

THE ROYAL COMMISSION ON HISTORICAL MANUSCRIPTS

Report on the papers of
R E G I N A L D S T E P H E N S T A C E Y
professor of pharamacology and therapeutics
1905-1974

Reproduced for the Contemporary Scientific
Archives Centre
(CSAC 22/16/74)
by
THE ROYAL COMMISSION ON HISTORICAL MANUSCRIPTS
Quality House, Quality Court, Chancery Lane,
London WC2A 1HP

1975

All rights reserved

No. 75/1

THE ROYAL SOCIETY

THE ROYAL COMMISSION ON HISTORICAL MANUSCRIPTS

Committee on Scientific and Technological Records

CONTEMPORARY SCIENTIFIC ARCHIVES CENTRE

Papers of

Reginald Stephen Stacey

(1905 - 1974)

Listed by: Jeannine Alton

Harriot Weiskittel

Deposited in the University of London Library 1974

Description of the collection.

The papers were received from Mrs. Helen Stacey, and the Wellcome Research Laboratories, Beckenham.

The collection consists almost entirely of work at St. Thomas's Hospital, London, where Stacey was Reader and later Professor of Pharmacology and Therapeutics. Items 4 - 57 are his laboratory notebooks and experimental observations on brain amines and blood-platelets, including data for his work on amine metabolism in suicides, neonates and mental defectives. Items 70 - 72, 97 - 177 are notes for lectures, demonstrations, curricula and examinations for St. Thomas's Hospital and the University of London, which give information on the organisation and development of courses of study in Pharmacology and Therapeutics.

Unless otherwise stated, all material is manuscript. Titles or descriptions in inverted commas are those which appear on the MSS.

Summary of the career of R.S. Stacey

- | | |
|-----------|--|
| 1905 | b. London
educ. Haberdashers' Aske's School |
| 1924 - 27 | Trinity College, Cambridge (Scholar); Physiology Cl.I |
| 1927 | University of Vienna |
| 1927 - 30 | St. Thomas's Hospital Medical School; B.Chir. 1930 |
| 1932 - 35 | First Assistant to Professor of Medicine, St. Thomas's |
| 1933 | married Margery North |
| 1935 - 47 | Professor of Pharmacology & Therapeutics, Royal College of Medicine, Baghdad |
| 1947 - 48 | University of Oxford |
| 1948 - 58 | Reader in Pharmacology & Therapeutics, St. Thomas's Hospital |
| 1951 | married Helen Duke |
| 1958 - 70 | Professor of Pharmacology & Therapeutics, St. Thomas's Hospital |
| 1963 - 70 | first holder of Chair in Pharmacology & Therapeutics, University of London |
| 1970 - 74 | Wellcome Research Laboratories, Beckenham. |

Contents of the handlist

	<u>Items</u>	<u>Pages</u>
I. Biographical	1 - 2	2
II. Laboratory Notebooks	3 - 11	2
III. Working papers	12 - 57	2
5-HT and MAO	12 - 26	
Platelets	27 - 32	
Brain Amines	33 - 39	
Misc. drugs	40 - 57	
IV. Publications	58 - 61	5
"	181 - 183	11
V. Lectures & Demonstrations	62 - 72	5
" "	97 - 173	8 - 10
VI. Conferences	73 - 74	6
VII. Committees and Societies	75 - 80	7
VIII. Correspondence	81 - 96	7
IX. University of London etc.	174 - 180	10 - 11
X. Index of principal correspondents		11 - 14

I. Biographical Material.

1. Photographs of Stacey and colleagues: c.1932 - 35, and 1968
2. Obituary notices: Lancet, March 2, 1974 (by Steven E. Smith); BMJ, March 2, 1974

II. Laboratory Notebooks.

3. Notebook, mainly pharmacological testing methods, indexed 1931
front and rear. (Probably kept by Stacey while resident House Physician, St. Thomas's Hospital Medical School).
- 4 - 11 Notebooks of experiments, observations and research as Reader 1956 - 67
(later Professor) of Pharmacology & Therapeutics, St. Thomas's.
All the books have numbered pages and indexes by Stacey, Book A (no.4, below) at rear, all others at front.
 4. A 13.XI.56 - 25.VI.58
 5. Book B 24.VI.58 - 29.II.60
 6. Book C 2.III.60 - 15.III.61
 7. Book D 15.III.61 - 12.VI.62
 8. Book E 20.III.62 - 21.X.63
 9. Book F 13.VI.62 - 1.III.65
 10. Book G 4.II.63 - 29.IX.66
 11. Book H 2.III.65 - 3.III.67

III. Working papers.

Professor Stacey's ordering and description of the notes have been preserved; some files include related offprints and correspondence.

