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It is my hope that you find the file of use to you personally – I know that I would have liked to have found some of these files years ago – they would have saved me a lot of time!

Colin Hinson

In the village of Blunham, Bedfordshire.

# RADAR COVER DIAGRAMS

for

A.M.E.S. TYPES

1, 6mk. 3 & 8, 7, 1 lmk. 4,

14mk.6, 15mk.2, 27

50 SERIES

HQ.Nº 9O GROUP, R. A. E

FEBRUARY 1950.

## RADAR COVER DIAGRAMS FOR A.M.E.S. TYPES

- The cover diagrams contained in this folder have been derived from the latest available information and, where possible, have been adjusted by the incorporation of recent test flight results. Recent flights have been conducted by this Headquarters on A.M.E.S. Types 1. 7, 14 Mk.6 and 15 Mk.3.
- 2. The diagrams have been drawn on the assumption that:-

The signal to noise ratio is one (Z = 1) for flowlit datums (AMES Type I).

The comparative Aircraft echains are set to be a statement. (i)

The comparative Aircraft echoing areas are:-(ii)

> Meteor - 10 Mosquito - 19 B29 - 180

- Conditions of normal atmospheric refraction prevail (iii)
  - The effective radius of the earth is 4307 nautical miles (iv) (4960 statuto miles)
    - The Types 1, 6, 11, and 15 are sited on flat sites.
- In making any practical application of the disgrams, the following points should be considered:-
  - (i) With agrials rotating at 6 revs. per minute. normal pick-up will be at a signal to noise ratio of 3:2 (Z = 3/2). Ranges in practise will consequently, be reduced by approximately 10%.
  - The cover produced by radar equipments is affected by the (ii) site and aerial heights, These effects have been worked out in dotail for A.M.E.S. Typos 6, 11 and 15 and are listed in the Air Publications mentioned on these diagrams.
  - The cover produced by A.H.E.S. Type I will vary according (iii) to site height and azimuth, and must be derived in detail for each station.

H.Q. No. 90 Group.

R. A. F.

February 1950.

