



## **National Oceanographic Library – Archive**

## Instrumentation/ Technology Development Projects – working documents/ files

National Institute of Oceanography – Institute of Oceanographic Sciences – Institute of Oceanographic Sciences, Deacon Laboratory – Southampton Oceanography Centre 1960s-1990s

These documents cover many aspects of instrumentation and technology development at the National Institute of Oceanography, (later became the Institute of Oceanographic Sciences, Institute of Oceanographic Sciences, Deacon Laboratory and the Southampton Oceanography Centre).

Norman Smith was at Group W, Admiralty Research Laboratory, with George Deacon. Norman Smith and the group that he led at the National Institute of Oceanography/ Institute of Oceanographic Sciences, Wormley, played a key role in the precision engineering and instrument development that allowed the Wormley Laboratory to become a world-leading institution, particularly in the 1960s and 70s.

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Airbottle (Williams and James Ltd)	5
Alan Hall Mooring (35)	5
Autosub (C5602)	5
Autosub (DTW Project No. MAE 043-2)	5

ARG Generating Table (Ministry of Defence, Admiralty Surface Weapons Establishment, Portsdown, Portsmouth)	5
3 sets of prints. General Arrangement Sheets 1 & 2, Drawing No. E293345	
3 sets of prints. Modified drawings en-numbered as follows:  D/L for E293345 SHT 1 & 2	
I/LIST for E293345 SHT 1-4	
A293385; B293359; B293356; E293285 (Casting pattern modified)	
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With accompanying letter from ASWE dated 28 May 1969	
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CAMERA – Video Camera and SST radiometer (Mounted on RRS <i>Charles Darwin</i> )	7
CAMERA – Deep Sea Camera – Chelsea Instruments – Mk4 and Mk4A and Mk5 – Camera and flash unit (CR10/ 3/1/2)	7
CAMERA – Underwater camera = Camera Mk5	7
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Compass – Bellows design sheets 7	7	
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DB Winch system (For RRS <i>Charles Darwin</i> ) 7	7	
Deep floats (20)	7	
Deep tow (Dr Rees correspondence/ drawings) 7	7	
Deep tow cable (For RRS <i>Discovery</i> Cruise 170). Planning – correspondence/drawings (1986-87)	7	
Dolphin (3210 MAE 034-2 15/6/93) 7	7	
Data buoy DBI model (NIO 5217) 7	7	
EM Spar (Gyro housing frame) (IOS/5290)		
ECM Case (IOS/5239) 8	8	
Fish Cable Termination P.E.S. (19)	8	
Fish trap (For Brian Bett GDD) (C5669)		
F122 Link (Anodic release) (19)		
GAL'PERN Package – Geophone packages/test tank and rotor box [5676-00-DWG/5675-01-000, S-500 for RW Whitmarsh D.R.A]		
Glass Spheres (26)	8	
GLORIA MKIII – vehicle launcher power pack. 8	8	
Helical capston and storage winch 8	8	
Hydrophone (Airgun winch and power pack spec) (For MV Farnella) 8	8	
ISIS Deep Scan – 60. Project No. MGD 015-1	8	
RRS James Clark Ross – CTD wire-CTD frome lab (May 1994) (34) 8	 8	
Light Meter window fitting (IOS/1883)	8	

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Marrs-traction winch (for M V Farnella)	8
Micro current meter (NIO/5170, IOS/1881)	8
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MODS to SUBCOM (IOS/5252)	9
Nitrate sensor (33)	9
No Load Release	9
Pop water sampler MkII – Progress report on the development	9
Pressure Test Rig – SIS Thermometers	9
PUBS Buoyed Hydrophone – Project No.M3B-34-1 (5573)	9
P.U.P.P.I - (Pop-Up Pore Pressure Instrument, for measuring the flow rates of water through sea floor sediments)	9
Remote release (34)	9
Resistor tank (IOS/5653) (33)	9
RMT [Rectangular Midwater Trawl] 25 (IOS/5528)	9
RMT [Rectangular Midwater Trawl - MODS	9
ROBOTICS – Letter from Brian McCartney 23 June 1987 to JSM Rusby on the Department of Trade and Industry (DTI), Advanced Robotics Initiative 'Underwater' Collaborative Group. Copy of recommendation for a project definitive study.	9
Sea battery (37)	10
Seabed Spectrometer (File marked 'R. Edge'-private)	10
Seal Marker (37)	10
Seasoar – winch (Power Pack)	10
Seasoar – Chelsea Instruments DRGS	10
Seasoar – Hydraulic Unit, modifications and main unit, MODS PlankIton Counter (CS674) 1996-1997	10