12. 'H.T.'; expts.case-notes, correspondence, Ms. draft of paper 1955 - 60
Continued...

12. continued
'Red cells and 5-HT'; correspondence 1955 - 57 with Dr. W. Jacobson.
13. **Tryptamine**; notes and charts, some dated 1963. 1963
14. Tryptamine; notes, charts, calculns.; Ms. draft for paper (untitled) on platelets. n.d.
15. Tryptamine; expts. and notes. n.d.
16. 'MAO Estimations'; notes and expts. 1965 - 67
17. 'MAO Estimations'; notes and expts.; text of short communication 'Monoamine Oxydase activity of platelets' (Latt, Rippey, Stacey). 1966 - 70
- 18 - 26 Work on 5-HT (5-Hydroxy-tryptamine)
18. 'HTP Experimental'; expts., tables and notes; includes Ms. paper 'Observations on the Synthesis and Storage of 5-HT by small intestine, B. Pharmacol. Soc. Jan. 1958 Barts.' 1957 - 58
19. Casenotes, expts. etc. on 5-HT; includes correspondence with Roger Hardisty and draft of his paper on Thromasthenia. 1961 - 64
20. '5-HT Absorption'; expts. and tests by Stacey and collaborators, 1960 numbered and dated.
21. Ditto 1961 - 62
22. Ditto 1963
23. Ditto 1964 - 65
24. 'Notes 5-Hydroxytryptamine'; misc. notes on books and articles read; expts. and observations; charts; Ms. draft of article (untitled) on history and present state of work on 5-HT (8 pp.) n.d.
25. Figures and tables on 5-HT, Perh. for paper. n.d.
26. 'Neonates and Infants. Blood'; tests and expts. on 5-HT in umbilical cord, and infants' blood. 1960 - 62
- 27 - 32 Work on Platelets.
27. 'Platelets ¹⁴C tryptamine 1 - 199'; expts. and case-notes, numbered and dated by Stacey and collaborators. 1966 - 69
28. Ditto 200 - 305. 1969 - 70
29. 'Platelet Gradient Expts.' 1968
30. 'Platelet Fractionation'; expts., charts, calculns. 1970
31. Misc. notes and correspondence on platelets. (c) 1962

32. 'Platelet Experiments'; misc. notes, graphs and working papers, 1955 - 68 variously dated 1955 - 68, and Ms. drafts for communications on 5-HT in platelets. (one for Experientia, 1968)
- 33 - 39 Work on Brain Amines.
33. 'Brain Amines. Suicides.'; case-notes, tests and expt. calculns, 1967 - 68 numbered by Stacey and collaborators 1 - 51. (not all in numerical sequence).
34. 'Brain Amines. Bevan Jones, Pare, Stacey'; ditto, numbered 1969 - 70
1 - 52.
35. 'Brain Amines Human'; notes and expt. observations, with correspondence and drafts for papers, with C. Michael B. Pare, K.F. Gey. 1969 - 72
Corrected drafts for paper, 'Brain Amine Concentration after M.A.O.I. Administration', Bevan Jones, Pare et al.
36. 'ISO & NIAL (Isocarboxazid and Nialamide)'; notes, charts, expt. observations; correspondence with C. Michael B. Pare. 1963 - 65
37. 'Mental Defective Experimental'; case-notes etc. 1967
38. 'Histidinuria'; case-notes, etc. 1969
39. 'Lactate Dehydrogenase'; case-notes etc. 1969
- 40 - 57 Shorter working papers on drugs and their effects, with related offprints, bibliographies and correspondence. (Headings are those used by Stacey).
40. Foetus.
41. Uterus; includes Correspondence on leaves of West African tree Spondias monbin L in obstetrics, 1952.
42. 5-HT in man.
43. Hypotensive drugs.
44. Folic acid; with expts., notes, bibliographies, correspondence.
45. Cocaine and Pheochromocytoma.
46. Autonomic
47. Biogenic Amines.
48. Nicotine.
49. Nutmeg; includes notes for **question** and answer interview, perh. on radio.
50. Reserpine; includes correspondence with Roussel Laboratories 1959
51. Parkinsonism.

