

U. S. NAVAL TECHNICAL MISSION TO JAPAN  
CARE OF FLEET POST OFFICE  
SAN FRANCISCO, CALIFORNIA

NS/kk

2 January 1946

RESTRICTED

From: Chief, Naval Technical Mission to Japan.  
To : Chief of Naval Operations.  
Subject: Target Report- Japanese Naval Mining Organization  
and Operational Techniques.  
Reference: (a) "Intelligence Targets Japan" (DNI) of 4 Sept. 1945.  
1. Subject report, covering Target O-05 of Fascicle O-1  
of reference (a), is submitted herewith.  
2. The investigation of the target and preparation of the  
report were accomplished by Ensigns M.O. Thompson, USNR, and A.D.  
Stone, USNR.

*C. G. Grimes*  
C. G. GRIMES  
Captain, USN

O-05

RESTRICTED

JAPANESE NAVAL MINING ORGANIZATION  
AND OPERATIONAL TECHNIQUES

"INTELLIGENCE TARGETS JAPAN" (DNI) OF 4 SEPT. 1945  
FASCICLE O-1, TARGET O-05

JANUARY 1946

U.S. NAVAL TECHNICAL MISSION TO JAPAN

**RESTRICTED**

O-05

## SUMMARY

### ORDNANCE TARGETS

#### JAPANESE NAVAL MINING ORGANIZATION AND OPERATIONAL TECHNIQUES

Mining by the Japanese never became extensive during any phase of the war, probably owing to lack of equipment. Many of the mine laying vessels were lost early in the war. However, four old submarines, I-121, I-122, I-123, and I-124, were fitted for mine laying and used for planting mines around Shanghai. German mines were also planted from submarine torpedo tubes off Brisbane. Mining by aircraft was not attempted.

NTJ-L-0-05

## TABLE OF CONTENTS

Summary .....	Page 1
References .....	Page 3
List of Enclosures .....	Page 4
List of Illustrations .....	Page 4
Introduction .....	Page 5
The Report	
A. Records of Japanese Mining Operations .....	Page 7
B. Submarine Minelaying .....	Page 7
C. Handling System Used by the Japanese on Their Defensive Mine Layers - Use of the Bogie System .....	Page 7
Enclosure (A) .....	Page 10

**RESTRICTED**

O-05

## **REFERENCES**

### **Japanese Personnel Interviewed:**

**Captain KUROKI**, Chief of Minesweeping Operations (under U.S. direction since the war ended).

**Commander MATSUEDA**, member of Second Section, Second Division of Technical Department in Japanese Navy Ministry, connected with mines, depth charges, and suicide squads.

**Lieut. Commander M. HIGUCHI**, Navy Technical Department, TOKYO, specialized in Japanese Mines.

O-05

RESTRICTED

## LIST OF ENCLOSURES

- (A). Charts (25) of Japanese Mines Laid. (NavTechJap Document No. ND50-3214;  
ATIS No. 3224)

## LIST OF ILLUSTRATIONS

Figure 1. "B Buoy" Mine Launcher.....	Page 8
Figure 2. Mine Laying Equipment.....	Page 9

**RESTRICTED**

**O-05**

## **INTRODUCTION**

The purpose of this investigation was to determine the extent of Japanese mining organization and operational techniques. An initial investigation of the subject revealed that the Fifth Amphibious Corps had already seized documents, blue prints, and data pertinent to this report. Therefore, only questions of minor importance are covered in this report.

# THE REPORT

## A. RECORDS OF JAPANESE MINING OPERATIONS

Records of all Japanese mining operations include, for each field, the dates of laying, exact location, number and spacing of mines and rows, types of mines used, size and type of mooring cable, case depths and other settings.

Since records of all Japanese mining operations were submitted to the Fifth Amphibious Corps, SASEBO, this subject will be covered in their reports. However, the document, "Charts of Japanese Mines Laid", was recovered and included in this report as Enclosure (A). This document is a record of Japanese mining operations including, for each field, the dates of laying, exact location numbers, and spacing of mines and case depths.

## B. SUBMARINE MINELAYING

The Japanese did no extensive minelaying from submarines. Early in the war the waters off the coast of Brisbane were mined with German mines launched from submarine torpedo tubes. The Japanese found, experimentally, that twelve mines could be carried in a submarine, six in the torpedo tubes, and six in storage. Only one mine could be planted from one tube at a time.

Four old submarines, I-121, I-122, I-123, and I-124, were converted for minelaying by replacing the torpedo tubes with specially designed tubes. These submarines were used to plant mines around Shanghai. Little information can be found on actual operations and effectiveness of the mines laid, but it is thought by the Japanese they were not successful.

The submarine I-367 was fitted with special tubes to launch the "B Buoy" mine. (See Figure 1.) This consisted of six pressureproof tubes 552 millimeters (22 inches) in diameter and about 1200 millimeters (48 inches) in length. The tubes were recessed in the upper deck, three on a side, at an angle of 20° to the vertical.

The mines were launched by opening the launching tube cover with a geared hand lever. At the same time, the release catch was retracted, permitting the mine to be thrust out of the tube, and the mine turned over and rose to the surface by buoyancy. It exploded 1 to 1.5 meters (3 to 4½ feet) above the surface of the water. (See NavTechJap Report, "Japanese Mines", Index No. O-04 for details of "B Buoy mine".)

## C. HANDLING SYSTEM USED BY THE JAPANESE ON THEIR DEFENSIVE MINE LAYERS - USE OF THE BOGIE SYSTEM

There were only three classes of Japanese minelayers, ITSUKUSHIMA, OKINOSHIMA, and TSUGARU, which used a power launching system. This system was very similar to our "bogie system". The launching mechanism was simple and its operation is clearly diagrammed in Figure 2.

The mines were launched by hand on all other mine layers. With known ship's speed and the aid of a stop watch, fairly accurate drops could be obtained.

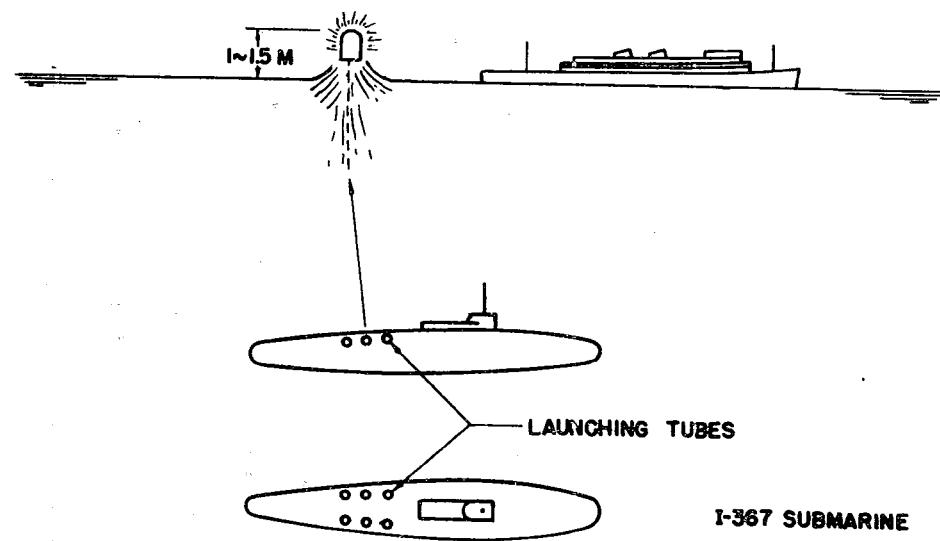
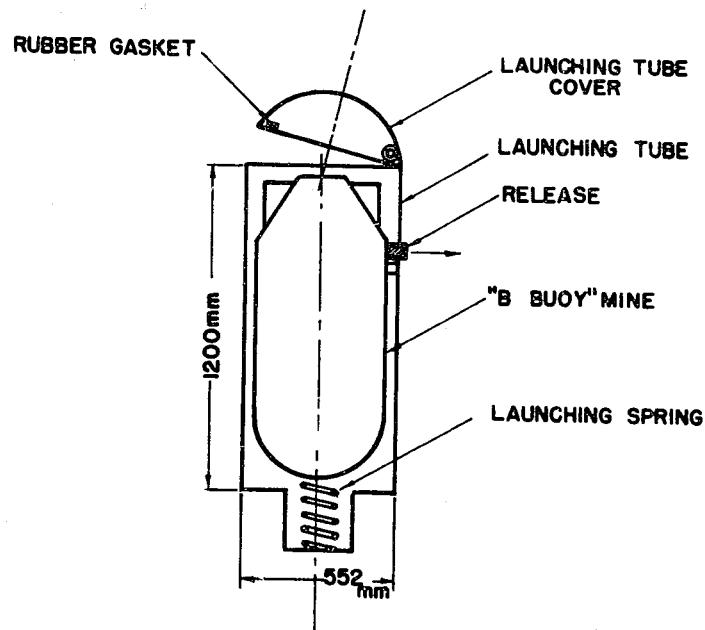
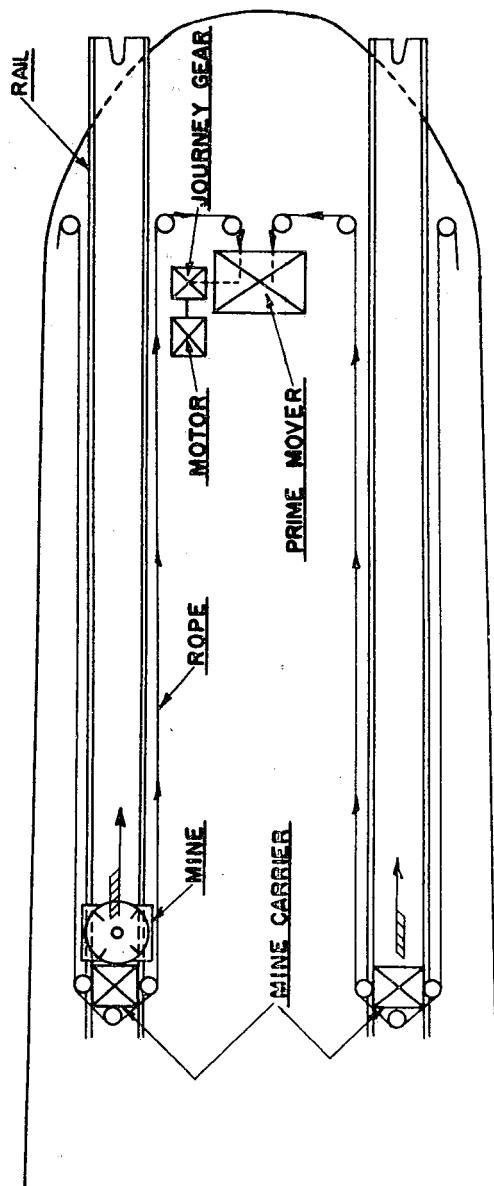
**"B BUOY" MINE LAUNCHER**

