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CODE No. 1563  
A.P. 1093E

ADMIRALTY  
WAR OFFICE  
AIR MINISTRY

2nd Edition, January, 1950

# INTER-SERVICES RADAR MANUAL

## RADAR TECHNIQUES

Prepared by direction of  
the Minister of Supply

*A. C. P. Roberts*

Promulgated for the information and guidance of all concerned

By Command of  
Their Lordships

*G. Lang*

ADMIRALTY

By Command of the  
Army Council

*G. W. G. G. G.*

WAR OFFICE

By Order of the  
Air Council

*J. H. Bennett*

AIR MINISTRY

J. H. K. Allen

# NOTE TO READERS

Amendment Lists may be issued to correct this publication. New or amended technical information on new leaves which are inserted when this publication is amended will be indicated by a vertical line in the margin. This line merely denotes a change and is not a mark of emphasis. When a Chapter is issued in a completely revised form, the line will not appear.

## AMENDMENT RECORD SHEET

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## *Foreword*

The objective of the authors and editors was the production of an Inter-Service Radar Manual dealing with generalities (excluding any discussion of particular equipments, which is better left to Service handbooks dealing with individual sets) and of such a standard as to permit its use for wide reading amongst personnel engaged in the use, repair and servicing of radar equipment.

In order to reduce the size of the book, relevant matter to hand in widely circulated Service handbooks has been excluded and previous acquaintance of the reader with one or other of these is therefore assumed, as is evidenced from references in the text.

Certain portions of the book are starred thus:-  
\* \* \*. It is suggested that these portions should be omitted at a first reading or by readers who wish to avoid discussions which are largely of a mathematical nature.

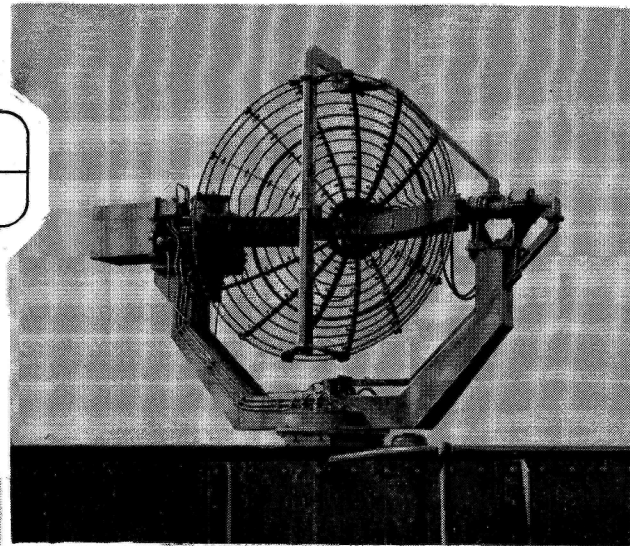
The first edition of this work was distributed in September, 1946. A number of minor amendments and corrections have been made in this edition and some new matter, namely, the Introduction and the chapter dealing with Range-Measurement, has been added.





### R.N. SHIPBORNE

RADAR TYPE 277 AERIAL OUTFIT A.U.K.

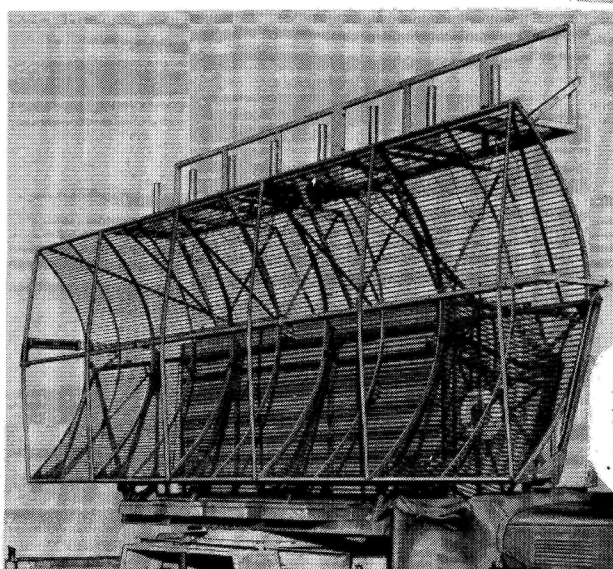
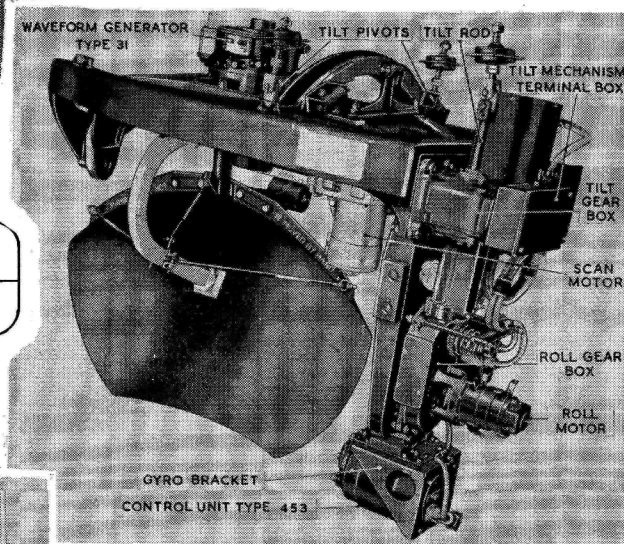