52. Carcinoids.
53. Substance P.
54. Smooth muscle contracting substances.
55. Synoptic transmission in the spinal cord.
56. Enzymes, Oriental drugs, Anti-convulsants; includes catalogue of 'Indigenous drugs of Iraq and Iran', and correspondence with Rona laboratories 1961.
57. Catecholamines and MAO with related offprints, expt. data and correspondence with May & Baker Ltd. 1969.

IV. Publications. See also p.11, nos. 181 - 183

58. 'Platelet Function Tests in Thrombocythaemia and Thrombocytosis', by P.D. McClure, G.I.C. Ingram, R.S. Stacey *et al*, Brit. J. Haemat. 1966
Expt. data, observations, charts etc.; drafts and corrections for paper; correspondence with collaborators. 1963 - 66
59. 'SUICIDES' (project on brain amine levels in depression)
Published as '5-Hydroxytryptamine, noradrenaline, and dopamine in the brain stem, hypothalamus, and caudate nucleus of controls and patients committing suicide by coal gas poisoning' by C.M.B. Pare, D.P.H. Young, Kathleen Price, R.S. Stacey.
Case-notes, expt. data, charts etc.; drafts and corrections for paper; correspondence with collaborators. 1966 - 63
60. Ms. draft for paper or article on platelets, effects of drugs, with tables. (unpublished) (c) 1970
61. 'Recent Advances in Pharmacology', by J.M. Robson & R.S. Stacey, Third ed. 1962, 4th. ed. 1968.
Correspondence with contributors and publishers. 1960 - 70

V. Lectures. See also pp. 8 - 10, nos. 97 - 173

62. 'Mental Defectives' 1959 - 62
Ms. lecture on Phenylketonuria given at Maudsley Hospital, May 1959. 7pp.; with offprints, bibliographies and working notes.
63. Ms. drafts and notes for lecture on platelets, at Royal Society of Medicine 1959, Barking 1971; others undated.
64. Misc. Ms. drafts for lectures and slides on platelets.
65. '5-HT in Medicine and the Malignant Carcinoid Syndrome' 1964
Mosul 25.V.64'; notes for lecture. 3pp.
'5-HT in Disease'; notes for lecture 5pp. n.d.
66. Iatrogenic Diseases (c) 1964
Notes, offprints, 3 Ms. lectures, 18pp. 7pp. 6pp.

- R.S.S. C.S.A.C. 22/16/74 6.
67. Misc. notes and lectures 1966 - 67
1. 'Questions for Old Students' Day 11 Nov. 1966' 1966
 2. 'Brainbridge 13.II.67'; misc. notes on drugs. 1967
 3. 'Observations on phenylketonuria and other forms of mental deficiency'. Ms. lecture 6pp. n.d.
68. 'Some Clinical Aspects of 5-Hydroxytryptamine'; lecture given at Helsinki Symposium; typescript with Ms. corrections and additions. 1968
See also Item 74.
69. 'Platelets.'; address given at University College, London; Ms notes and plan, typescript of address. 1971
70. Misc. lectures at St. Thomas's 1967 - 70
1. 'Preliminary Neurology Course 23 June 1967' 6pp.
 2. 'Prelim Combined Neurology Course May 1970' 5pp.
 3. 'Drugs modifying As - Ab reactions. STH Pharmacists 18.III.70' 7pp.
71. Two lectures for Nurses 1955 - 57
1. 'The naming of Drugs. Charge Nurse Study Day October 1955' 6pp.
 2. 'Drugs affecting blood pressure. Charge Nurses Jan 1957' 2pp.
72. 'Nurses' Lectures' 1960 - 67
10 Ms. lectures indexed by Stacey
- Hypotensive drugs (2), Nov. 1960, Jan. 1967
Diuretics Jan. 1967
Chemotherapy April 1961 etc.
General Pharmacology April 1961
Corticosteroids and Corticotrophin Sept. 1966
Cardiac Drugs n.d.
Hypnotics Sedatives Analgesics n.d.
Drugs used in the treatment of mental disease 3.VII.64
Chemotherapy and Malignant Disease n.d.