Seasoar – New Seasoar winch, 1990 (20)	10
Seasoar – Hydraulic test rig (34)	10
Seasoar – Notes (David Grohmann)	10
Seasoar (Resent Post-92) + CTD + BOTS	10
Sequential-sediment sampler (Time Series trap) (33)	11
Sonic Buoy Report, by Orcina Ltd. 1992	11
Sonic Buoy – notes etc. drawings (M98062-2)	11
Spar Buoy – Blowing valve (envelope with drawing plan)	11
Spectrometer (38)	11
SST (Sample Serial Transport) – Sensor packages, R. Pascal, MkI (CS677), MkII (CS681)	11
SST (Sample Serial Transport) – Sensor package, L-15B (RB Whitmarsh) DRA (C5675/003) File 1	11
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Test tank mounting frame (Angus Best C5690)	12
Tide Gauge – Cruise 68, RRS <i>Discovery,</i> November/December 1974	12
TOBI – Buoyancy	12
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TOBI - Transducers, encalculations, materials	12
TOBI – (R. Edge Letter file, meetings, papers)	13
TOBI – R. Edge Umbilical tow	13
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Miscellaneous items folder – Oceanology International '69 ('Tom' Tucker)  Engineers' Reference Tables (belonged to David Grohmann)  (water/oil stained – worn copy)	14
Summary of the design study for a Long Range Slanting Sonar, 1244/64, NIO October 1964	14
Drawings for RMT (Rectangular Midwater Trawl) nephelometer bracket, 1995	14
BURT, RG (Dick) — Handling oceanographic equipment: notes and sketches from a Netman's Log, Institute of Oceanographic Sciences, Report, 84, 1979.  Contents: Tide frame — Thumper unit — Grabs — N.7 OF VNET — N.50 VNET — Engraphic Trawl — Pop up net — I.K. Midwater trawl cod end —Indian Ocean Standard net — Institute of Oceanographic Sciences NRigged for closing on the Levit Principle — Pop up buoy — 2mm wire for mooring buoys — Airgun — Pop up corer (Boomeran Graphels — RMT 8 Mk I — RMT Combination Net — Current frames —MBA dredge—Bottom net, Institute of Oceanographic Sciences — Spar buoy — Pop up buoy (PUBS) sphere — Tide float using a parachute — Pop up current float — Spar buoy Longhurst net — Towed camera — Transponder buoy — Airgun array — Hydrophones and Magnetometers — Hydrographic lay — Bottom net (opening an closing) — General information	g) -
STUBBS, John B - Studies for British Bathyscaphe 1957-1964 – Documents, typed, handwritten drawn plans and Correspondence relating to attempts to obtain support for the Development of a British Bathyscaphe, bound in one volume.	15

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GAUNT, D.J	Operating manual for MkII Neutrally Buoyant Float System (Swallow Float) 1978. Engineering drawings, text and data in ring binder.	15
DRIFTING BUOY	<ul> <li>S (FGGE) (First Garp Global Experiment)</li> <li>File of correspondence (Peter Collar, Institute of Oceanographic Sciences), Development of drifting buoy Systems 1979-1983 with other research organisations.</li> <li>World Meteorological Organisation (WMO) – First Garp Global Experiment (FGGE) Proceedings. 5<sup>th</sup> Session of the Committee of Participants for the FGGE Drifting Buoy System, Geneva, 26-30 November 1974.</li> <li>International Oceanographic Commission (IOC)/ WMO. Drifting Buoy Co-operation Panel, 1<sup>st</sup> Session, Toulouse, 14-16 October 1985. Final Report.</li> </ul>	15
DRIFTING BUOY	<ul> <li>S (FGGE) (First Garp Global Experiment)</li> <li>Reports on drifting buoys from various corporate/ research organisations in Australia and New Zealand – Correspondence, reports, photographs, 1981-83.</li> <li>(contains information and location of FGGE archive FGGE tapes)</li> </ul>	15
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