## RADAR COVER DIAGRAMS

#### FOR

# AIR MINISTRY EXPERIMENTAL STATIONS

### CONTENTS

4. H. E. S. Typo 1

A.M.E.S. Type 6 Mk.3

A.M.E.S. Type 6 Mk.8

4.M.E.S. Typo 7

A.M.E.S. Typo 11 Mk.4

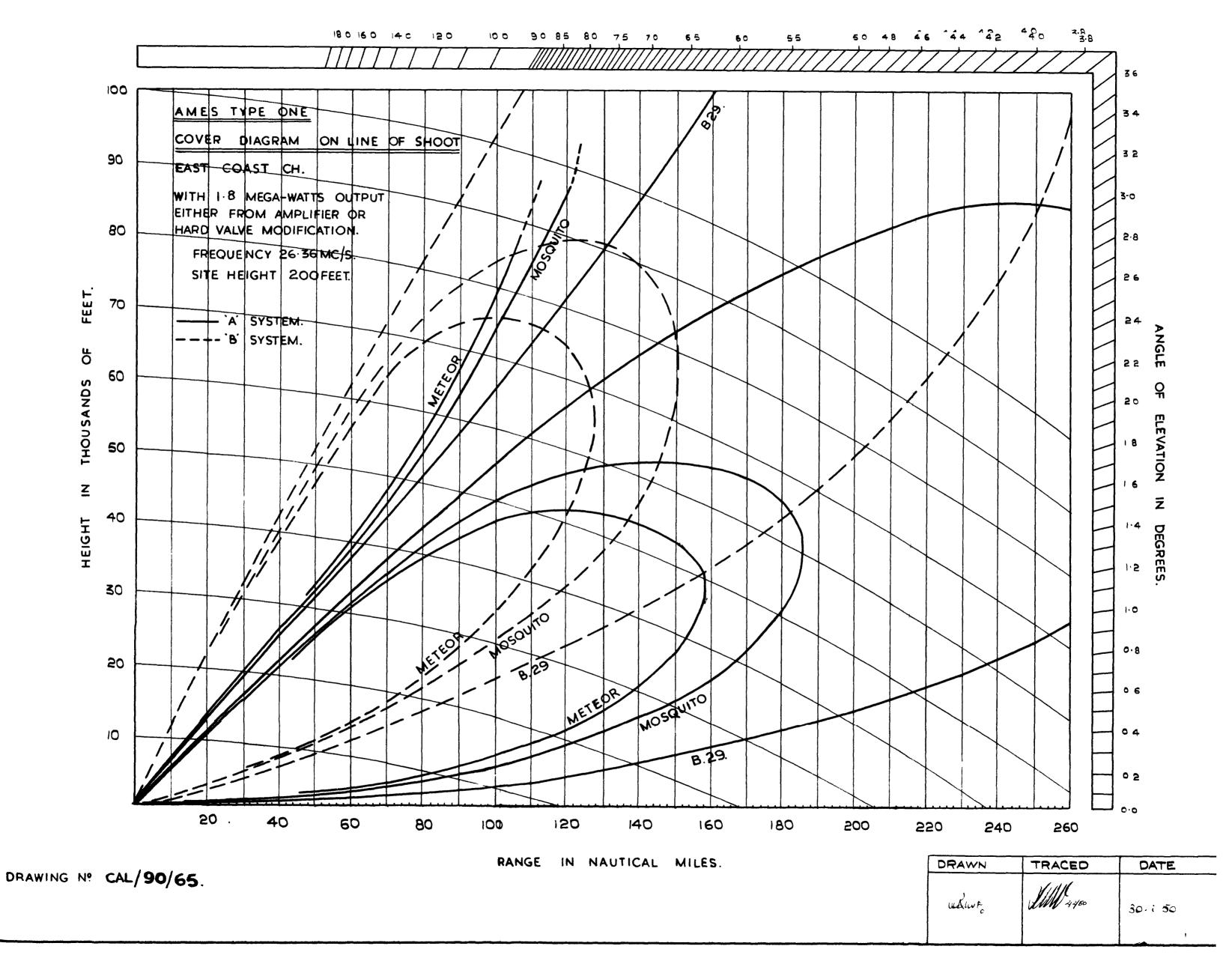
A.M.E.S. Typo 14 Mk.6

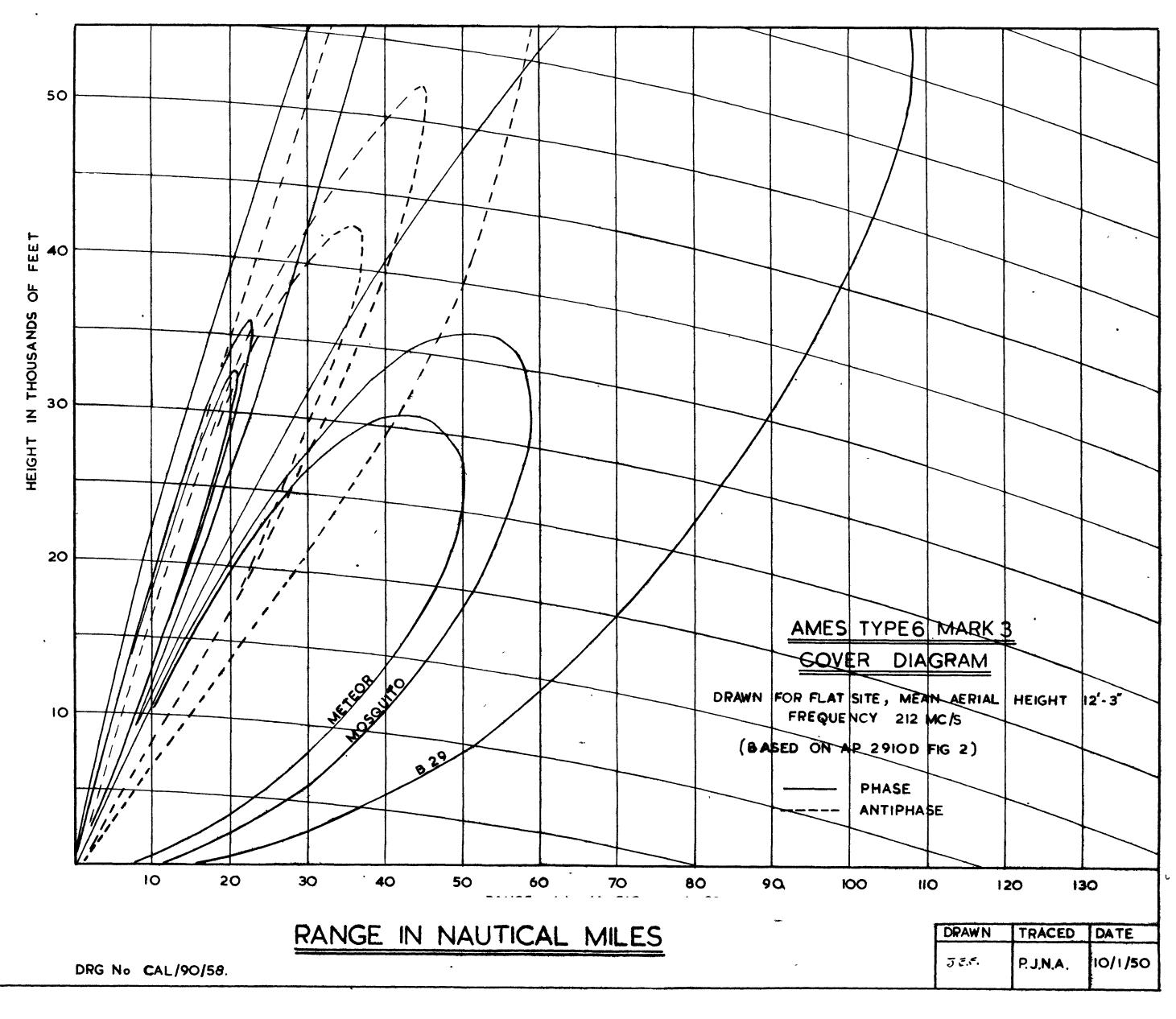