FIGURE 2

**RESTRICTED**

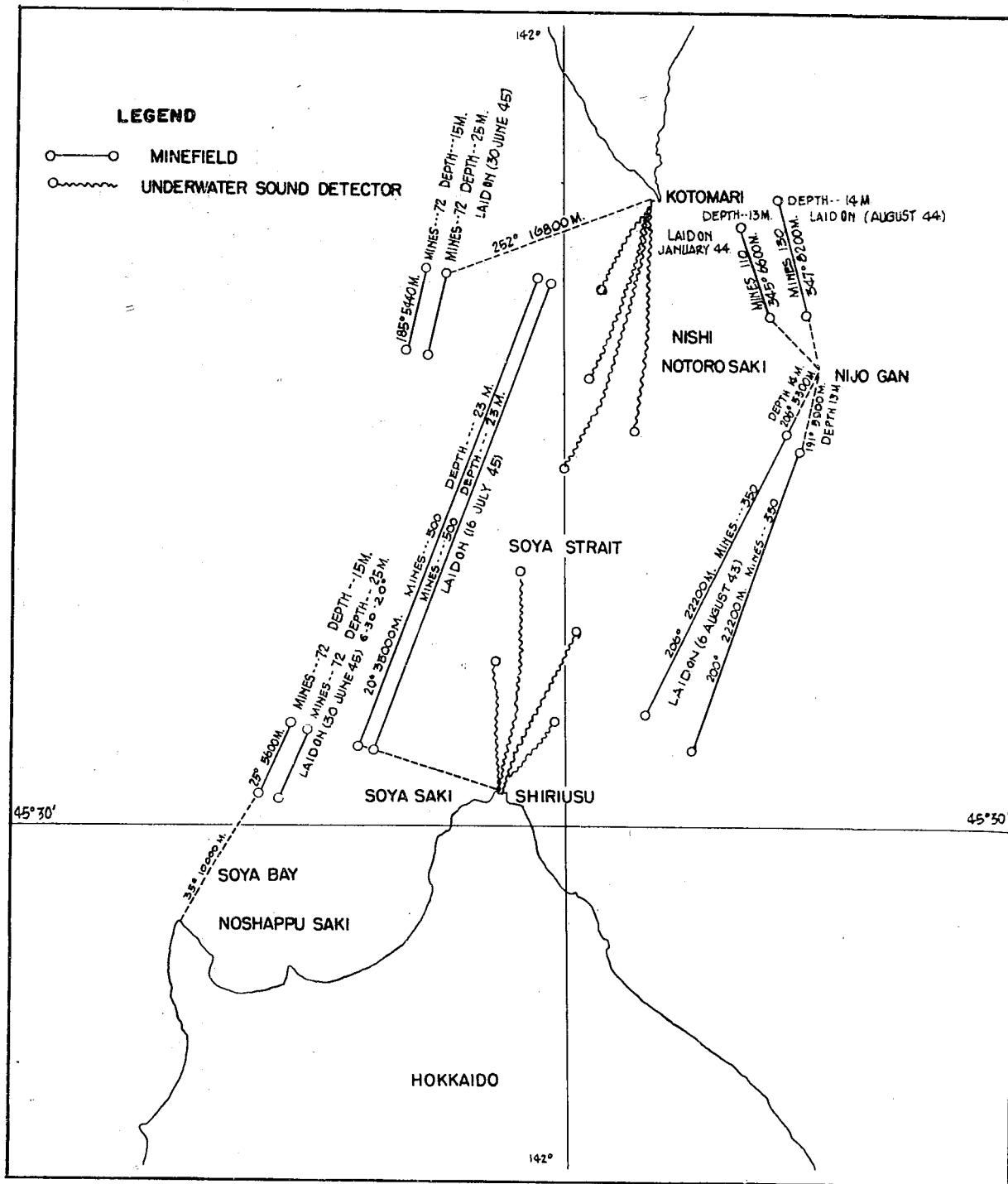
O-05

**MINE LAYING EQUIPMENT  
(MINE LAYER)**



ITSUKUSHIMA } CLASS  
OKINOSHIMA }  
TSUGARU }

**ENCLOSURE (A)**



RESTRICTED

