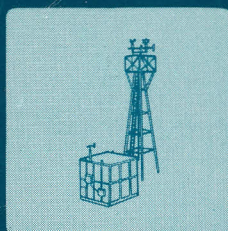
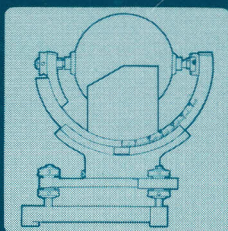
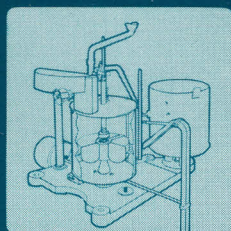
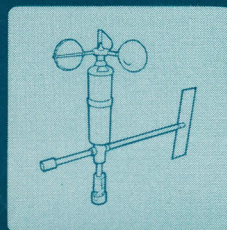
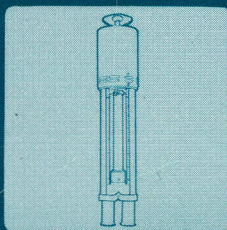
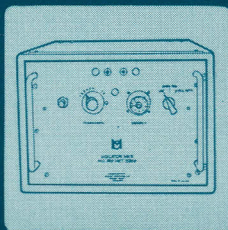
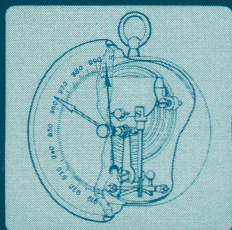
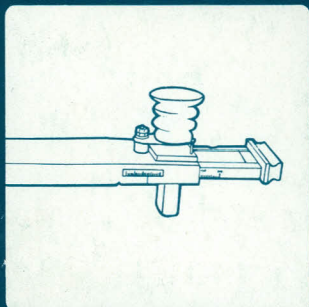


Meteorological Office

Handbook of Meteorological Instruments

Second Edition

7 Measurement of Visibility and Cloud Height



K
17

HMSO

Met.O. 919g

METEOROLOGICAL OFFICE

INSTITUT 203/2943
FÜR METEOROLOGIE U. KLIMATOLOGIE
UNIVERSITÄT HANNOVER
HERRENHAUSER STR. 2 · 3000 HANNOVER 71

DK 551.591
551.501.776
551.508.92
551.508.762

HANDBOOK OF
METEOROLOGICAL
INSTRUMENTS

SECOND EDITION

VOLUME 7

MEASUREMENT OF
VISIBILITY AND CLOUD HEIGHT

LONDON
HER MAJESTY'S STATIONERY OFFICE

UDC 551.508(02)

CONTENTS

	<i>Page</i>
Introduction	iii
1 Measurement of visibility — General	
1.1 Definition	7-1
1.2 Quantities and fundamental units	7-1
1.3 Theory	7-1
1.4 Visibility objects	7-5
1.5 Determination of visibility at night using lights	7-5
2 Measurement of visibility using instruments	
2.1 General	7-7
2.2 Meteorological Office visibility meter Mk 2	7-8
2.3 Runway visual range	7-12
3 Automatic instruments	
3.1 General	7-13
3.2 Transmissometers	7-13
3.3 Instruments measuring the scattering function	7-18
3.4 Comparison of the various types of instruments	7-24
4 Measurement of cloud height	
4.1 Introduction	7-25
4.2 Searchlight methods	7-25
5 Instruments for measuring cloud height	
5.1 Meteorological Office cloud searchlight	7-26
5.2 Meteorological Office cloud-base recorder Mk 3A	7-29
5.3 Meteorological Office cloud-base recorder Mk 3B	7-34
5.4 Laser cloud-base recorder	7-34
References	7-37
Appendices	
Appendix 1 Meteorological recording instruments	A-1
Appendix 2 The International System of units (SI)	A-10
Appendix 3 Terminology	A-12
Index	I-1

20312943

FOR INFORMATION OF THE METEOROLOGICAL SERVICE
METEOROLOGICAL SERVICE