### ARMY MOBILE

FIRE CONTROL EQUIPMENT RADAR A.A. NO. 3 MK. 7

### R.A.F. AIRBORNE

ASV. MK.13 B SCANNING UNIT TYPE 80

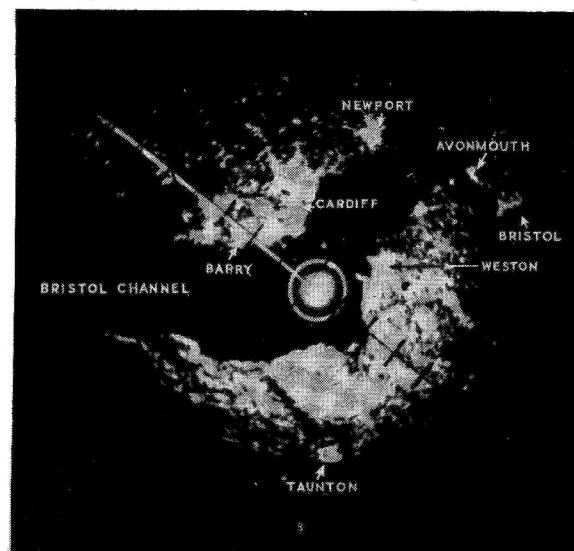
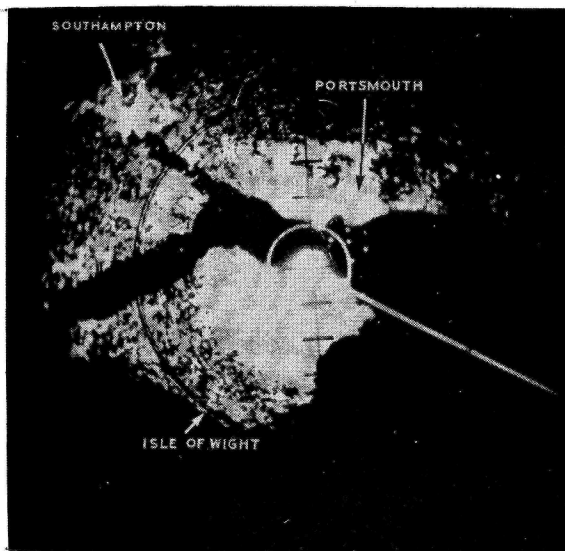