A.M.E.S. Type 15 Mk.2

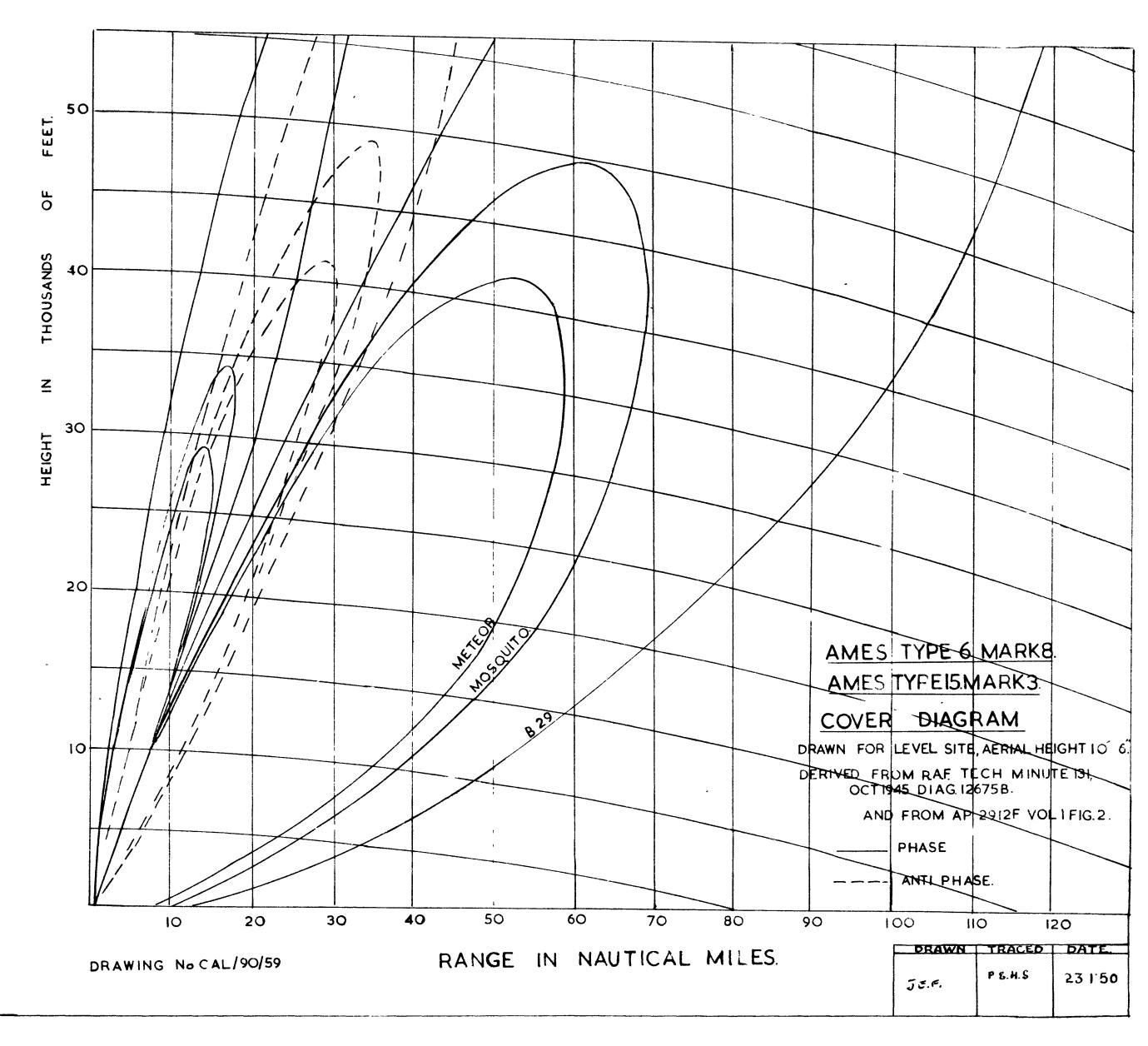
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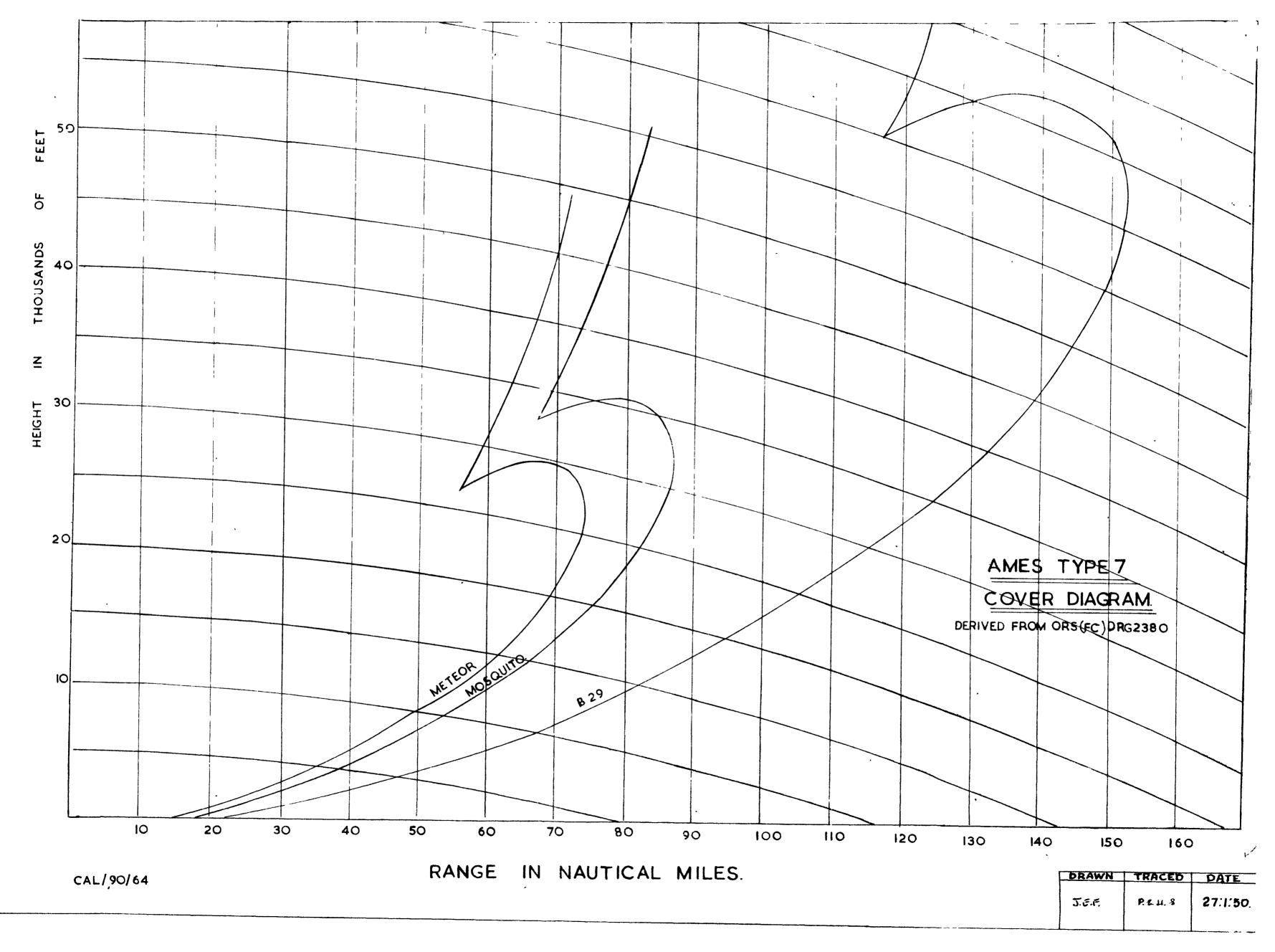