O-05

ENCLOSURE (A), continued

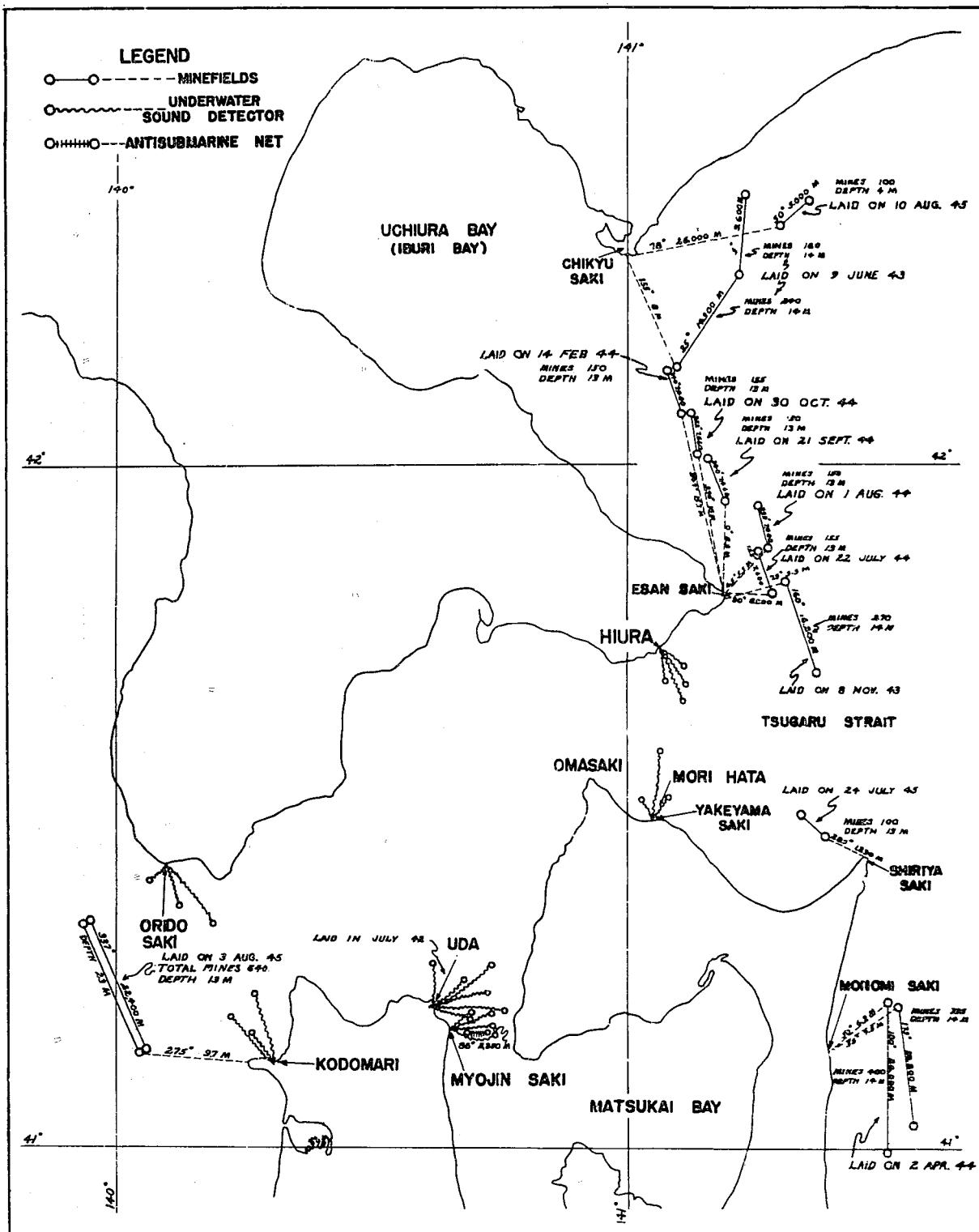


CHART 2

## ENCLOSURE (A), continued

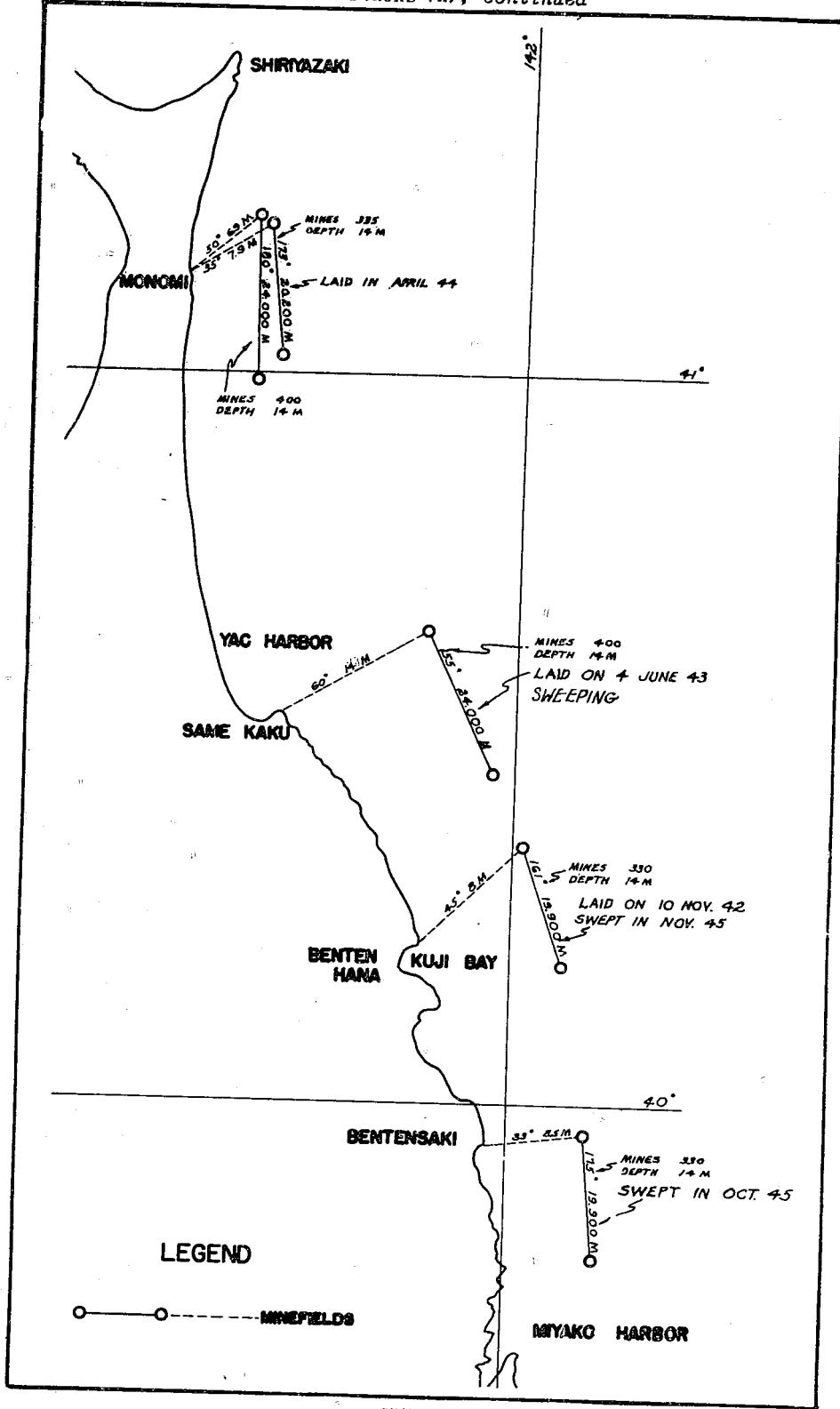
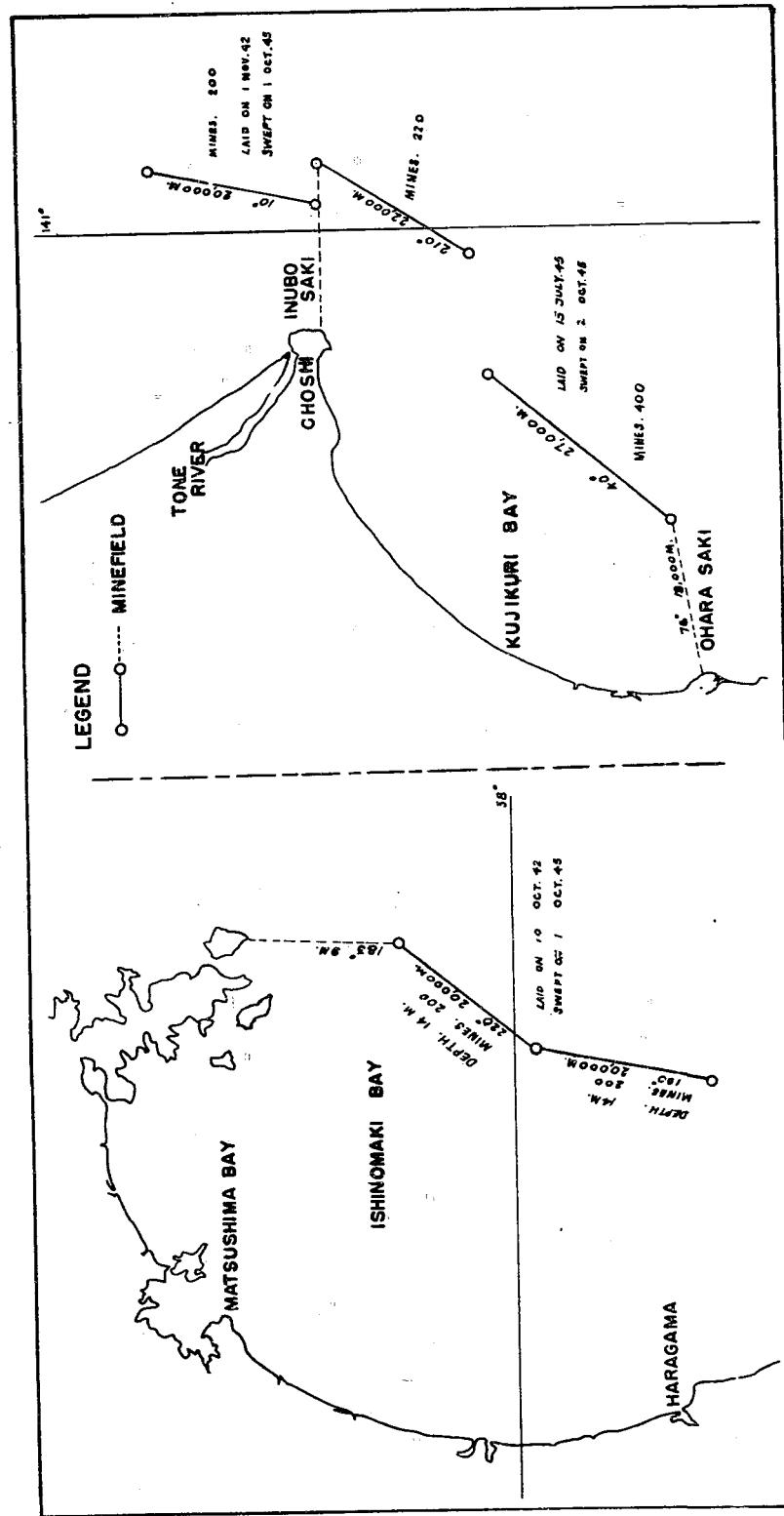