### R.A.F. GROUND MOBILE

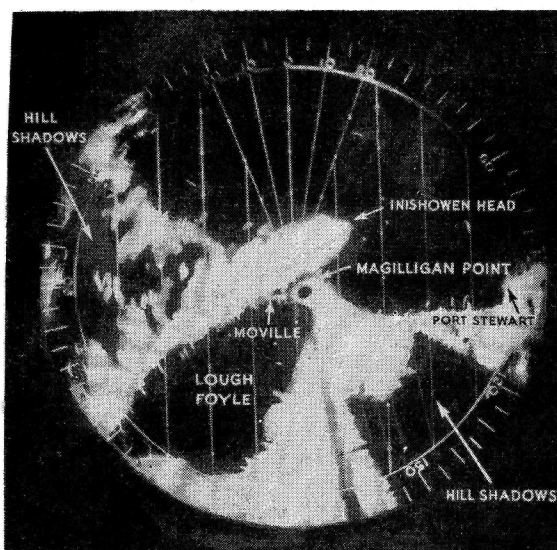
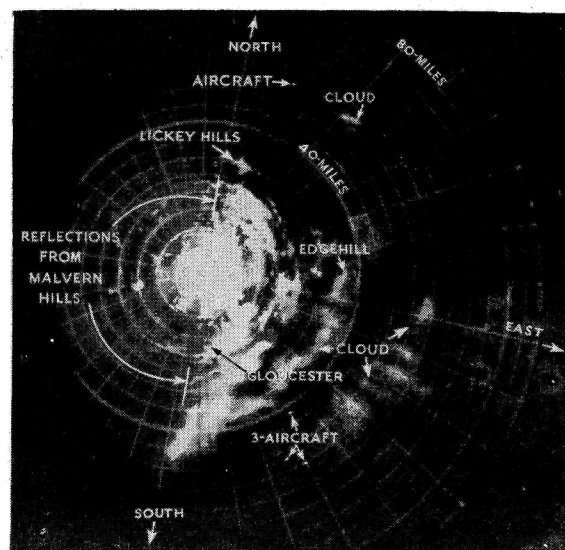
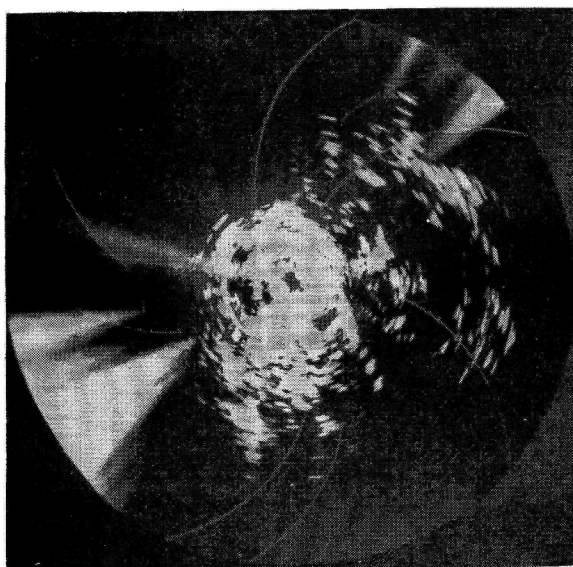
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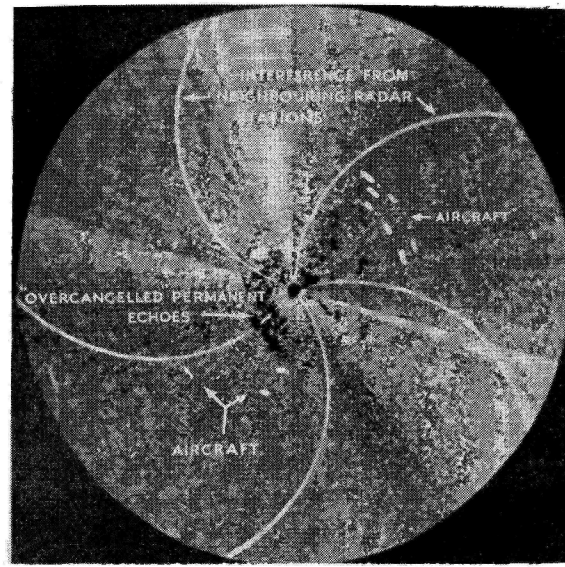




PPI DISPLAYS ON AIRBORNE RADAR MAPPING EQUIPMENT

PPI DISPLAY ON AIRBORNE ASV  
(ANTI-SURFACE VESSEL) EQUIPMENTPPI DISPLAY ON GROUND-BASED  
SEARCH RADAR EQUIPMENT, WITH  
CLOUD ECHOES INCLUDED

WITHOUT PERMANENT ECHO CANCELLATION



WITH PERMANENT ECHO CANCELLATION

PPI DISPLAYS ON GROUND-BASED SEARCH RADAR EQUIPMENT



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## LIST OF CHAPTERS

Note.- A list of contents appears at  
the beginning of each chapter.

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- 1 Linear circuit analysis
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