VI. Conferences.

73. Symposium on the Biological Role of Indole Derivatives, 1967
held 10 - 12 May 1967 at College of Surgeons and Physicians, Columbia University, New York.
(includes Stacey's report on Session B.)
74. Symposium on 5-Hydroxytryptamine, held 29 - 30 March 1968 at Helsinki; correspondence with Professor Matti K. Paasonen re Stacey's journey to Helsinki and his paper 'Some Clinical Aspects of 5-HT'; Ms. and corrected proof of paper, published in Ann. Med. exp. Fenn., 1968, 46. See also Item 68.

VII. Committees and Societies.

Only documents directly relating to Stacey's contribution to these bodies have been retained.

75. British Journal of Pharmacology 1970 - 71
(Stacey served as Secretary to the Editorial Board Jan.1966 - Jan.1971)
Notes on circulation of journal, financial statements, statistics of journal subscriptions, distribution of articles, comparative costs etc; includes some correspondence with colleagues.
76. British National Committee for Physiological Sciences. 1967 - 72
Misc. correspondence and reports re travel grants, membership of international organisations etc.; includes Stacey's note of proceedings at meeting 1970 on application of IUPHAR (Int. Union Pharmacologists) to join ICSO (Int. Comm.Scientific Organisations).
77. British Pharmacological Society (Committee) 1971 - 72
Report on Training of Overseas Graduates in Pharmacology, by Steven E.Smith, prepared for Brit.J.Pharmacol.
Correspondence and notes re Joint Committee Royal Society & Brit.Pharmacol.Soc. to administer travel fund for 5th International Pharmacological Congress, San Francisco.
78. British Pharmacopoeia Commission 1963 - 73
Committee I; on Medicine and Doses; correspondence with colleagues.
79. Research Defence Society 1969 - 72
(Stacey served on the Council of the Society)
Misc. correspondence; notes for talk at Sevenoaks to Junior Branch, British Association, 1971.
80. Society for Drug Research. 1966
Misc. correspondence; Ms. note of proceedings at meeting 28.IX.66.

VIII. Correspondence.

81. Academic Correspondence; with Arnold S.V. Burgen 1963,
J.B. Ellis Baker 1972
82. Papers and correspondence re Stacey's expert's Report in Regina v. Anthony William John Stephenson and Terrence Brown. 1967
83. Invitations to lecture 1971 - 72
- 84-90 General professional and scientific correspondence.
The letters are arranged chronologically; names of correspondents appear in the general index.
84. 1951 - 56
85. 1957 - 58

86. 1959 - 61
87. 1962 - 68
88. 1969 - 72
89. Correspondence and reports on research carried out with M.S.E. refrigerated centrifuge provided by Royal Society Grant-in-aid. 1959 - 64
90. Misc correspondence with pharmaceutical suppliers on analgesic drugs. 1961
- 91 - 96. Work as examiner, referee etc. Restricted

Lectures, Demonstrations etc. (see also nos. 62 - 72)

The lectures were frequently updated by corrections, deletions, and insertions of new material or references.

Misc. Lectures on Therapeutics.

97. 'Chemotherapy'; notes for lectures on chemical structure and properties of Sulphonamides, Penicillins, Streptomycin, polypeptide antibiotics etc.
98. 'Cardiovascular System'
99. 'Therapeutic Trials'
100. 'Chemotherapy of Some Non-bacterial infections'
101. 'Chemotherapy'
102. 'Revision' (notes on therapeutic drugs)
103. 'Drugs used in Psychiatry'
104. 'Oral hypoglycaemic compounds'
- 105, 106. 'Iatrogenic diseases'
107. 'Thyroid and Antithyroid drugs'
108. 'Chemotherapy of Malignant Disease'
109. 'Infestation with worms'
110. 'Gout'
111. 'Pneumonia'
112. 'Mode of Action of Arsenic'
113. 'Treatment of Parkinsonism'
114. 'Treatment of Common Symptoms'
115. 'Mechanical Methods of removing fluid in Heart failure'
116. 'Vasodilators and Hypotensive Drugs'
117. 'Poisoning'
118. 'Treatment of Cough'
119. 'Substances depressing Bone Marrow'
120. 'Histamines, Antihistamines, Anaphylaxis, Allergy'
121. 'Hormones of the Adrenal Cortex and Analogues'
122. 'Some enzymes used medicinally'
123. 'Salt and Water Balance'
- 123A. 'Treatment of Poisoning'
124. 'Radioactive Isotopes'

