enter the water temperature.
16. PRESSURE - Enter the local barometric pressure. Use the default value, if necessary.
17. Boc - Enter value after the program calculates it.
18. Soc - Enter value after the program calculates it.
19. TEMPERATURE - Enter the water temperature.
20. O₂ - Enter the CTD Oxygen value.
21. O₂ TABLE - Enter the O₂ value from the Saturation Table.
22. COMPLETED BY - Initials of person completing form.

HYDROLAB CALIBRATION DATA SHEET

1. EQUIPMENT ID - Enter the barcode or EPA serial number on the unit.

12 HOURS BEFORE CALIBRATION

2. OXYGEN ZERO - Enter the Oxygen zero reading with the membrane off and the probe dry.

3. PROBES - Indicate whether or not probes were replaced and which probe.

4. TIME - Enter the time of a DO membrane change.

5. DATE - Enter the date of a DO membrane change.

6. PINS - Indicate whether or not conductivity pins required polishing.

7. ELECTROLYTE - Indicate whether or not the pH Reference Electrolyte required changing.

8. BATTERIES - Indicate whether or not the main batteries were changed.

9. VOLTAGE - Enter the new voltage after adjustments were made.

10. CHECK BY - Initials of person conducting pre-calibration.

11. COMMENTS - Comments on pre-calibration.

CALIBRATION

12. TIME - Enter the time of the calibration.

13. DATE - Enter the date of the calibration.

14. CONDUCTIVITY - Indicate whether or not the conductivity had to be reset.

15. OXYGEN - Indicate whether or not it was necessary to reset the oxygen % saturation.

16. pH 7 - Indicate whether or not it was necessary to reset the pH probe to pH 7.

17. pH 10 - Indicate whether or not it was necessary to reset the pH probe to pH 10.

18. CHECK BY - Initials of person conducting pre-calibration.
19. COMMENTS - Comments on pre-calibration.
20. COMPLETED BY - Initials of person completing form.

BENTHIC GRAB DATA SHEET

1. **EVENT** - Fill in Event Number. The number should match that on the Boat Location form. If there is a discrepancy, enter the **EVENT** number from Page 1 in the **ERROR** field for **EVENT**.
2. **PAGE** - Enter page number. Total number of pages will be entered at end of event.

FOR ALL BENTHIC INFAUNA SAMPLES

If benthic infauna and sediment chemistry samples are taken during an event, grabs 2, 5, and 6 will be used for benthic samples. If only benthic infauna samples are taken, grabs 1, 2 and 3 will be used.

3. **GRAB SAMPLE** - Describe the sediment grab sample according to the properties in the shaded block.
4. **COMMENTS** - Indicate whether or not more space is required for the description of the grab sample. Be sure to include the sample number if comments are written below.
5. **DEPTH** - Record the depth (cm) to which the sampling device penetrated the sediment.
6. **JARS USED** -After sample is processed, enter number of jars used. If two jars are used, write the sample number on the second jar and tape the two together.
7. **RPD DEPTH** - Record the RPD depth (redox potential discontinuity) of the sediment grab sample to the nearest mm.
8. **GRAB #** - Record the **GRAB #** for the benthic sample, according to the **NOTE** at the top of the data sheet.
9. **TIME** - Record the time of collection. Use 24-hr notation and Eastern Daylight Time.
10. **GRAIN SIZE SAMPLEID** - Prepare a core from a grab sample selected for benthic infauna. Scan the barcode on the Whirl-Pak for the grain size sample. Check that it matches the Sample Number on the data sheet. Enter the Event number before the Sample Number on the data sheet to match the Sampleid on the barcode on the

Whirl-Pak. If there is a discrepancy, enter the barcode number on the Whirl-Pak into the appropriate GRAIN SIZE ERROR field.

11. BENTHIC INFAUNA - Scan the barcode on a sample container for benthic infauna. Compare it to the Sample Number on the data form. Enter the Event number before the Sample Number on the data sheet to match the Sampleid on the barcode on the Whirl-Pak. If there is a discrepancy, enter the barcode number from the sample container into the appropriate BENTHIC INFAUNA ERROR field.

