THE ROYAL SOCIETY

THE ROYAL COMMISSION ON HISTORICAL MANUSCRIPTS

Joint Committee on Scientific and Technological Records

#### CONTEMPORARY SCIENTIFIC ARCHIVES CENTRE

Papers of

Rear Admiral Brian Egerton

(1886 - 1973)

Listed by: Jeannine Alton
Harriot Weiskittel

## Description of the collection.

The collection supplements other work of Admiral Egerton's already given to the Imperial War Museum by Mrs. A. Dumas.

The papers deal with work on mathematical problems, especially those involved in artificial satellites and space exploration, in which Admiral Egerton became interested during his retirement.

He seems to have planned several popular textbooks on these subjects, though none were completed. His Technical Note on Orbits produced considerable controversy and correspondence which forms the bulk of the collection (B5 - B11).

The help of Dr. Peter Collins, St. Edmund Hall, Oxford, in sorting and identifying papers and correspondents, is gratefully acknowledged.

Unless otherwise stated, all items are manuscript. Titles and descriptions in inverted commas are those which appear on the manuscripts.

# Note on the career of Admiral Egerton.

Rear Admiral Egerton was born in 1886. He retired from the Navy in 1935 after a distinguished career which included service on the Mining Staff of the Admiralty, and as Director of Torpedoes and Mining 1928. In 1935 he was ADC to King George V, and was recalled to the Navy in 1939, commanding HMS Vernon, Torpedo, Mining and Electrical Training Establishment.

He died in 1973.

## Contents of the handlist.

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## A. Notebooks A.1 - A.6.

A.1 Red Analysis Book, pages numbered and indexed by Egerton, with many loose notes & MSS interleaved, some dated 1950.

Misc. notes on mathematics, & some more extended drafts; includes copy of letter from L.S.Mordell, commenting unfavourably on Ms. submitted to him by Egerton. c. 1950

A.2 Red notebook, labelled '3-T' (= three-dimensional time).

Misc. notes & calculations by Egerton on time & relativity, related press-cuttings; correspondence, & drafts of replies.

Ms. by Egerton: 'Dimensions of time' 1956
'Visualising 3-dimensional time' 1955
'Gaussian time' 1955
and shorter undated notes.

1955 - 57

A.3 Green notebook, labelled 'J.L.Pritchard'

Notes & drafts by Egerton, & correspondence with Pritchard, mainly on Egerton's 'Technical Note' on 'Spiral and Elliptical Orbits' and matters arising from it. (See also B.2 - B.11). 1956 - 57

- A.4 Red notebook, with some loose pages interleaved, inscribed inside 'Astronavigation for Amateurs'; draft for popular book.

  (Unfinished)

  1957
- A.5 Black notebook, inscribed 'Gravitation. Newton's Theory and the 'Classical' Version.'; draft for popular book (unfinished)1958
- A.6 Red notebook, 'Experiments with Numbers for Amateurs'; misc.
  drafts & notes for popular book, calculations & notes on
  books read, correspondence with R.L.Goodstein.

  1960 64

#### B. Drafts & working papers B.1 - B.11

B.1 Misc. Ms. drafts on gravitation & orbits, perhaps intended for popular book. (See A.5 above.)

'Experts and experts'
untitled (on gravitational orbits)
'Orbits'
'Elliptical & Spiral Orbits of Space-ships'
'Textbooks and Reality'
'Gravitation and Inertia'
'Accelerations'

1957

#### B.2 Ms. drafts:

'Privileged point in space and time'
'Least Action'
'Holman' (comment on newspaper correspondence on recession of the galaxies) 1963.

- B.3 Ms. of letter on 'Time', with note 'Sent to New Scientist'
  (not published) 1963
- B.4 Letter to 'N.J.', with outline of Egerton's proposed experiment on 'least action'.
- B.5 B.11 'Spiral and Elliptical Orbits': Egerton's Technical Note, published in J.Roy aeronaut. Soc., 61, June 1957.
  - B.5 Ms. of note, published paper, editorial correspondence.
  - B.6 Ms. draft of Egerton's reply to criticisms received.
  - B.7 Critical comments on note, received from Sydney Univ.
    Rocket Society, & Egerton's draft reply.

    1958
  - B.8 Comment on note from W.B.Klemperer, Missiles Research Section, douglas Aircraft Co., & Egerton's draft reply. 1957
  - B.9 Ms. note by Egerton to unidentified correspondent. 1959
  - B.10 Misc. copies of letters arising from publication of note, transmitted to Egerton by J.L.Pritchard, many with his comments, & notes for reply by Egerton.

    Those who sent in comments were: K.E.Baler, E.C.Capey, A.Causon, R.A.Gellatley, W.G.Gilchrist, W.E.Hick, P.C.Parks, R.H.Peacock, Ernest Frederick Relf, R.I. Vaughan, H.M.Yeatman.

B.11 Correspondence with J.L.Pritchard on note, criticisms & answers. 1956 - 58

#### C. Correspondence. C.1 - C.6

- C.1 letter from A.M.Tyndall, on 'Expanding Universe?', with
  Egerton's Ms. of that title.

  1955
- C.2 letter from Sir Bernard Lovell, on orbit of Lunik III 1959
- C.3 letter from R.L.Goodstein, on some elementary results in theory of number (with Egerton's draft reply) 1960

C.4	letter from H.Martyn Cundy, on errors in mathematical textbook (with Egerton's Ms. and draft reply)	oks, 1964
C.5	letter from D.G.King-Hele, on orbits (with Egerton's draft replies)	1964
<b>c.</b> 6	Misc. correspondence with setters etc. on mathematical	1966 - 68.

# Index to principal correspondents.

CUNDY, H. Martyn	C.4
DINGLE, Herbert (2 letters)	A.2
GOODSTEIN, R. L.	A.6, C.3
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KLEMPERER, W. B.	B.8
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