



## **National Oceanographic Library - Archive**

**Dr John Swallow Bequest** 

Items held in the

National Oceanographic Library
Archive
(with a brief biographical note)
(Archive B Stack 11)

(Dr John Swallow Book Collection held in the John Swallow Room)

# Dr John Swallow Bequest collection and cruise data boxes (including his book collection housed in the John Swallow Room) – Physical oceanographer

## Brief biographical note

Dr Swallow –principally known for the development of neutrally buoyant floats, a method for measuring ocean currents in which a slowly falling sound source was tracked by sno-buoys at the surface with the source on the sea-floor, and for his discovery of the energetic variability of the deep ocean flow. Dr Swallow joined The National Institute of Oceanography in 1954. The first Swallow Float was constructed using a standard building site scaffolding tube whose dimensions were carefully adjusted to create with some simple electronics and nickel transducer. His first use of the floats was immediately successful in the eastern Atlantic, and yielded some of the facts oceanographers know now about the fluctuation of the deep currents there. A sideline of this research was the broadening of the National Institute of Oceanography's interest in precision echo-sounding, which was recognized at the time as a valuable navigational tool as well as for geophysical research. He predicted a southward undercurrent below the Gulf Stream. Henry Stommel (Woods Hole Oceanographic Institution) and John Swallow organized the Aries Expedition (1959/60) (named after the ketch that WHOI lent him for the work. This led to the clear identification of deep energetic eddies in the ocean, and contributed to a profound change in oceanographic thinking about circulation. His research radically altered the way we view the world's oceans and their dynamics.

Amongst his other achievements – his participation in the International Indian Ocean Expedition –Mid Ocean Dynamics Experiment which led to work on the circulation of the Arabian Sea and Equatorial Indian Ocean. He was prominent in planning the work in the Indian Ocean (INDEX International Expedition), and the resulting discoveries concerning the modes of evolution of the 'Somali Current' after the onset of the SW Monsoon. He received many awards including the Prince Albert I (Monaco) Medal.

## John Swallow Bequest items held in the National Oceanographic Library - Archive

#### Red Box HC 1 - Books

The Bombard Story – Alain Bombard 1953

Hydrographical Tables – Knudsen 1901

Octopus and Squid – J-Y Cousteau 1973

Darwin's Voyage – Charles Darwin 1907 2<sup>nd</sup> Edition

Biologist Philosopher Life and Writing of Alfred Russell Wallace – Wilma George 1964

Sailing Ships their history and development - G.S.Laird Klowes 4<sup>th</sup> Edition 1952

Aquatic Resources Hawaiian and Islands US Fish Commission Vol 23 1903 Part 2/1906

Aquatic Resources Hawaiian and Islands US Fish Commission David Starr Jordon and Barton Warren

Evermann Part 1 Shore Fishes

The Explorers and Anthology of Discovery G.R.Crone 1962

Seismic Investigations at Sea JC Swallow Ph.D. thesis (To Maurice Hill 25 October 1950)

Pamphlet the Global Weather Experiment

Wild Life in the Sub Antarctic J.H. Sorrensen 1951

The North West Passage G.M. Thomson 1975

The Great United States Exploring Expedition William Stanton 1975

John Harrison and his timekeepers Rupert T. Gould R.N. 1958

Here is the weather forecast E.G. Bilham 1947

Polar Exploration William S.Bruce 1911

The Cruise of the Falcon E.F. Knight 1886

Arctic Expeditions from British and Foreign Shores D. Murray Smith 1877 (No covers)

A Partial Bibliography of the Indian Ocean W.H.O.I. 1962

A.S.R.E. Tech. Note TX/50/1 De Walden and Swallow

#### **Red Box HC 2 Files**

Notes and Drawings Indian Ocean Feb 94

Indian Ocean Correspondence May 86 – December 88

Misc. Correspondence with I.O.S.

Indian Ocean Meeting Miami November 19-20 1984

Text and Diagrams for I.O. Panel Delhi Jan 1985

Discovery Cruise 162 – CD Cruise 3/84 and 1/85

C.C.C.O IO Panel Delhi Jan 85

C.C.C.O Panel File 2 Starts April 84

Correspondence with Brenda

Stommel 1816 Non existent islands

JADE – 2 and Indian Ocean 1991/92

New Meteor Equatorial Atlantic October 1990

ASQ Life with NERC

HEYE Last Prog Oceanog paper

Indian Ocean Bibliography notes

On Being an Editor of Deep Sea Research

## M.F. Maury Meiklejohn Memorial Notes

Florida Tropical Oceanography Conf November 1965

Oxford Symposium Cartography 1963

Oxford Symposium Cartography 1963

Notes from Doug Webb re gliders

Ship Reports of Somalia

US WOCE Indian Ocean Review Panel

Challenger Society and Oceanography Society Correspondence

Ex CTD's in Indian Ocean July 1992

Vienna IUGG Meeting 1991

Indian Ocean and Climate March 1983

Correspondence Brookhaven Feb 1991

INDIGO Meeting Paris November 1987

Indian Ocean correspondence Sept 1993 onwards

Circulation of Indian Ocean Review Paper with Schott 1984 onwards

Indian Ocean and Climate CCO Panel June 81 to April 83

Indian Ocean and Climate April 83 to March 84

## HC3 (Notebooks)

Big Sky Montana Jan 1980

WHOI Sept Oct 1980

SCOR WG 47/ICSU Feb 1980/Rhines talk Feb 1980

WOCE CP1 Nov 86

IO Panel Apr 87

IUGG SCOR WG 21 Aug 71

Press clippings

JOA Sept 76

Correspondence LHN Cooper

Notes for meeting AUWE May 1961

Election to Royal Society Personal Letters

**IUGG Grenoble 1975** 

Discovery Surface Currents April/May 1971 Geoff Howe

Poisoned Sea and other misc. topics

Index correspondence

**CINCWIO** 

FINE Workshop and Working Group 47

Bigelow Medal

JCS Rakestraw

**IUGG 1975** 

Files Indian Ocean Notes and Data

Files Discovery Cruise 102 XBT's

Large waves and flooding in Maldives

Aries Decklog

Atlantis 2 XBT Data

South Equatorial Current

Station Data ARGO

Discovery – Bruce Hamon

Monaco museum List of science instruments (3 volumes)

