

May 1987  
No 75

# BRITISH ANTARCTIC SURVEY

# BULLETIN



CAMBRIDGE  
PUBLISHED BY THE BRITISH ANTARCTIC SURVEY  
NATURAL ENVIRONMENT RESEARCH COUNCIL

# BRITISH ANTARCTIC SURVEY

*Director:* DR R. M. LAWS CBE, FRs

*Deputy Director:* W. N. BONNER

## *Heads of Divisions*

*Geology:* DR M. R. A. THOMSON

*Geophysics:* DR P. F. BARKER

*Ice and Climate:* DR ELIZABETH MORRIS

*Marine Life Sciences:* DR R. B. HEYWOOD

*Space Sciences:* DR M. J. RYCROFT

*Terrestrial and Freshwater Life Sciences, Human Physiology and Medicine:*  
DR D. W. H. WALTON

*Managing Editor:* B. MORAN

The *Bulletin* is published quarterly, in February, May, August and November.

1987 annual subscription: UK £44

Overseas £48

Individual issues: £11.00 each.

Only papers concerned with the work of the British Antarctic Survey can be published in the *Bulletin*, but correspondence on papers appearing in the *Bulletin* or on related topics will also be considered.

The authors of all signed papers are alone responsible for the opinions expressed in them.

Papers to be considered for publication and editorial enquiries should be sent to the Managing Editor of the *Bulletin*, British Antarctic Survey, High Cross, Madingley Road, Cambridge CB3 0ET, England. Telephone: Cambridge (0223) 61188. Telex: 817725 BASCAM G.

Orders for subscriptions and individual copies should be sent with payment to: The Distribution Centre, Blackhorse Road, Letchworth, Hertfordshire SG6 1HN, England. Telephone: Letchworth (04626) 72555. Telex: 825372 TURPIN G.

Copyright © 1987 British Antarctic Survey  
ISSN 0007-0262

# BRITISH ANTARCTIC SURVEY

## BULLETIN

*No. 75 May 1987*

### CONTENTS

	PAGE
AVDAS – A microprocessor-based VLF signal acquisition, processing and spectral analysis facility for Antarctica A. J. SMITH and K. H. YEARBY	1
The ULF/VLF correlator experiment at Halley H. GOUGH, D. JONES and K. H. YEARBY	17
An aeromagnetic survey of the Neny Fjord area, Graham Land, Antarctica R. G. B. RENNER and C. M. BALES	31
Orientated calcareous concretions from James Ross Island, Antarctica D. PIRRIE	41
Seismic bedrock depth measurements and the origin of George VI Sound, Antarctic Peninsula M. P. MASLANYJ	51
Facial asymmetry in a leopard seal ( <i>Hydrurga leptonyx</i> ) A. J. E. CAVE and W. N. BONNER	67
Report on Antarctic Fieldwork The geology of southern Oscar II Coast, Graham Land A. J. MILNE	73