CHART 3

**RESTRICTED**

O-05

*ENCLOSURE (A), continued*



RESTRICTED

## ENCLOSURE (A), continued

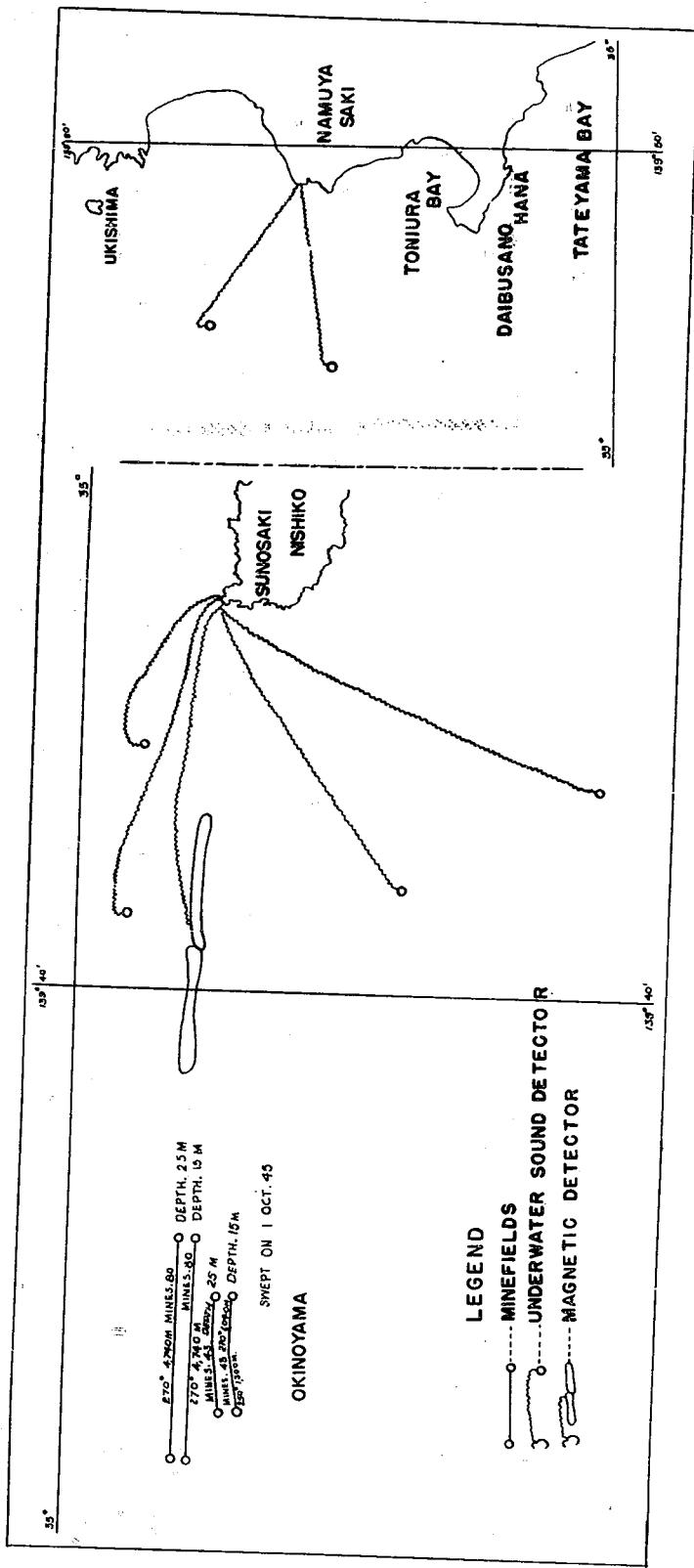


CHART 5

**RESTRICTED**

O-05

ENCLOSURE (A), -continued

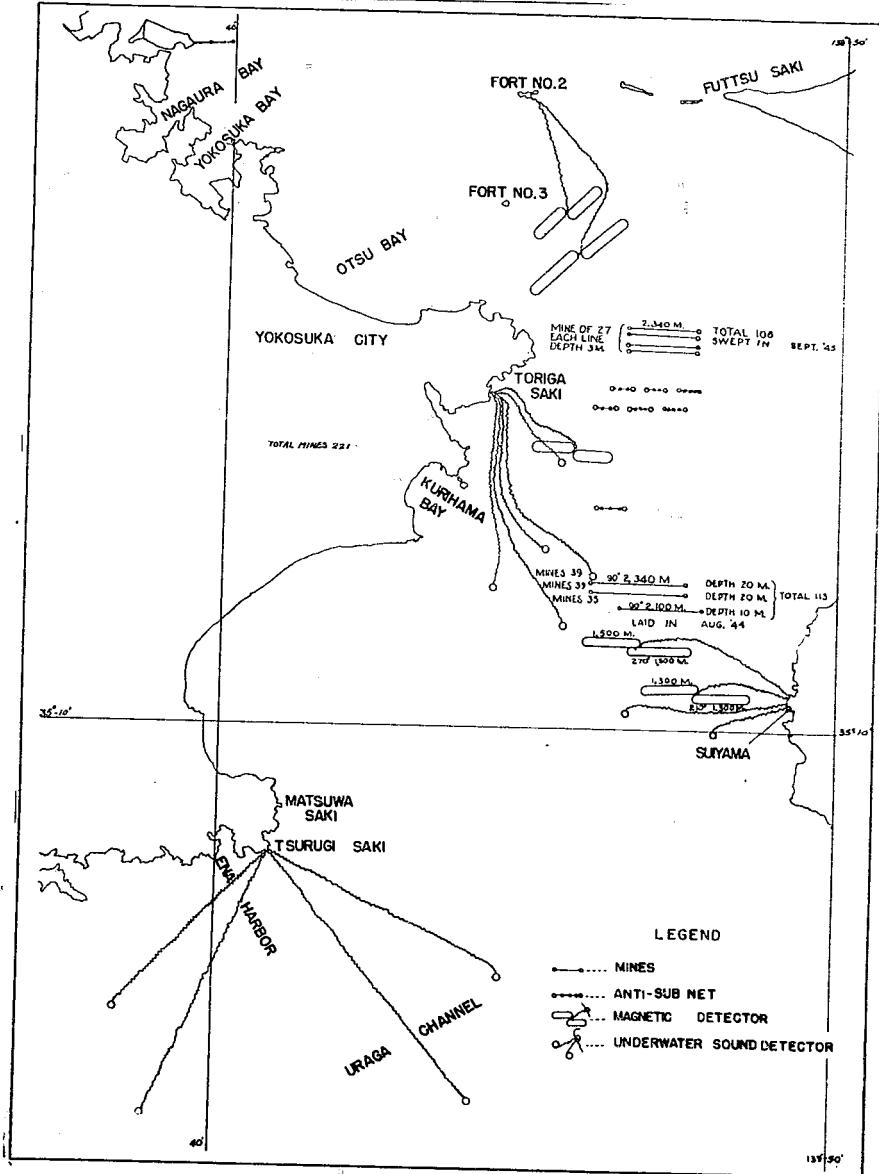


CHART 6

RESTRICTED

ENCLOSURE (A), continued

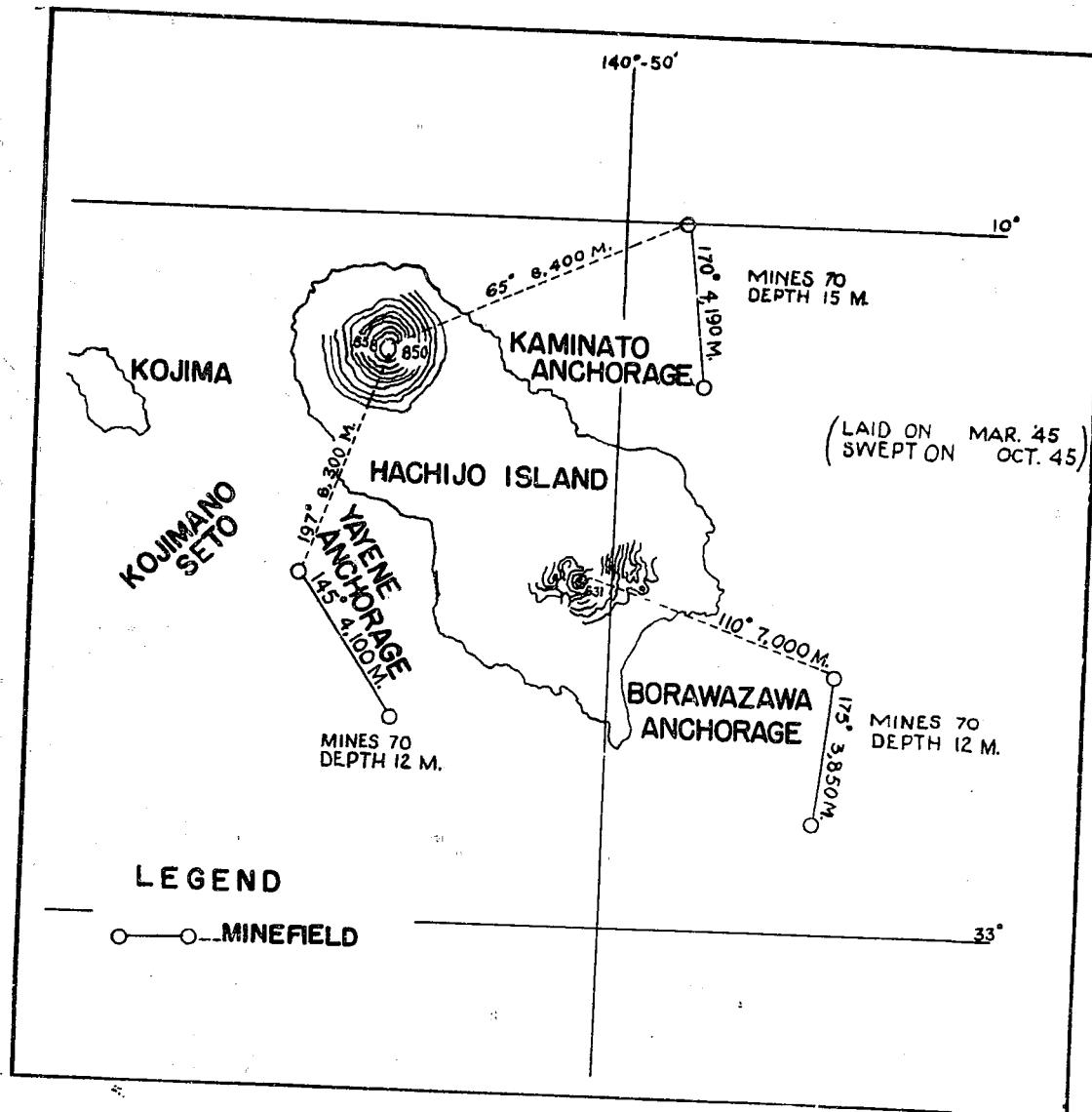
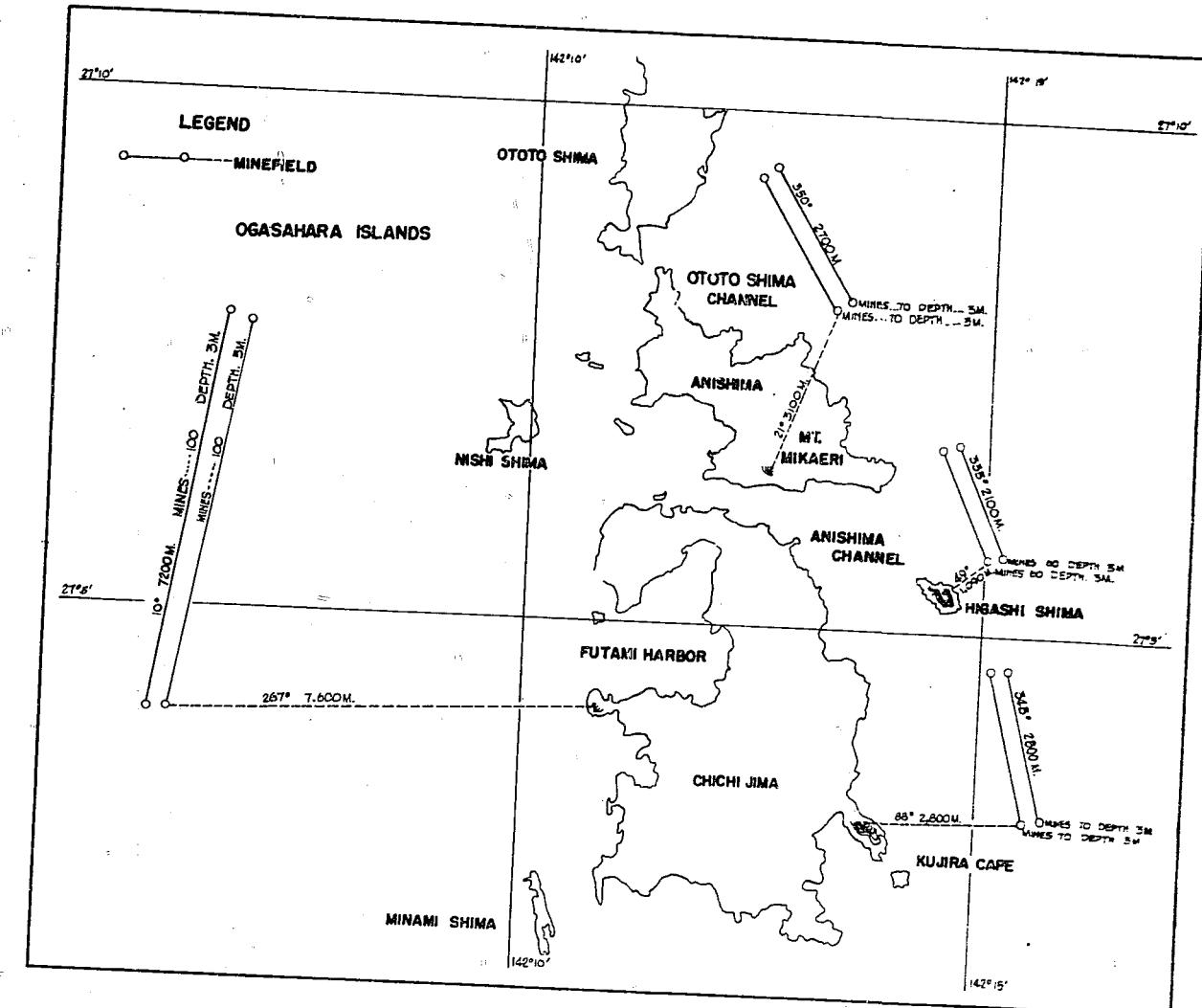