REPEAT FOR THE OTHER GRABS TAKEN FOR BENTHIC INFAUNA

12. COMMENTS - Continue comments regarding the benthic samples or enter general comments. Include sample number in comments.
13. COMPLETED BY - Initials of person completing form.

NOTE

Make sure the samples for benthos have these sample numbers:

	GRAIN SIZE	INFAUNA
SAMPLE #1	008	009
SAMPLE #2	010	011
SAMPLE #3	012	013

SEDIMENT CHEMISTRY DATA SHEET

1. **EVENT** - Fill in the Event Number. The number should match that on the Boat Location form. If there is a discrepancy, enter the EVENT number from Page 1 in the ERROR field for EVENT.
2. **PAGE** - Enter page number. Total number of pages will be entered at end of event.
3. **# GRABS USED** - Enter the number of sediment grab samples which will be homogenized and split for sediment chemistry, toxicity testing and quality control samples (if necessary).
4. **# GRABS UNUSED** - Enter the number of grabs taken, but not used.
5. **VOLUME** - Approximate the total volume (cc) of sediment to be homogenized for all samples.
6. **GRAIN SIZE** - Prepare a core from the homogenized sample. Scan the barcode number on the Whirl-Pak for the grain size sample. The Sample Number should match that shown on the form. Enter the Event Number before the Sample Number to match the Sampleid on the barcode on the Whirl-Pak. If there is a discrepancy, record the code on the container in the ERROR field.
7. **SEDIMENT CHEMISTRY** - Scan the barcode number on the glass sediment chemistry jar. The Sample Number should match that shown on the form. Enter the Event Number before the Sample Number to match the Sampleid on the barcode on the jar. If there is a discrepancy, record the barcode on the container in the ERROR field.
8. **VOLUME** - Record the volume (cc) of the sample.
9. **TOXICITY TESI # 1** - At all stations where sediment chemistry samples are collected, one sample is collected for toxicity testing. Scan the barcode number on the glass jar for a toxicity test sample. The sample number should match that shown on the form. Enter the Event Number before the Sample Number to match the Sampleid on the barcode on the bottle. If there is a discrepancy, record the barcode on the container in the ERROR field.
10. **VOLUME** - Approximate the sample volume (cc).

11. TOXICITY TEST # 2 - Where the bottom salinity is < 10 ppt as recorded by the CTD, a second sample is taken for toxicity testing. For each sample collected, scan the barcode on the glass jar for a toxicity test sample. The Sample Number should match that shown on the form. Enter the Event Number before the Sample Number to match the Sampleid on the barcode on the bottle. If there is a discrepancy, record the barcode on the container in the ERROR field.
12. VOLUME - Approximate the sample volume (cc).
13. COMMENTS - Indicate whether there are comments for the sediment chemistry samples. If there are, identify the sample type in the comments.

QUALITY CONTROL SAMPLES

Quality control sediment samples will be collected at 10 % of the stations where sediment samples are taken. Therefore, this section will not always be filled out.

14. BLANK QA BOTTLE - Scan the barcode on the blank sample bottle. The Sample Number should match the barcode on the form. Enter the Event Number before the Sample Number to match the Sampleid on the barcode on the bottle. If there is a discrepancy, enter the barcode number from the bottle in the ERROR field.
15. DUPLICATE SEDIMENT SAMPLE - Scan the barcode on the glass jar to be used for a duplicate sediment chemistry sample. Enter the Event Number before the Sample Number to match the Sampleid on the barcode on the bottle. This sample will be shipped to the same laboratory which analyzes the regularly collected sediment sample.
16. VOLUME - Approximate the volume (cc) used for this sample.
17. REFERENCE LABORATORY SAMPLE # 1 - Two additional sediment chemistry samples are prepared and shipped to a different laboratory than the regularly collected sediment chemistry sample.
18. REFERENCE LABORATORY SAMPLE # 2 - Scan the barcode number from the glass jars to be used for these samples. Enter the Event Number before the Sample Numbers to match the Sampleids on the barcode on the bottle. If there is an error, enter the correct code in the ERROR field.

19. VOLUME - Approximate the volume (cc) used for sample # 1.
20. VOLUME - Approximate the volume (cc) used for sample # 2.
21. COMMENTS - If you have comments regarding the quality control samples, enter the appropriate number.
22. COMMENTS - Write comments and identify the sediment sample you are writing about.
23. COMPLETED BY - Initials of person completing form.

