

THE WHYS AND WHEREFORES OF NAVIGATION

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649201204

The whys and wherefores of navigation by Gershom Bradford

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

GERSHOM BRADFORD

**THE WHYS AND
WHEREFORES
OF NAVIGATION**

THE
WHYS AND WHEREFORES
OF
NAVIGATION

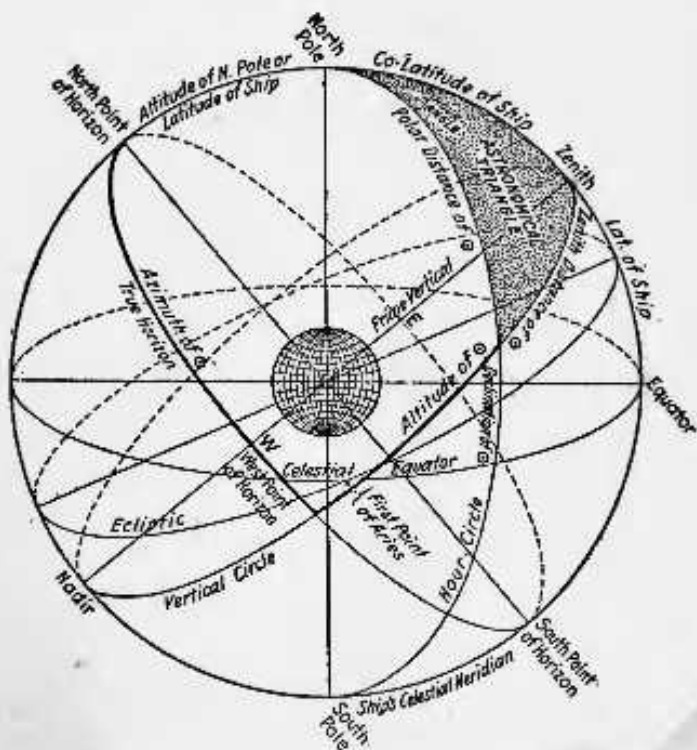


FIG. 1.

The Plane of the Meridian showing the Conditions for a Ship in North Latitude, the Sun in North Declination, and the Time P.M.

VISION.
37

THE WHYS AND WHEREFORES OF NAVIGATION

BY
GERSHOM BRADFORD

*Executive Officer and Senior Instructor New York State Nautical
Schoolship "Newport," Late Nautical Expert,
Hydrographic Office, U. S. N.*

Second Edition, Revised and Enlarged
ILLUSTRATED



NEW YORK
D. VAN NOSTRAND COMPANY

25 PARK PLACE
1919

ELECTRONIC VERSION
AVAILABLE

NO. _____

154769
16/4/20

VK
559
B8
1919

Copyright, 1918, 1919, by
D. VAN NOSTRAND COMPANY

PRESS OF
BRAUNWORTH & CO.
BOOK MANUFACTURERS
BROOKLYN, N. Y.

TO THE
AMERICAN SUB-PATROL
WHOSE WAR ZONE RECORD OF SKILL AND DARING
HAS THE AUTHOR'S PROFOUND RESPECT
AND ADMIRATION



PREFACE

WHEN taking into consideration the number of excellent works now published on navigation there would seem to be a small chance of finding a different angle from which to discuss the subject. The purpose of the majority of such books is to give instruction to those commencing a study of the subject. This book, however, while being adapted to beginners, is written particularly for the men who do their work mostly by rote and wish to know more of the reasons; or, perhaps, for schoolship graduates who may here find a chance to extend their horizons.

I have not considered it desirable to avoid repetition and in order to closely follow a line of thought have freely repeated many points already taken up. This has in a number of cases avoided the distraction of seeking a page of reference elsewhere.

I have had in mind that it serve as supplementary reading to the American Practical Navigator, Bowditch, that great bulwark of navigation which for over a hundred years has guided the masters of American ships through every deed of valor and every commercial adventure. It is placed beyond criticism by its venerable name and its remarkable record and, as a reference book for the navigator, it stands without a peer, but as a text book it founders the beginner.