CHART 7

**RESTRICTED**

0-05

**ENCLOSURE (A), continued**

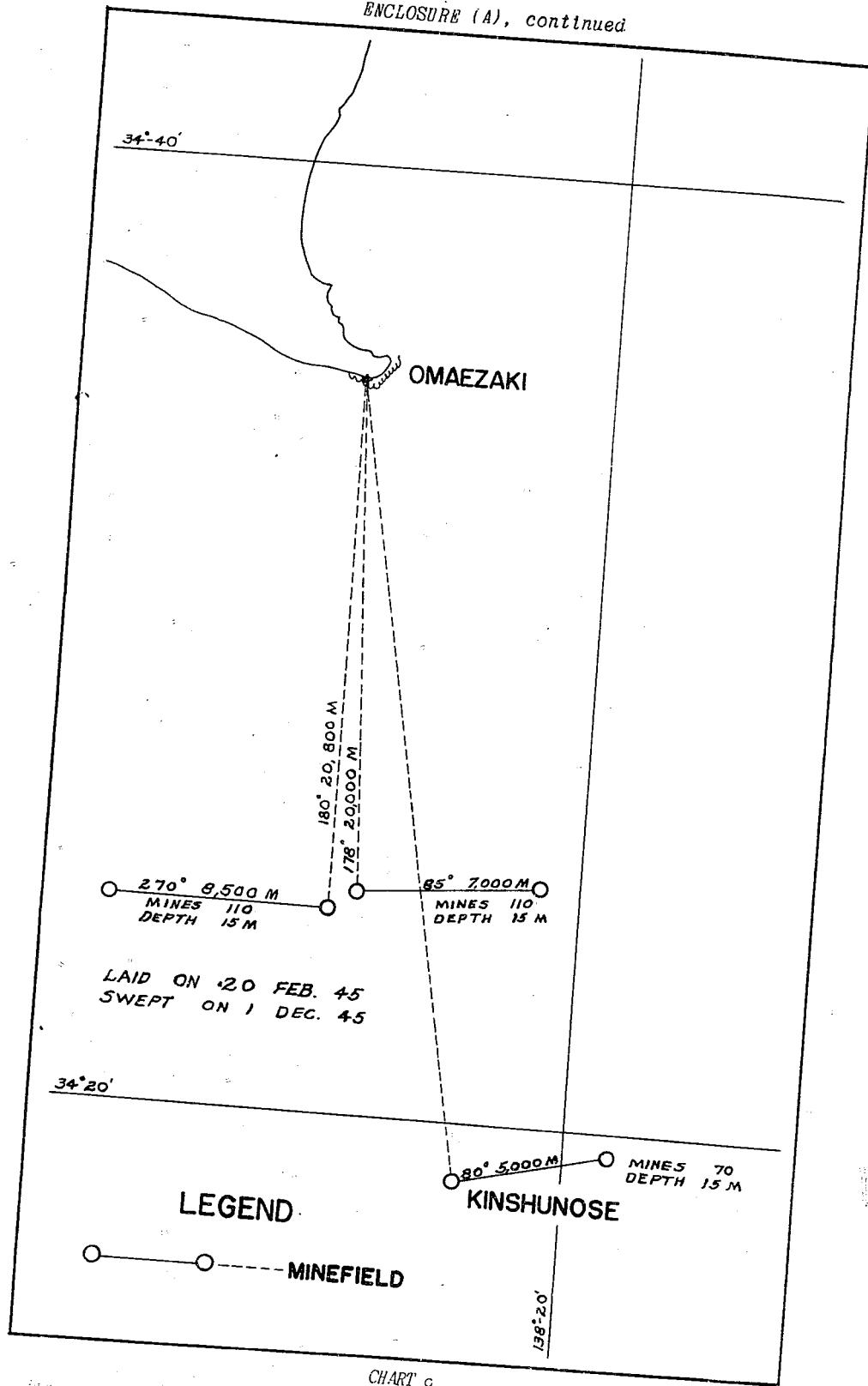


*CHART 8*

O-05

RESTRICTED

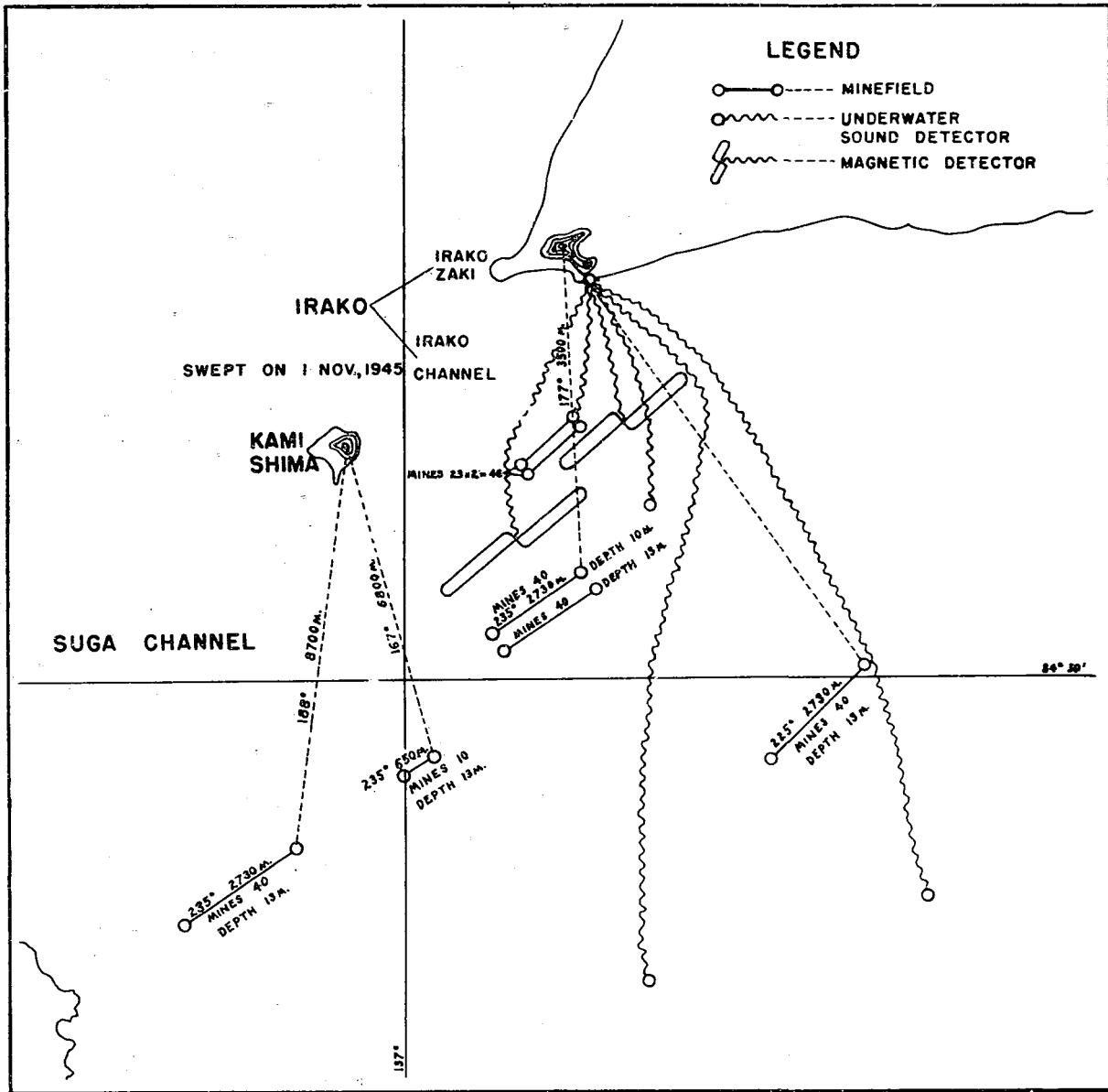
ENCLOSURE (A), continued



**RESTRICTED**

Q-05

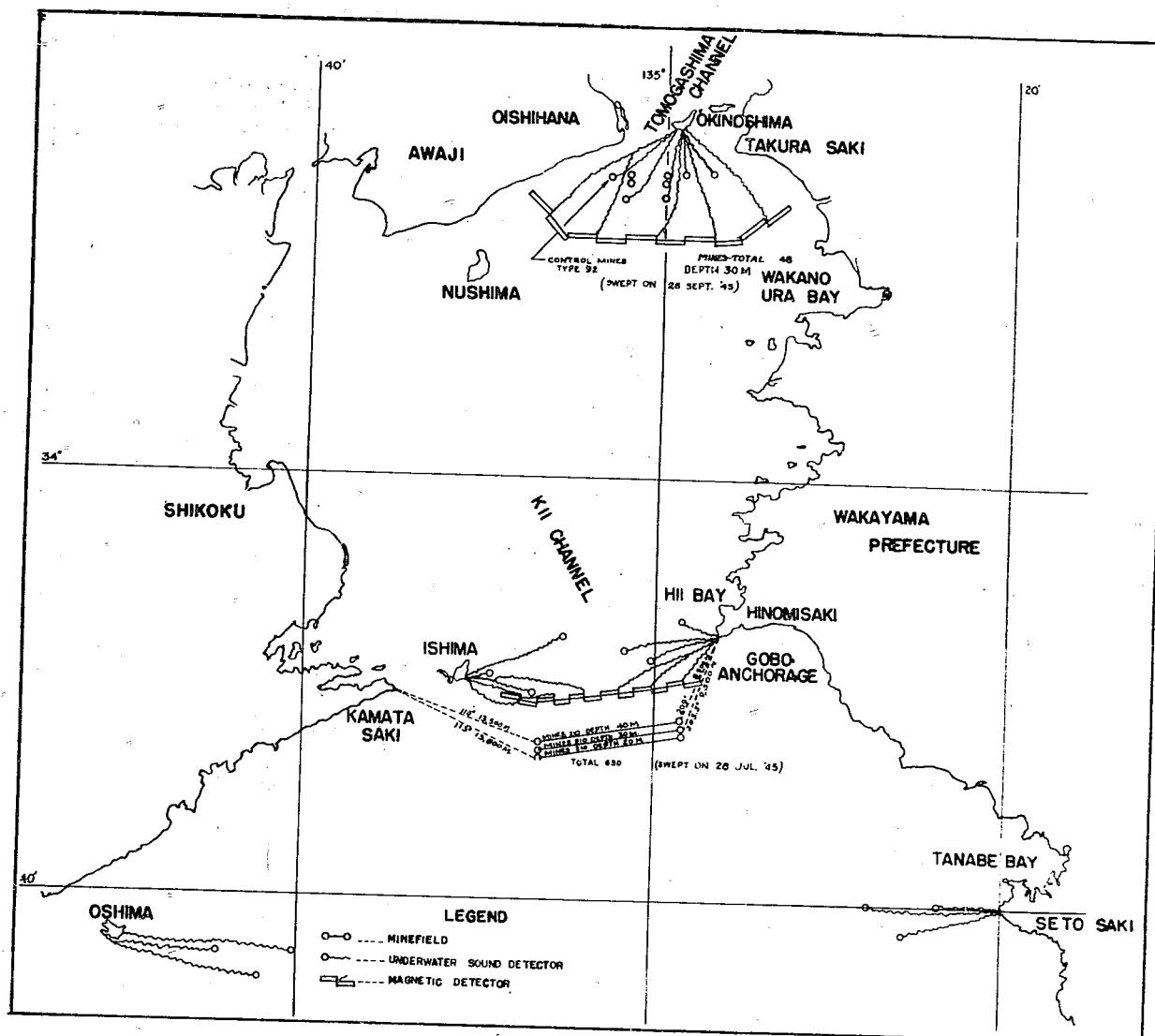