NOTE

Make sure the sediment samples have these sample numbers:

SAMPLE	SAMPLE NUMBER
GRAIN SIZE	019
SEDIMENT CHEMISTRY	020
TOXICITY TEST #1	021
TOXICITY TEST #2	022
BLANK QA BOTTLE	024
SEDIMENT CHEMISTRY DUPLICATE	020
REFERENCE LABORATORY SAMPLES 1 AND 2	023

FISH TRAWLS 1 AND 2 DATA SHEETS

1. EVENT - Fill in the Event Number. It should match the Event on the Station Information data sheet (Page 1). If there is a discrepancy, enter the number from Page 1 in the ERROR field.
2. PAGE - Enter the PAGE number. Enter the total number of pages after completion of the event.
3. BOAT DRIVER - Print the last name, first initial of the person who is driving the boat during the trawl.
4. LINER SIZE - Enter the appropriate liner size code from the choices on the form.
5. LINE OUT - Record how far the net is behind the boat by measuring (in meters) the line on the net (without the bridle) as it goes into the water.
6. NET ID - Record the Net ID #.
7. TRAWL # - Fill in the Event Number on the data sheet to complete the Trawl Number Sampleid. If there is a problem, record the number in the ERROR field.
8. START TIME - Enter the time the trawl is started. Use 24 hr format (EDT).
9. DEGREES MAGNETIC - Enter the compass heading (0-359) at the start of the trawl.
10. COORDINATES - At the start of the trawl, record the latitude and longitude from the navigation system being used.
11. TRACK - If the trawl is conducted along a straight track, enter a "1" . If the track is not straight, enter a "2" and print in the type of course followed.
12. TRAWL DEPTH - Monitor the depth of the net during the trawl. Record the minimum and maximum depths observed in meters from the depth finder.
13. WATER SPEED - Record the speed of the boat through the water in knots. This will be calculated from the depth finder.
14. BOTTOM SPEED - Record the speed of the boat over the bottom in knots. This will be calculated from the depth finder.

15. TIME END - At the end of the trawl, record the time in 24 hour format (EDT).
16. COORDINATES - Record the latitude and longitude of the boat at the end of the trawl.
17. # TRAWLS - Enter the number of trawls necessary to get a successful trawl.
18. TRAWL SUCCESSFUL? - Note if the trawl was successful or not. A 'NO' would be appropriate if the last trawl was unsuccessful and further attempts were discontinued due to time or weather.
19. TRASH - Enter either 0 = N or 1 = Y for each category. Describe the amount of trash in the net.
20. COMMENTS - Enter comments concerning the trawl or trash, etc. Be sure to identify your comments.
21. COMPLETED BY - Initials of person completing form.

NOTE

Make sure the fish trawls have these sample numbers:

SAMPLE	SAMPLE NUMBER
FISH TRAWL #1	043
FISH TRAWL #2	044

FISH CHEMISTRY, LENGTH & PATHOLOGY DATA SHEET

NOTE: Each species will have separate data sheets. More than one data sheet may be required for one species for one trawl. Separate forms should be completed for each trawl.

1. TRAWL SAMPLEID - Fill in the Trawl Sampleid. The number should match the Trawl Sampleid on the appropriate Fish Trawl Data Sheet.
2. PAGE - Fill in the page number. At the end of the event, fill in the total number of data sheets required.
3. SUBSAMPLE OR TOTAL NUMBER - After sorting the catch by species, check whether or not there are more than 30 individuals to determine whether or not to complete the subsampling information.
4. FISH IN SUBSAMPLE 1 - Select a portion of the total number of fish and record the number. Follow directions in the Field Operations Manual.
5. WEIGHT OF SUBSAMPLE 1 - Enter the weight of the fish in the subsample to nearest 0.1 KG.
6. FISH IN SUBSAMPLE 2 - Select a portion of the total number of fish and record the number for Subsample 2. Follow the Field Operations Manual.
7. WEIGHT OF SUBSAMPLE 2 - Enter the weight of the fish in Subsample 2 to nearest 0.1 KG.
8. TOTAL WEIGHT - Weigh the total catch of the fish species.
9. TOTAL SHEETS - Record the total number of data sheets required for the species.
10. SPECIES NAME - Print the species name of the individuals listed on the sheet. Use the list provided.