125. 'Vitamin Deficiency'
126. 'Anaesthetics'
127. 'Uses of Drugs which Act as Synapses'
128. 'Disinfectants'
129. 'Analgesics'
130. 'Chemotherapy' (with note 'Replaced 1955')
131. 'Post.Pituitary Extract.'
132. 'Potassium Deficiency'
133. 'Anaemia' (with note on alternative lecturers)
134. 'Coronary Thrombosis' (with note of alternative lecturer)
135. 'Blood, Blood Products and Blood Substitutes'
136. 'Adrenal Cortex'
137. 'Hormones of the Anterior Pituitary Gland'
138. 'Sex Hormones'
139. 'Constipation'
140. 'Therapeutics' - Mangement in General Practice
141. 'Preparations and Uses.'
142. General lecture on drugs.
143. General introductory lecture and reading list for course on Therapeutics.
144. Applied Pharmacology and Therapeutics 1949 - 1961
Detailed plan of course year by year, with titles of lecture subjects, names of lecturers etc., plans for visits, related correspondence with colleagues etc. 1949 - 61
145. Course in Pharmacology (later Applied Pharmacology and Therapeutics)
Syllabus, lecture courses, introductory talks on scope of course, misc.notes for lectures by Stacey. 1951- 70
146. 'Gen. Pharmacology I'
147. 'Biological Assay'
148. 'Morphine and other Opium Alkaloids'
149. 'Analgesics and Antipyretics'
150. 'Drugs depressing the C.N.S.'
151. 'Drugs acting on C.N.S.'
152. 'Drugs apparently stimulating the C.N.S.'
153. 'Drugs causing changes in the Blood'
154. 'Drugs acting on the peripheral nervous system'
155. 'Drugs acting on Alimentary Canal'
156. 'Drugs acting on Respiratory System'
157. 'Drugs acting on the peripheral nervous system'
158. 'Drugs acting on Blood Vessels'
159. 'Diuretics'
160. 'Acetylcholine and drugs which mimic it'
161. 'Histamine'
162. 'Drugs and adrenergic transmission. Catechol amines'
163. 'Sympathomimetic Amines'
164. 'Hypnotics Sedatives Tranquillisers'
165. 'Tranquillisers'
166. Shorter notes on misc.drugs.
167. 'Statistics'. To illustrate this lecture Stacey used the experiment discussed in 'The Effect of Cyclobarbitone on Mental Performance' by Steven E.Smith & Thomas J.Sullivan, J.Med. Educ. 40, 1965. Some of the experimental material and a copy of the communication are included.

168 - 171. Practical Pharmacology.

(c)1950 - 68

Misc. notes, charts, working papers, programmes, instructions and outlines for demonstrations, class experiments etc.; many given or annotated by Stacey.
4 folders.

- 168 1951 - 55
169 1955 - 60
170 1964 - 68
171 n.d. Stacey's notes and papers for demonstrations.

172, 173 Anaesthetics.

1970

Lectures given for Primary Examination for Diploma of Fellow in the Faculty of Anaesthetics, Roy. Coll. Surg. England. Includes timetable of lectures, specimen questions, letter of thanks and congratulation on high success rate.
2 folders.

- 172 Lectures on General Pharmacology,
Antimicrobial Chemotherapy
Drugs depressing the C.N.S.
173 Lectures on Cardiac Glycosides
Diuretics
Psychiatric Drugs
Antihistamines
Chemical Transmission
Drugs acting on Cholinergic neurones and
receptors
Muscle Relaxants
Drugs acting on respiration and on the
respiratory tract
'Rag bag'

IX University of London and other Examining bodies

174. University of London
Examination for M.B. B.S. in Applied Pharmacology & Therapeutics.
Drafts and notes for examination questions, including multiple-choice papers, devised or annotated by Stacey.
175. University of London 1968 - 70
Examination for B.Sc. (Stacey was Chairman, College Board)
Misc. correspondence with colleagues, visiting examiners,
university authorities; examination papers, class and pass lists.
176. University of London
Examination for B.Sc.
Reading lists, syllabus, notes for lectures on Absorption, Distribution
Elimination
Antagonism
Bloodstream & receptors.
177. University of London
Examination for B.Sc. (Physiology, Pharmacology)
Notes, syllabus, instructions etc. for practical experiments and
demonstrations.