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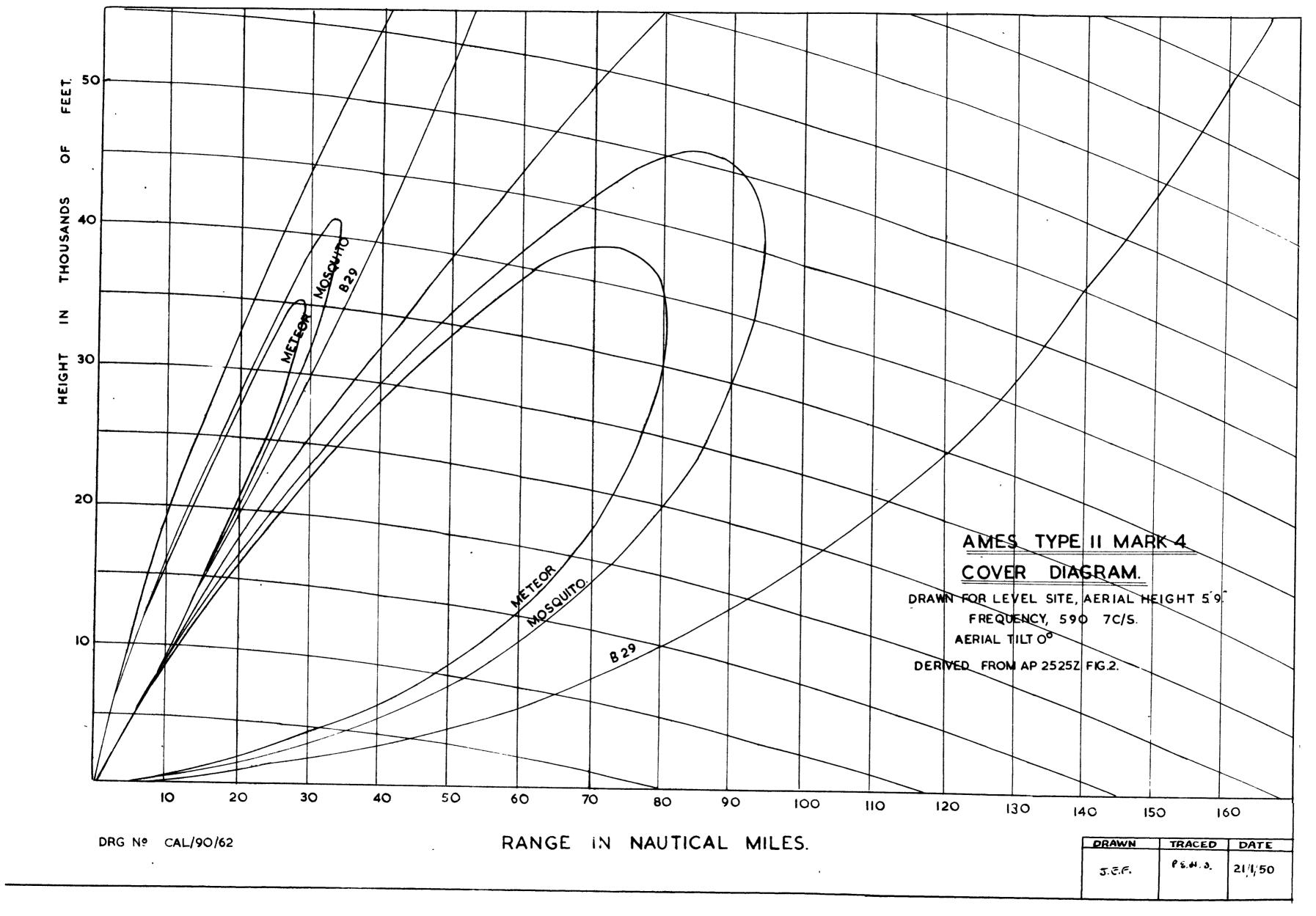
4. M. E. S. Type 70 Mk. 3 & 4