*ENCLOSURE (A), continued*



*CHART 10*

RESTRICTED

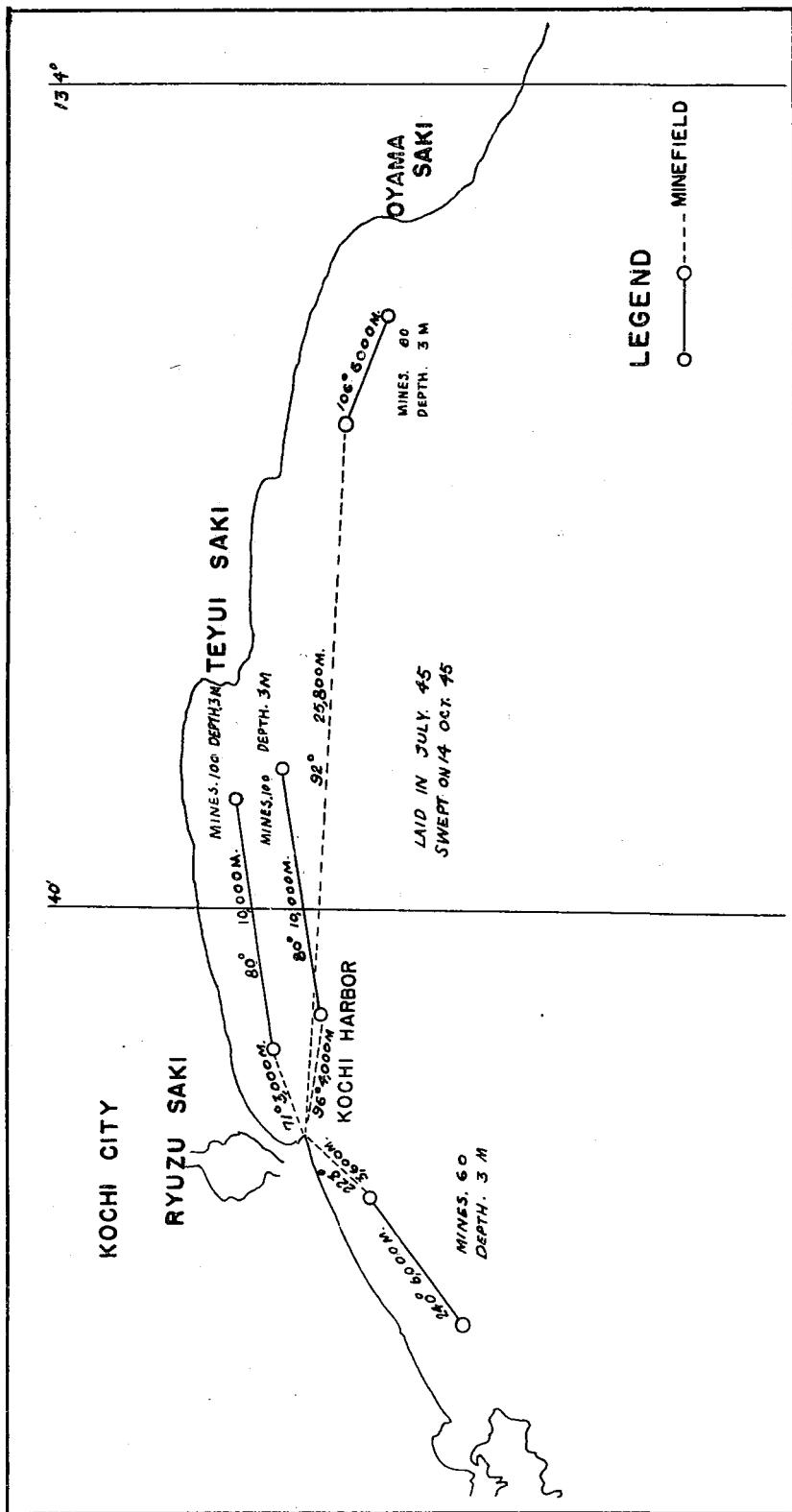
## ENCLOSURE (A), continued



**RESTRICTED**

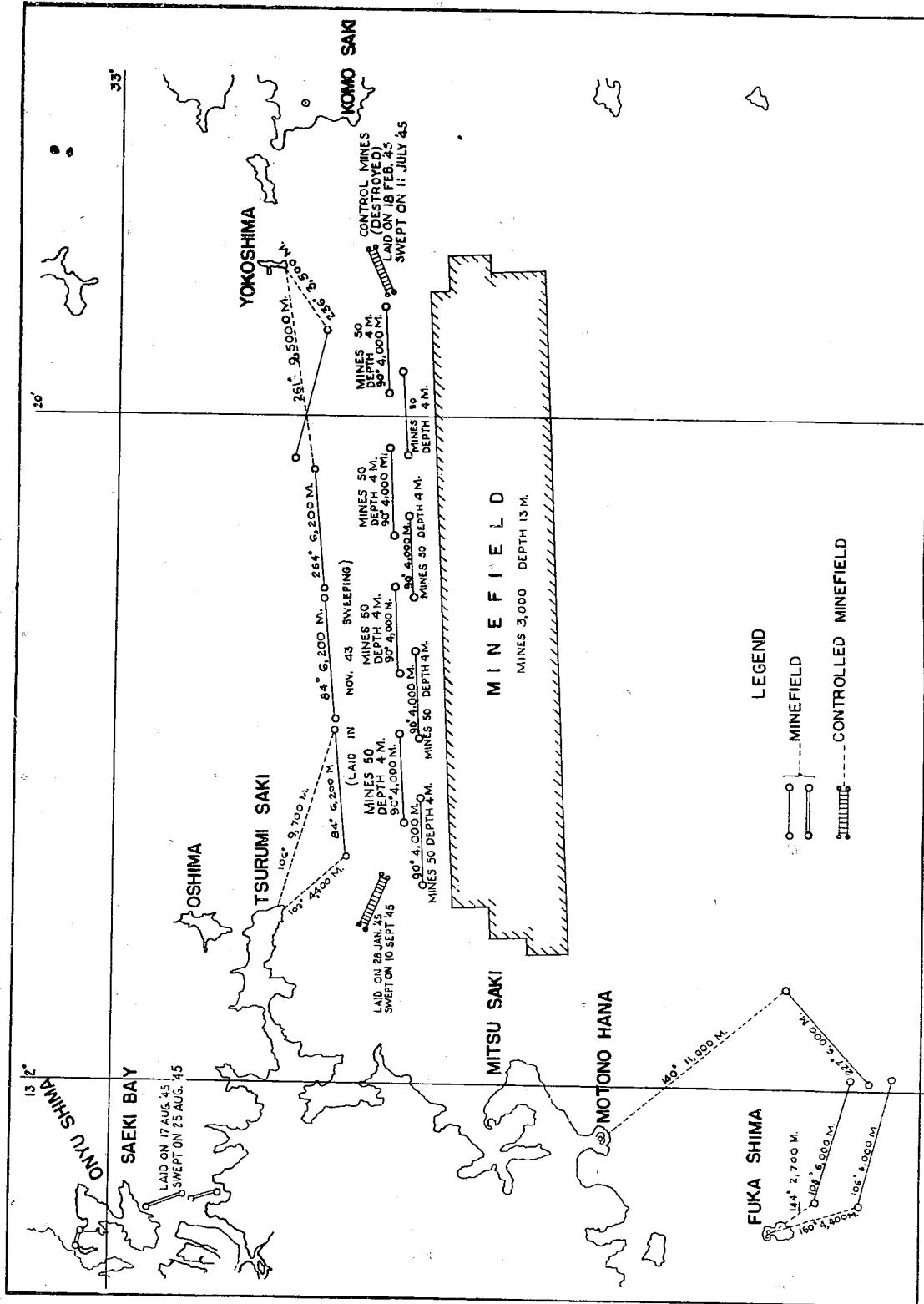
0-05

**ENCLOSURE (A), continued**



*CHART 12*

## ENCLOSURE (A), continued



**RESTRICTED**

O-05.