International ice patrol Bulletins 17,21,23,24,25,27,28,29(x2)

## HC 4 (Blue Label)

Discovery 102 Navigation

#### HC5

**IIOE** Data

#### HC<sub>6</sub>

Somali Current Historical

### HC8

MEDOC 69

## HC9

Marion Dufresne '85, '86

## HC 10

MD 44/49

## HC 11

Historical Equatorial Jet and other climate related work Discovery 164 RTP HC12 INDEX Data Various Ships

## HC 12

Miscellaneous data

(Added item via Pauline Simpson, Librarian NOL 2006 – Believed to be a Marianas Trench sounding profile, but not validated (by John Gould or James Crease)

### HC 13

IO current work with Molinari

#### **HC14**

Shackleton 1975

#### **HC15**

Indian Ocean Current Meter Stations

### **HC16**

Discovery IIOE Sections (Box 2)

HC 18 Discovery 102

2 Boxes -4 card index boxes. Indian Ocean bibliography

1 Box - Photographic slides and prints of oceanographic cruises and scientific visits

#### **Bradbeers 1**

Yellow file WOCE in the Indian ocean

File INDEX occasional notes

File Somali current correspondence with Met office 1964 –

Letters re UK WOCE

Correspondence file WOCE planning

File INDEX 1976

File WOCE CP1

File relating to award of Bigelow medal 1962

File re Jon Rees (UEA) PhD

Copy of Rees PhD thesis

Correspondence with Doug Webb re "fast fish" profiler

File with letter of job offer from GERD to JCS 1954

Knox Gan data

AII surface currents Bob Munns

Brenda Deacon interview with JCS 1994 (R Met Soc)

Draft of "Existence Doubtful" (Henry Stonmmel)

Draft of "A view of the Sea" Henry Stommel

Green Box File HMS Challenger RTW cruise

Discovery BT logs IIOE 1964

### **Bradbeers 2**

Photo of Admiralty group at Stonehouse 1945 (with M McKenzie)

Microfiche of IO surface currents

Arabian Sea XBTs HMS Hydra/HMS HECATE May June 1978

BT Section Indian ocean Anton Bruun and AII

Small note book JCS 1950

Life and activities of a physical oceanographer Norris Rakestraw

Photographs Aries etc.

Correspondence with Bruce Hamon

Photo of JCS Bermuda, Mode

Bermuda correspondence 1959 – 60

Bermuda current plots Aries

Gerold Seidler Ph.D thesis

File Indian Ocean Bibliography

Bermuda correspondence

NIO Library material

Somali Basin work - Green box file

Photos of HMS Challenger given to JCS by Dr Carruthers

Letters relating to Erica Dan IGY

Photographs Discovery 2

Photographs relating to JADE cruise

Misc. photographs HMS Challenger

Slides HMS Challenger

File AMSOC and Albatross

Early days with NS floats – slides and talk

Stommel medal talk and view graphs

Indian Ocean correspondence 1989-1993

Albatross file

File Indian Ocean circulation

Misc. letters from Henry Stommel

File – Phil Williamson

File – Challenger legacy 1995

CCCO Islamabad 1988

Marian Dufresne 1988

## **Lamont and Shaw Box**

Green box file Oman 1988

Green box file misc. correspondence

Green box General indain Ocean Correspondence

#### **Bradbeer 3**

## (\*Books in Bradbeer 3 transferred to NOL stock)

Magazines with ocean articles

Met office admiralty weather charts

\*Phys Geog of the sea Maury

Beaufort of the Admiralty Friendly

- \*The sea Miller
- \*The Sea Vol 3 Hill
- \*Phys Ocean Defant Vol 1 and Vol 2
- \*Monsoons of IO Duing
- \*New world of the Ocean Behrman
- \*Faroe Shetland Channel Tait
- \*Boundary Layers Bowden et al
- \*Rao Bay of Bengal Arabian Sea

Hill Phd Thesis

- \*Summerhayes and Thorpe
- \*Atlas of Arabian Sea

**GEOSECS Atlantic** 

**GEOSECS Pacific** 

**POLYMODE** Atlas

**GATE Atlas** 

Stommel Photo Meteor plaque MD Plaque

Loose

Sundry large format Admiralty weather and ocean folios

Green file

## **MODE-1** Data box

MODE-1 (Mid-Ocean Dynamics Experiment) data RRS *Discovery* Cruise 53 (Includes: 9 log sheet, files & MODE-1 Density Program Operations manual March-June 1973, NIO Cruise Report, 58 RRS *Discovery* Cruise 53, April-June 1973.Physical Oceanography In the Western North Atlantic Ocean (contribution to MODE-1) (NB: From J.Crease via Pauline Simpson – put with Swallow Bequest 2005)

2 Card Index Drawers – Mediterranean Deep Water Formation & Mediterranean Outflow

9 Atlases