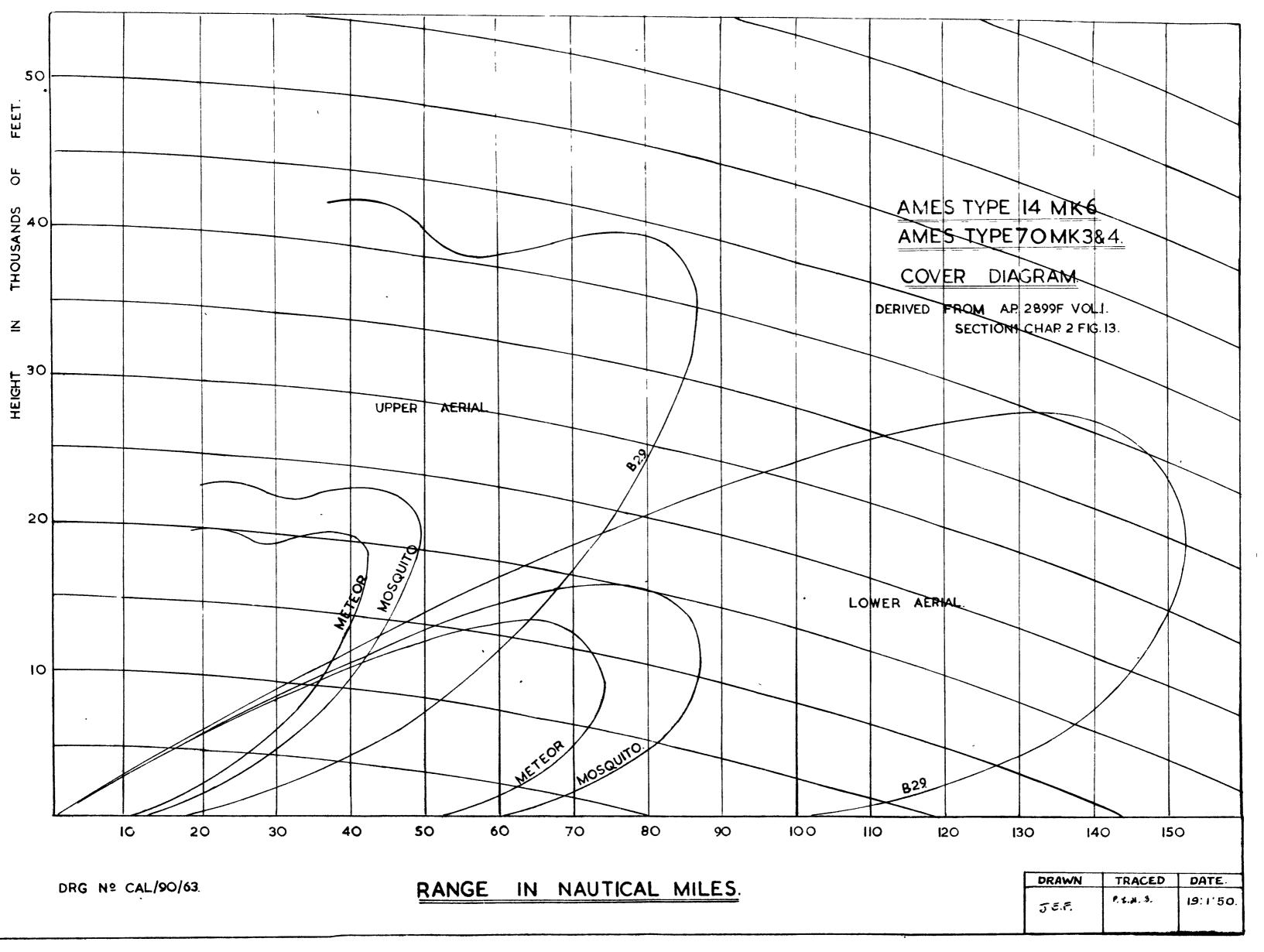


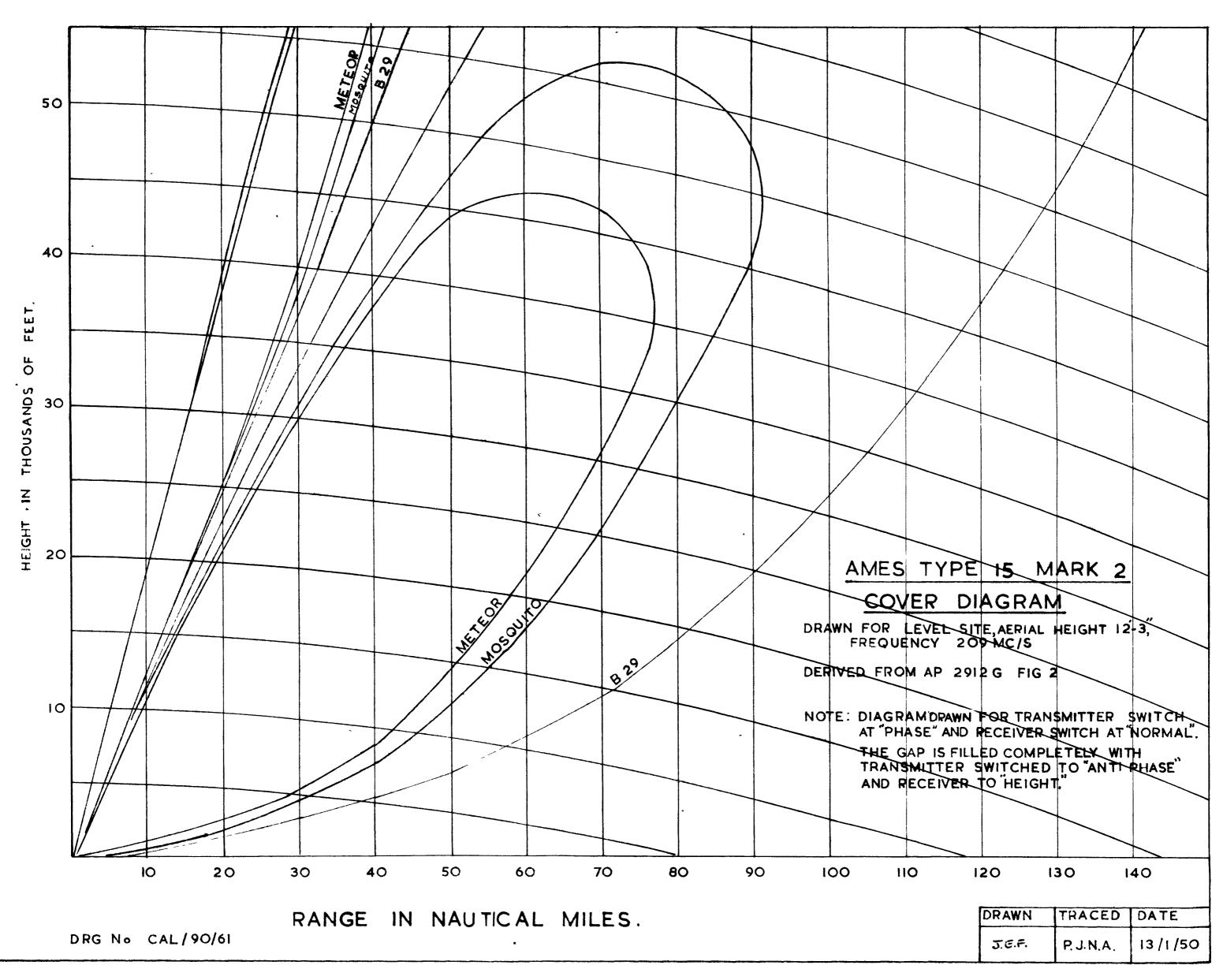