*ENCLOSURE (A), continued*

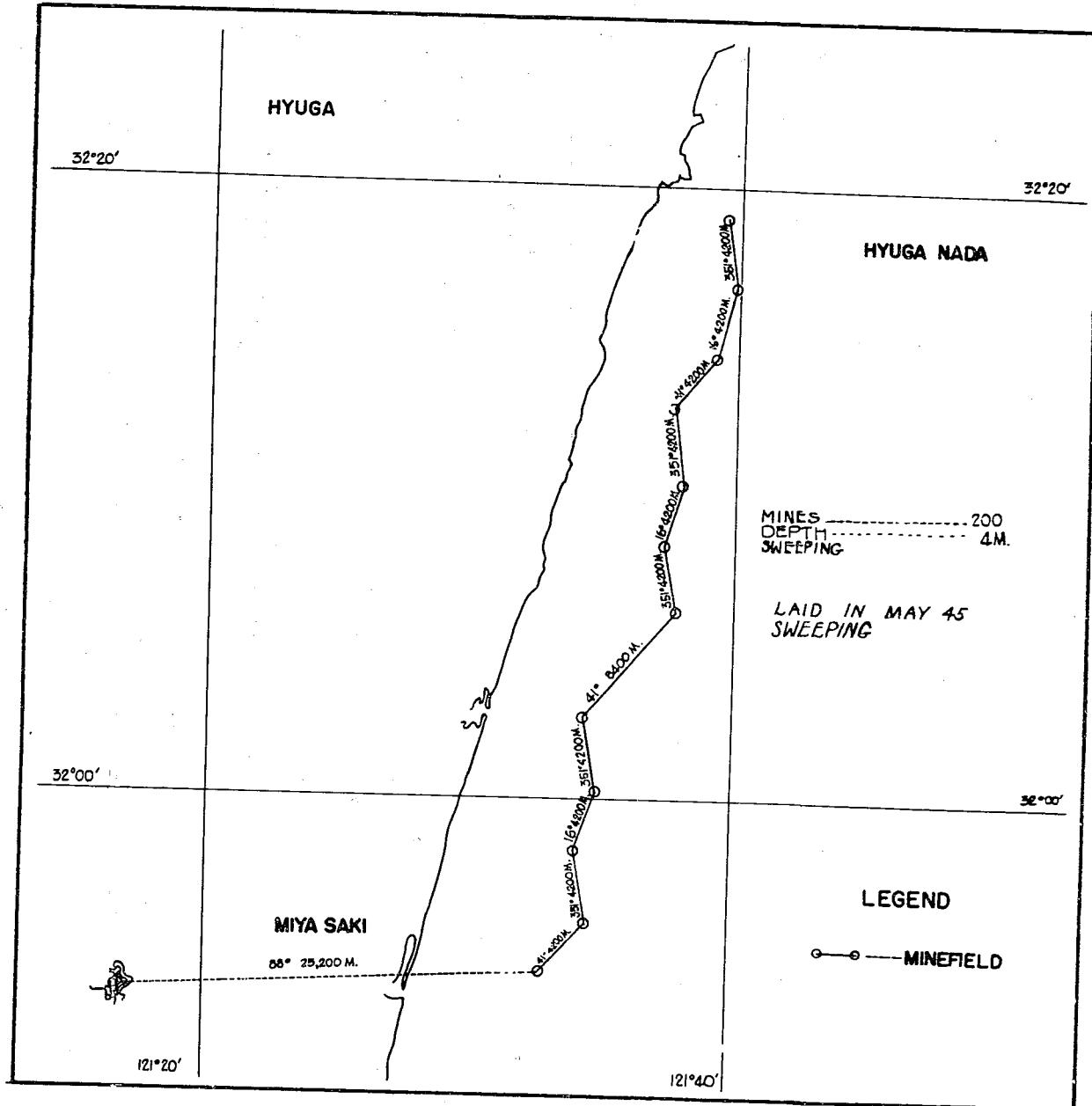


CHART 14

## ENCLOSURE (A), continued

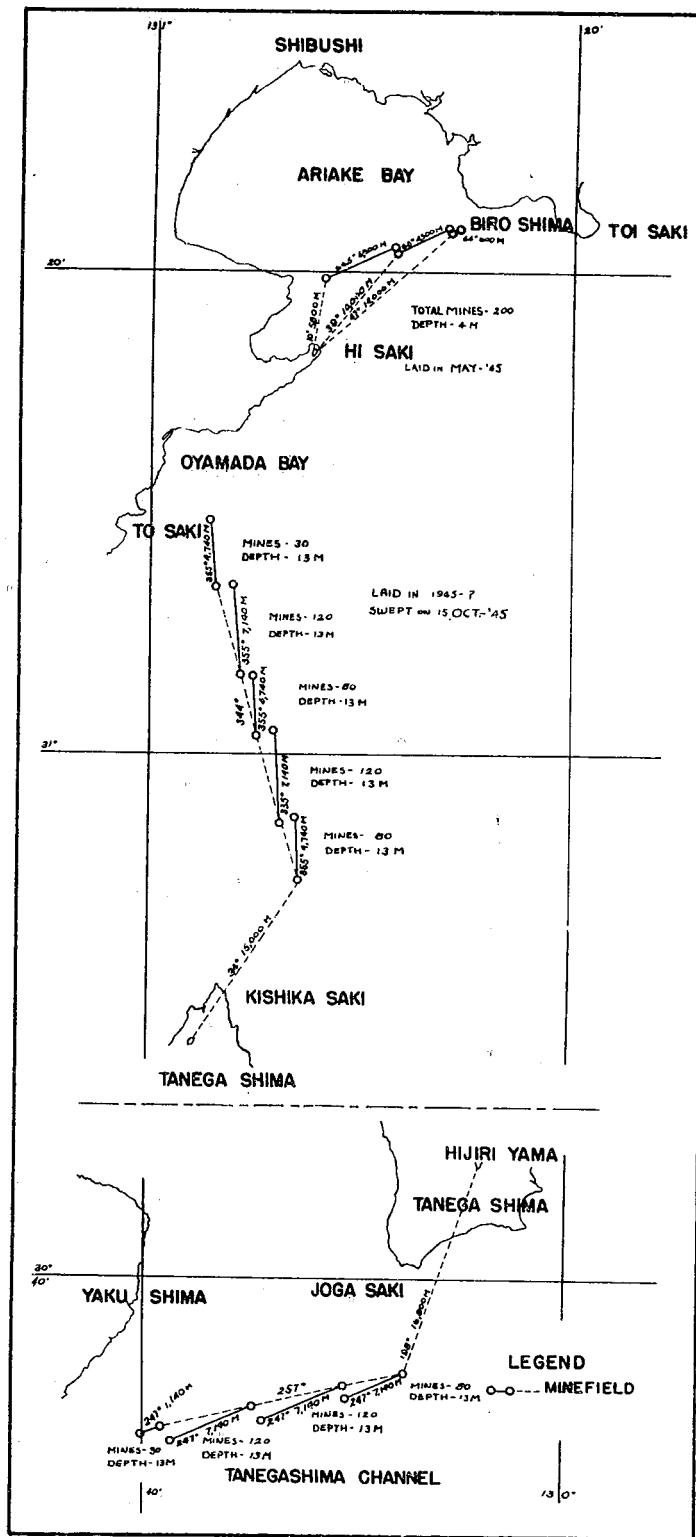


CHART 15

**RESTRICTED**

O-05

*ENCLOSURE (A), continued*

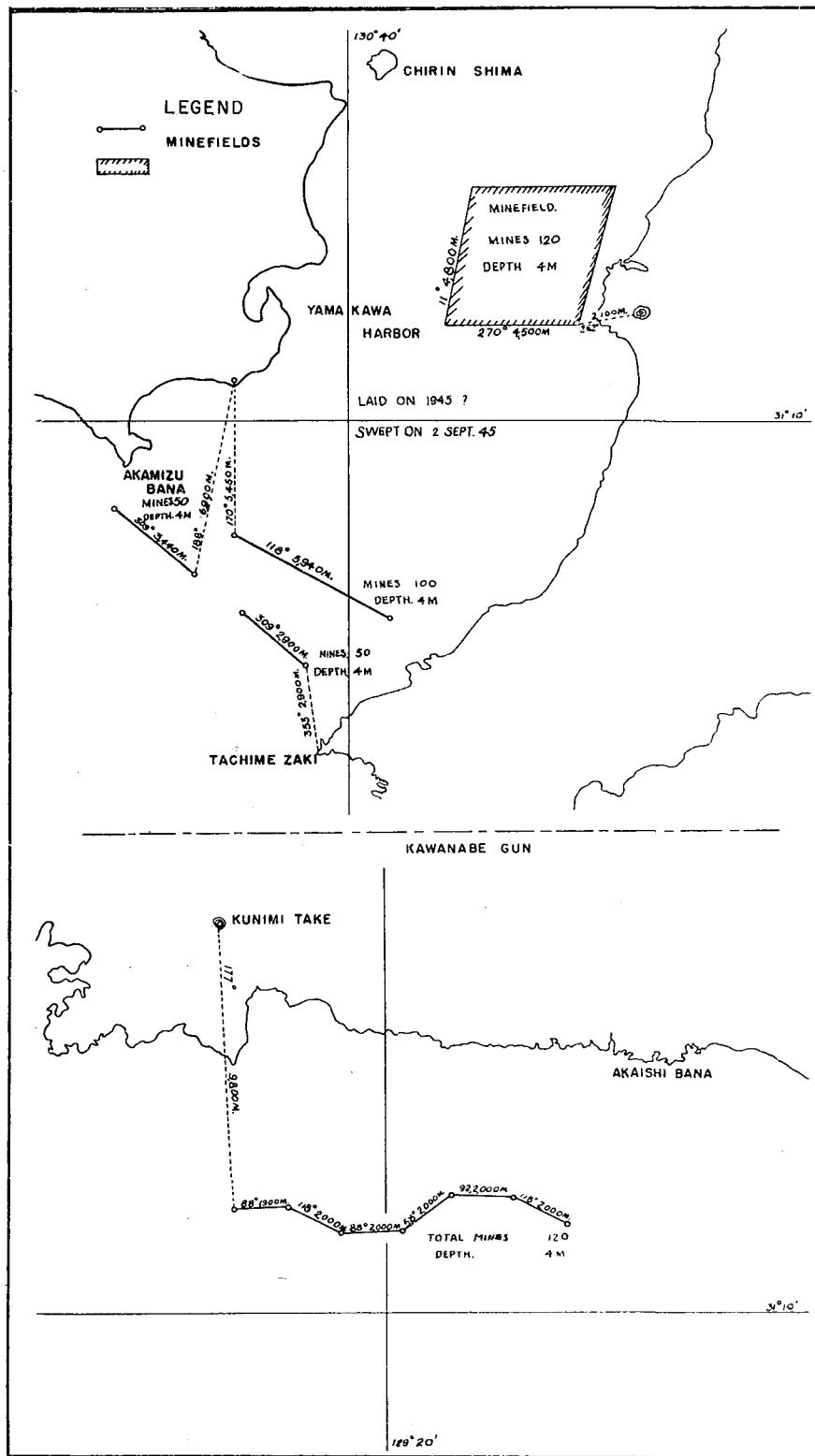


CHART 76