178. University of Birmingham. 1969 - 70
Misc. correspondence re Stacey's appointment and service
as External Examiner in Pharmacology and Therapeutics.
179. University of Ibadan. 1969 - 70
Misc. correspondence re Stacey's appointment and service
as External Examiner in Pharmacology.
180. Medical College, University of Baghdad. 1964 - 70
Misc. correspondence with colleagues; includes Stacey's
visit as Visiting Professor, May 1964, and short Ms. diary
of events during rebellion in Iraq on earlier visit. c. 1942

IV Publications (cont. See also nos. 58 - 61)

181. Reviews by Stacey of MSS submitted for comment by Nature,
Psychopharmacologia, J.Embryol.Exp.Morphol. and other journals.
182. Misc book-reviews by Stacey.
183. Misc shorter publications and related correspondence, mainly 1949 - 60
with B.M.J., The Practitioner.
Includes Stacey's Ms. contributions:
- | | |
|-------------------------------------|------|
| 'Choline and Atherosclerosis' | 1950 |
| 'Salicylates and Rheumatism' | 1950 |
| 'The Choice of an Opium Derivative' | 1959 |

X. Index of principal correspondents.

Nos refer to items in the handlist.

ADAM, H.	M.		75
ANTHONY, M.			87
BACON, Anthony			88
BAIN, W.	A.		76
BAKER, J.	B.	Ellis	81
BAKER, Ruth			85
BARCROFT, Henry			79
BARRATT, T.	M.		87
BARRY, D.	R.		84
BLACKBURN, Eddie		k.	87
BLASCHKO, Hermann Karl			85
BORN, Gustav V.	R.		75,86,87
BRADLEY, Philip	B.		61

BRODIE, Bernard	B.	61
BULBRING, Edith		85
BURGEN, Arnold		61,81
BURN, Joshua Harold		61,88
BUXTON, Joyce		84
CRAWFORD, Neville		87
CURZON, G.		86,87
DALE, Sir Henry		84
DALGLEISH, C.	E.	84
DAVIES, Alan	J.	85
DAVIES, D.	H.	84
DENSTON, T.	C.	78
GADDUM, Sir John (Henry)		86
GARATINI, Silvio		86
GEY, K.	F	35
GINZEL, K.	H.	90
GOODSPEED, A.	H.	90
GORKIN, V.	Z.	86
GRAHAM, J.	D. P.	76,80
HARDISTY, Roger m.		19,84.85
HELLMANN, K.		87
HERXHEIMER, Andrew		88
HORTON, Eric		61
INGRAM, G	Ilsley C.	19,31,58
JACOBSON, W.		12
KITTERINGHAM, G.	R.	78
LACKNER, H.		85
LANGEMANN, H.		84
LENNARD-JONES, John		84,85
LEONARD, F.	H.	90

LIBRACH, I.	M.		85
LINTON, S.			84
MACDONALD, A.	D.		79
McCLURE, Peter D.			58
MARKS, J.			86
MELCHING, H-J			86
MITCHELL, G.	M.		74
MOFFAT, A.	C.		88
NEVILLE, B.	G.	R.	88
O'BRIEN, J.	R.		86,87
PAASONEN, Matti K.			74
PAGE, J.	H.		85
PARE, C.	Michael	B.	35,38,87
PARKES, Maurice, W.			88
PEKKARINEN, Aino			87
PICKLES, V.	R.		84
PLETSCHER, Alfred			61
POLANI, Paul E.			85
ROBERTSON, M.	D.	J.	87
RODNIGHT, R.			84
ROKA,			88
SCHMID, E.			86
SCRIVER, Charles			86
SHACKMAN, Ralph			84
SIMISTES, J.	Michael		87
SINCLAIR, Hugh			84
SMITH, Steven E.			77
STEPHENSON, R.	P.		75
TADZER, G.			85
TODRICK, Archibald			86

UDENFRIEND, Sidney		84
VALENTINE, J.	C.	85
VANE, John R.		61,77
WALKER, John M.		77
WARDEL, D.	B.	84
WEATHERALL, Miles		61,79
WHITTAKER, Victor P.		61
WOODROW, J.	C.	85
ZELLER, E.	A.	88