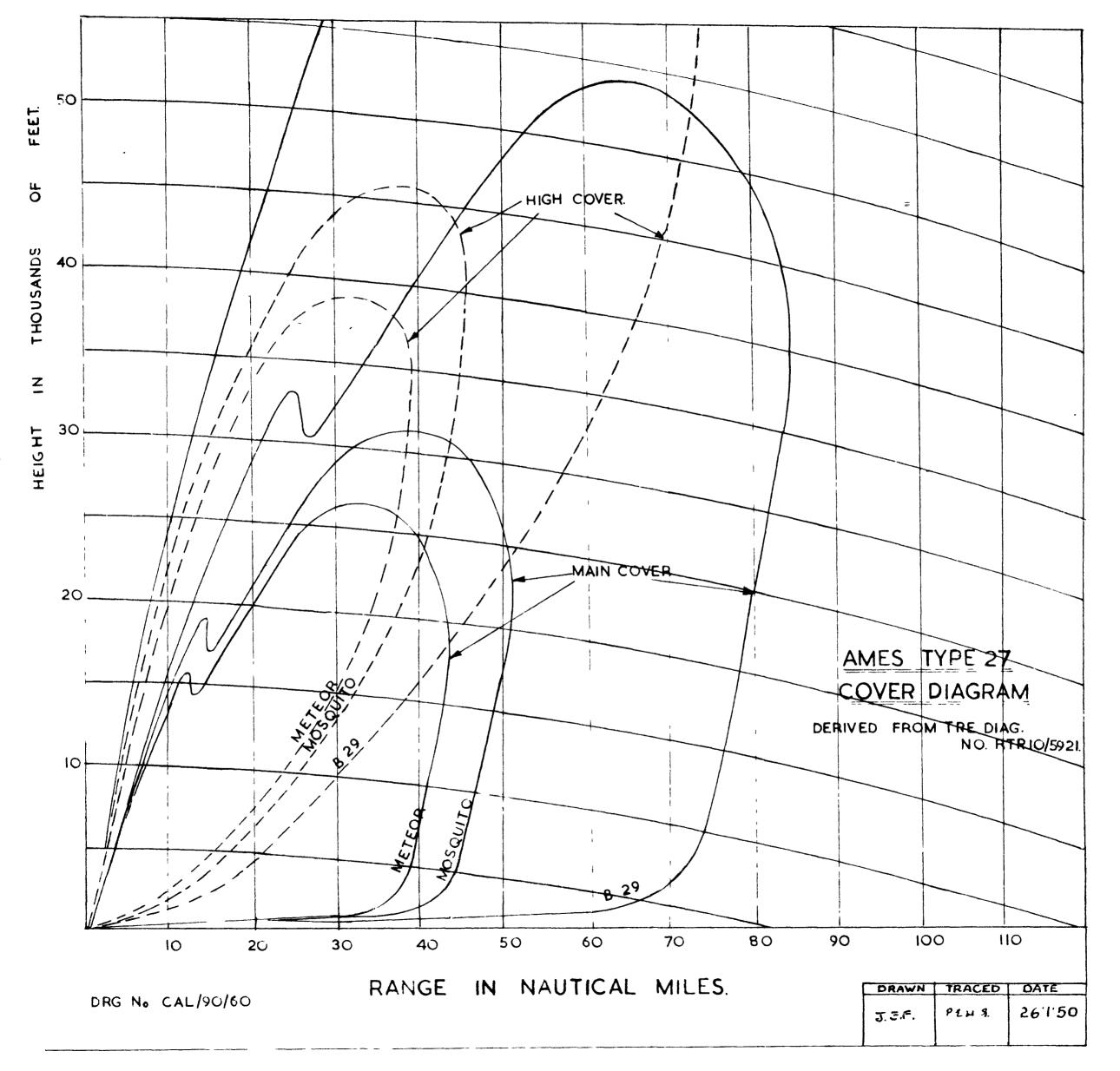


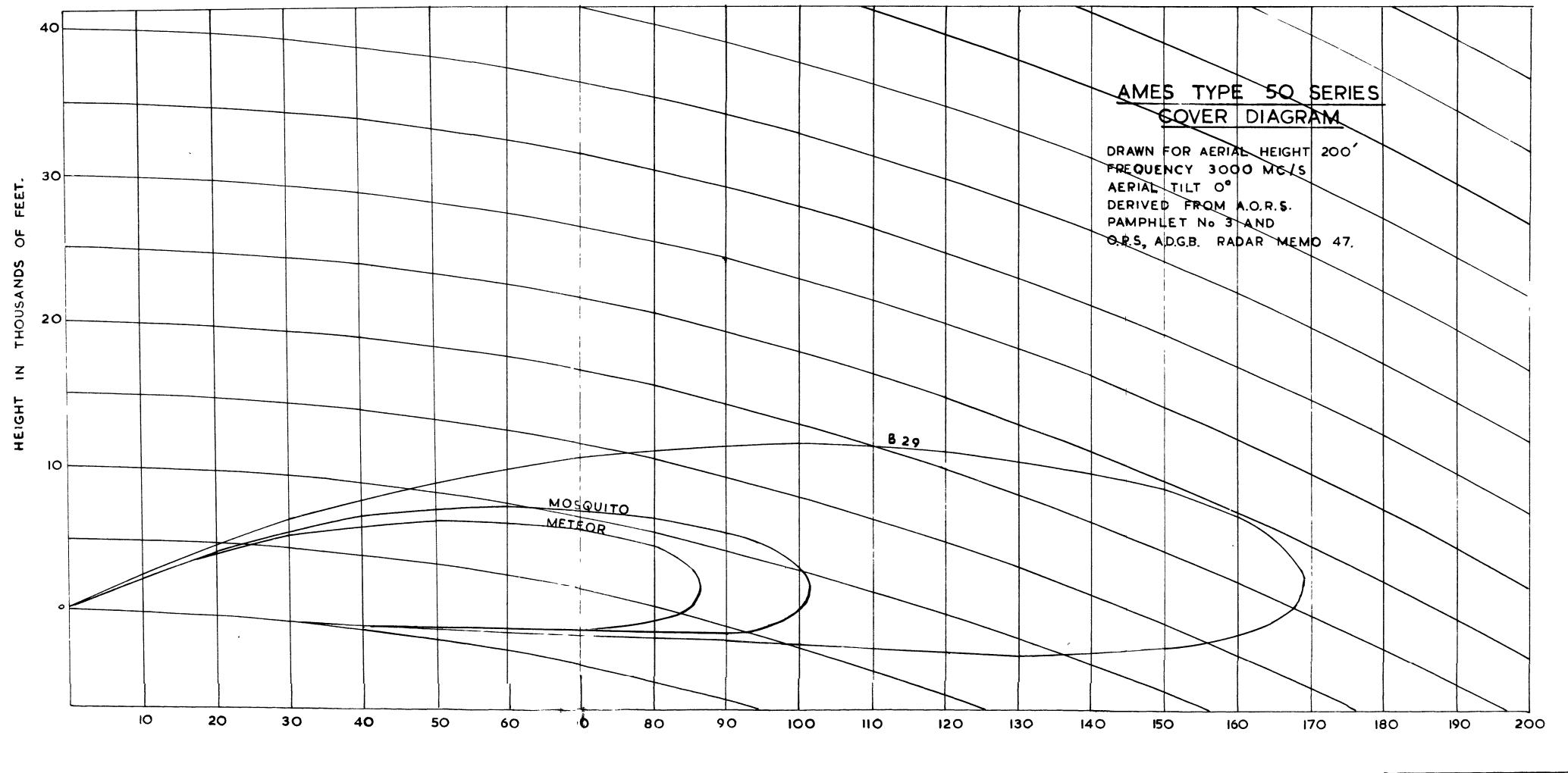