FISH CHEMISTRY SAMPLES

USE THE FIRST FIVE FISH OF THE APPROPRIATE LENGTH FOR CHEMISTRY.

11. FORK LENGTH - Enter the Fork Length (tip of snout to fork of tail) to the nearest mm.

12. **CHECK** - Check the Chemistry Box.
13. **PART SAVED** - Enter part to be saved: 1 = "WHOLE" if the whole fish is being saved or 2 = "PART" if a portion is being saved, based on the size of the fish.
14. **SAMPLE NUMBER** - Enter a Sample Number for the fish. Sample Numbers for Trawl 1 are 100 - 149. Sample Numbers for Trawl 2 are 300 - 349. The Sampleid should be recorded on a water-proof tag and attached to the specimen.

FISH PATHOLOGY SAMPLES

15. **FORK LENGTH** - Enter the Fork Length (tip of snout to fork of tail) to the nearest mm.
16. **PART SAVED** - Enter part to be saved: 1 = "WHOLE" if the whole fish is being saved or 2 = "PART" if a portion is being saved, based on the size of the fish.
17. **PATHOLOGY CONDITIONS** - Examine each of the major body regions (Skin, fins, eyes, gills, buccal cavity) for each of the conditions across the top of the form. Place a code or check in all condition columns applicable to a particular individual. If you observe conditions not already specified on the form, use the OTHER columns. Record the condition associated with each OTHER column in the COMMENTS section. Also, make sure to include the Reference Number (Line Number) or Sample Number associated with the pathology specimen.
18. **SAMPLE NUMBER** - Enter a Sample Number for the fish. Sample Numbers for Trawl 1 are 150 - 299. Sample Numbers for Trawl 2 are 350 - 499. The Sampleid should be recorded on a water-proof tag and attached to the specimen.

REFERENCE FISH

19. **FORK LENGTH** - Enter the Fork Length (tip of snout to fork of tail) to the nearest mm.
20. **REFERENCE FISH** - Place a check in the field, if a whole fish is being retained as a reference specimen because it has no external abnormalities.

1. **SAMPLE NUMBER** - Enter a Sample Number for the fish. Sample Numbers for Trawl 1 are 150 - 299. Sample Numbers for Trawl 2 are 350 - 499. The Sampleid should be recorded on a water-proof tag and attached to the specimen.

ALL OTHER FISH

22. **FORK LENGTH** - Enter the Fork Length (tip of snout to fork of tail) to the nearest mm.
23. **COMPLETED BY** - Initials of individual completing form.

COMMENTS

If you have used the "OTHER" condition categories, comments regarding an individual fish should be written on the back of the data sheet. When commenting on an individual fish, prefix your remarks with the Reference Number associated with the individual and the "OTHER" Comment number.

NOTE

Make sure the fish samples have these sampleids:

SAMPLE	SAMPLE NUMBER
FISH CHEMISTRY - TRAWL 1	100-149
FISH PATHOLOGY/REFERENCE FISH - TRAWL 1	150-299
FISH CHEMISTRY - TRAWL 2	100-149
FISH PATHOLOGY/REFERENCE FISH - TRAWL 2	150-299

BIVALVE DREDGE DATA SHEET

1. **EVENT** - Fill in the Event Number. It should match the Event code on the Boat Location data sheet (Page 1). If there is a discrepancy, enter the number from Page 1 in the ERROR field.
2. **PAGE-** Enter the PAGE number. Enter the total number of pages after completion of the event.
3. **BOAT DRIVER** - Print the last name, first initial of the person who is driving the boat during the tow.
4. **START DEPTH** - Enter the Depth at the station where the tow will start (meters).
5. **LINE OUT** - Record how far the dredge is behind the boat by measuring (in meters) the line as the dredge goes into the water.
6. **DREDGE ID** - Record the Dredge ID #.
7. **DREDGE SAMPLEID** - Enter the Event Number to complete the Sampleid for the Bivalve Tow. If there is a problem, record the number in the ERROR field.
8. **START TIME** - Enter the time the tow is started. Use 24 hr format (EDT).
9. **DEGREES MAGNETIC** - Enter the compass heading (0-359) at the start of the tow.
10. **COORDINATES** - At the start of the tow, record the latitude and longitude from the navigation system being used.
11. **TRACK** - If the tow is conducted along a straight track, enter a "1" . If the track is not straight, enter a "2" and print in the type of course followed.
12. **TOW DEPTH** - Monitor the bottom depth during the tow. Record the minimum and maximum depths observed in meters from the depth finder.
13. **SPEED BOTTOM** - Record the speed of the boat over the bottom. This will be calculated using the depth finder.
14. **TIME END** - At the end of the tow, record the time in 24 hour format (EDT).

15. COORDINATES - Record the latitude and longitude of the boat at the end of the tow.
16. # TOWS - Number of tows required for a successful tow or until decision made to discontinue attempts.
17. DREDGE - Note if the last tow was successful or not.
18. COMMENTS - Enter comments concerning the tow. Be sure to identify your comments.
19. COMPLETED BY - Initials of person completing form.

NOTE

Sample Number associated with the BIVALVE DREDGE is 045

BIVALVE SHELL LENGTH DATA SHEET

NOTE: More than one data sheet may be completed for a tow.

1. **EVENT** - Fill in the Event Number. The number should match the event number on Page 1 (Boat Location Data form). If there is a discrepancy, enter the Event number from Page 1 in the ERROR field.
2. **PAGE** - Fill in the page number. At the end of the event, fill in the total number of data sheets required.
3. **DREDGE SAMPLEID** - Enter the Event Number to complete the Sampleid for the Bivalve Tow. The Event Number should be the same as that on the Bivalve Dredge Data Sheet.
4. **SPECIES NAME** - For each species, print the species name. Use the list provided.
5. **TOTAL LENGTH** - Each set of three boxes represents one individual bivalve. Enter the total length to the nearest mm. Up to 30 individual lengths can be recorded in this area. If there are more than 30 individuals, use another section.
6. **TOTAL #** - Enter the number of bivalves measured from one species.
7. **CHEMISTRY SAMPLEID** - 25 bivalves from one species should be placed in a Zip-loc bag after being measured. These will be processed as chemistry samples. Each bag will be assigned a sample number, starting with 500. The Sampleids will be written on water proof tags placed inside the bag with the bivalves.
9. **COMMENTS** - Indicate if comments are written on the back of the data sheet.
10. **COMPLETED BY** - Initials of person completing form.

NOTE

Bivalve sampleids should start at 500.

SAMPLE SHIPMENT FORM

1. SHIPMENT ID # - Enter the barcode ID from the label being attached to the shipping container. Shipment ID # will range from 820000 - 820999.
2. DATE SENT - Enter the date in YYMMDD format.
3. TIME SENT - Enter the time of shipment pick-up (or dropoff) in 24-hour format (EDT).
4. CARRIER - Print the name of the carrier. Do not use shortened names.
5. CARRIER SHIPMENT ID - Record the airbill number from the carrier's shipping form.
6. PACKED BY - Print the last name, first initial of the person who prepared the shipment.
7. SHIPPING ADDRESS - Print the name, address, and phone number of the laboratory (or other party) receiving the shipment.
8. SAMPLEID -Enter the SAMPLEID of the sample being shipped.
9. SAMPLE TYPE -Put a check in the box under the appropriate sample type. Refer to CODES listed at right.
10. SAMPLE CONDITION - Report how the sample is being shipped, i.e., frozen-dry ice, cold-pak, in formalin, etc. If there are comments relating to any sample (e.g., a sample has a lower volume than normal because of field problems, etc., print these in the SAMPLE CONDITION field.

THIS WILL BE FILLED OUT AT ERL-N

11. DATE RECEIVED - Enter the date the shipment was received by the appropriate laboratory.
12. HOUR RECV'D - Enter hour of receipt in 24-hour format (EDT).
13. RECEIVED BY - Print the last name of the person receiving the shipment and the name of the laboratory.
14. SHIPMENT COMPLETE - Enter a "0" if the shipment was not complete at the time of shipment and "1" if the shipment was complete. Comments on the condition of

the samples upon receipt should be recorded by the receiving laboratory on the **SAMPLE RECEIVING FORM**.

15. **COMPLETED BY** - Initials of individual completing form in field.