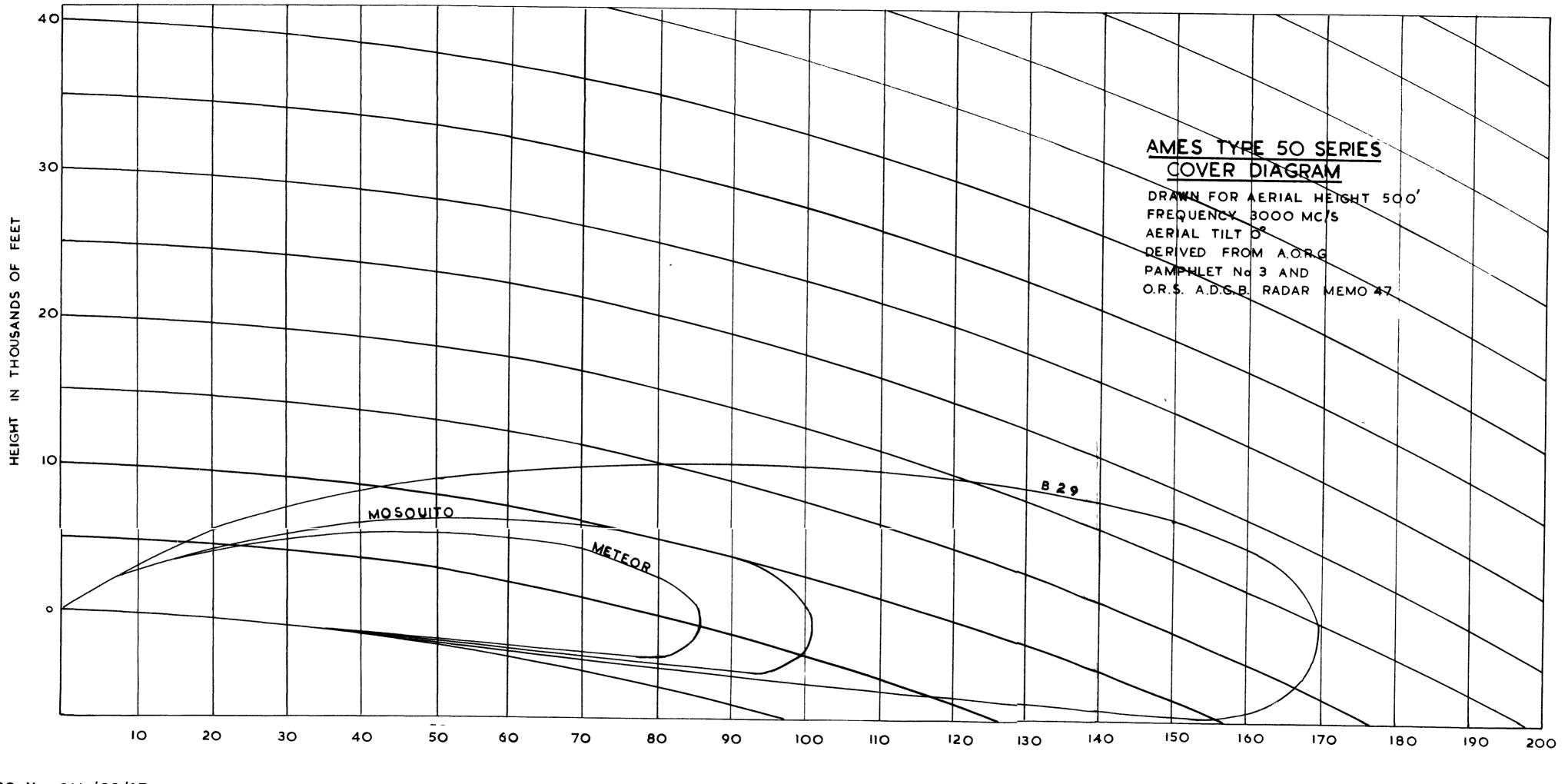




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