O-05

RESTRICTED

ENCLOSURE (A), continued

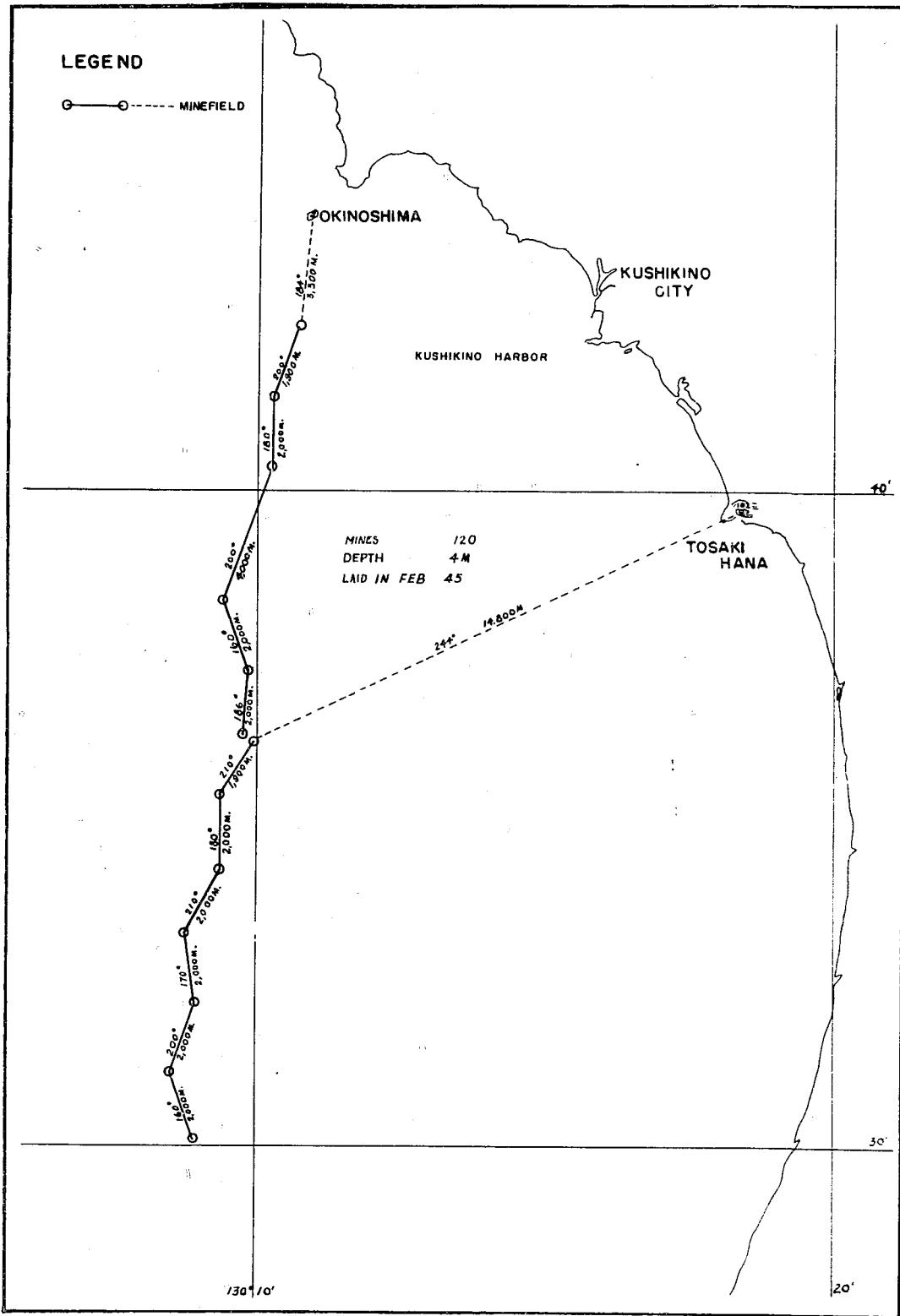
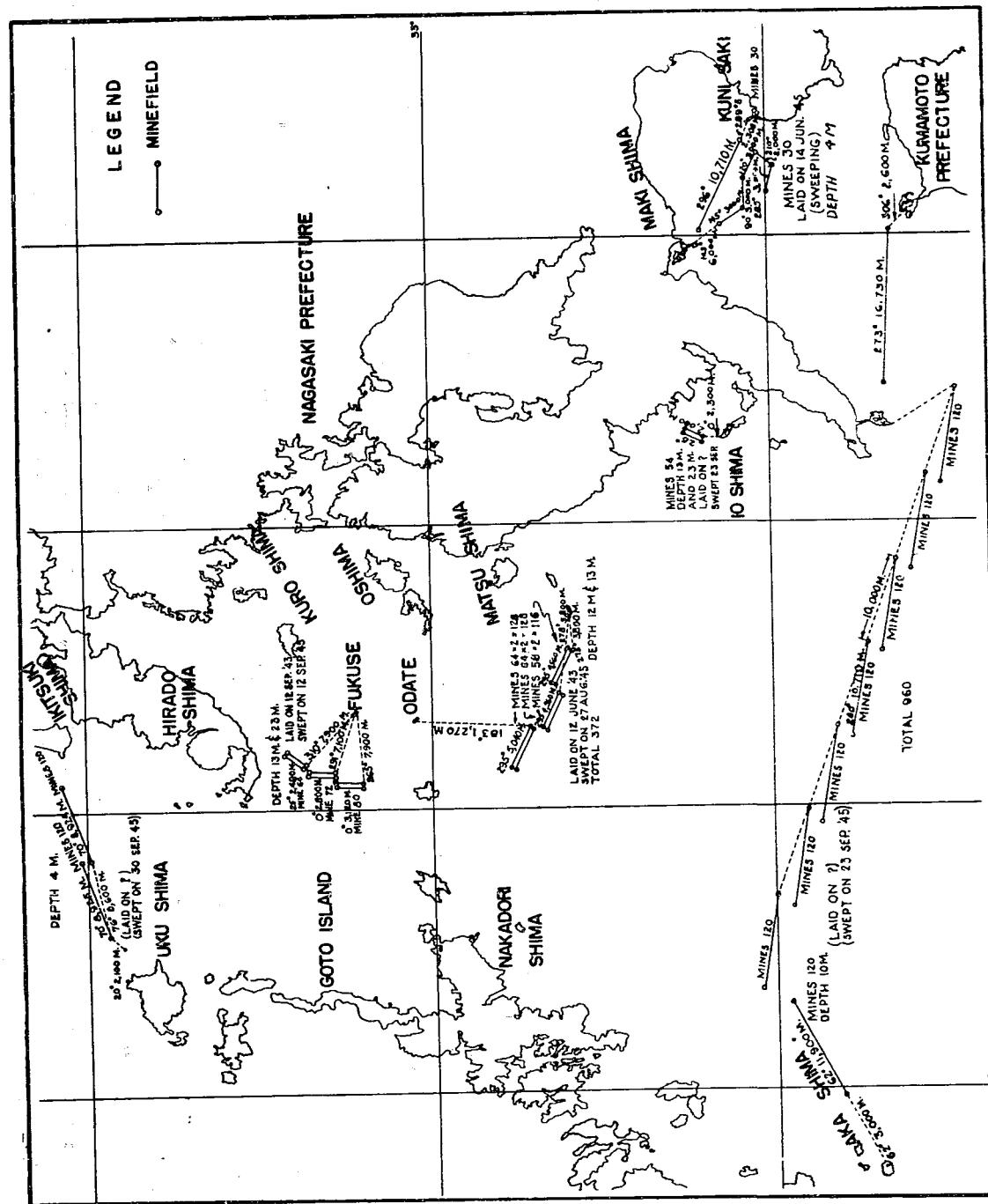


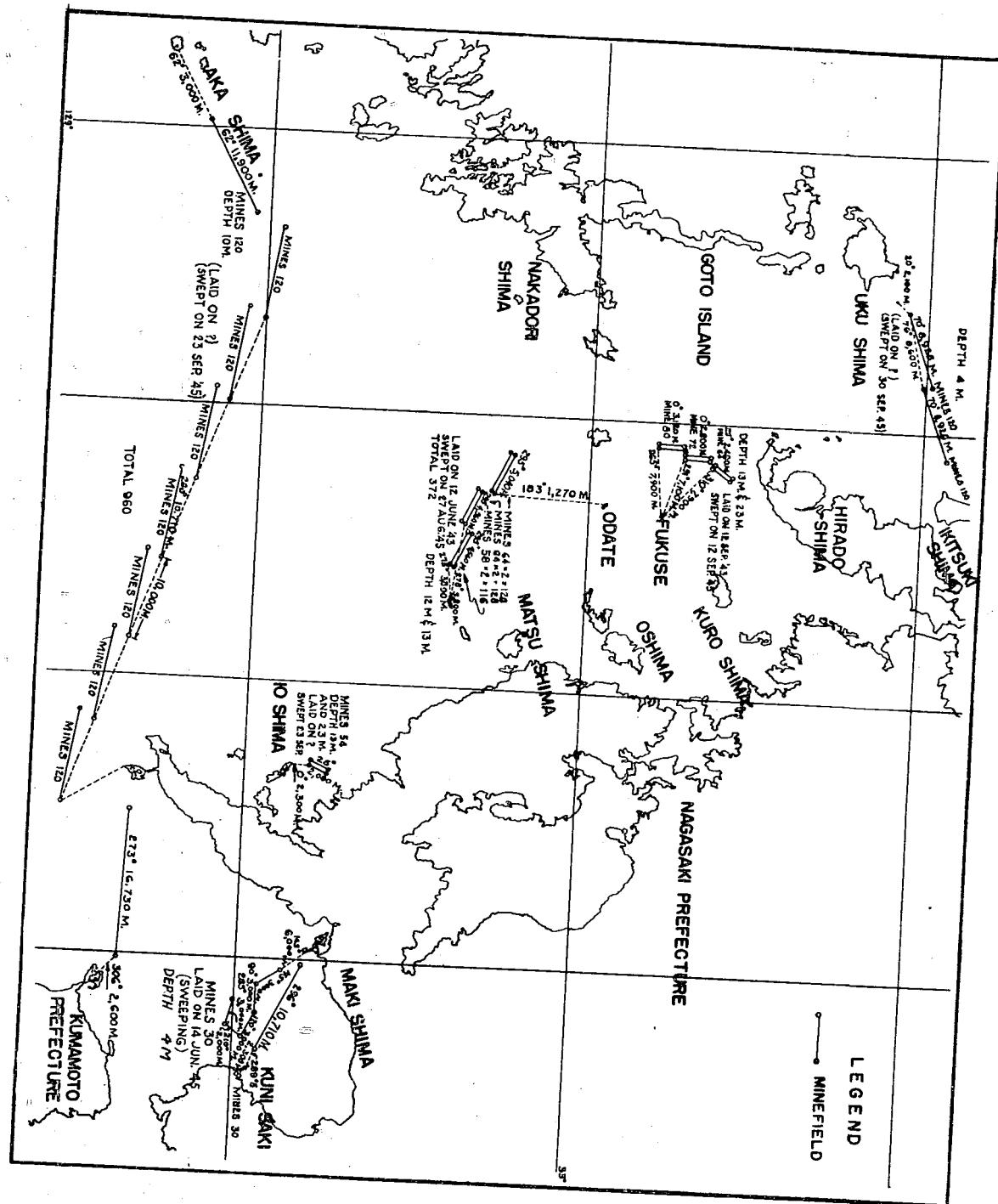
CHART 17

**RESTRICTED**

0-05

*ENCLOSURE (A), continued*





ENCLOSURE (A), continued

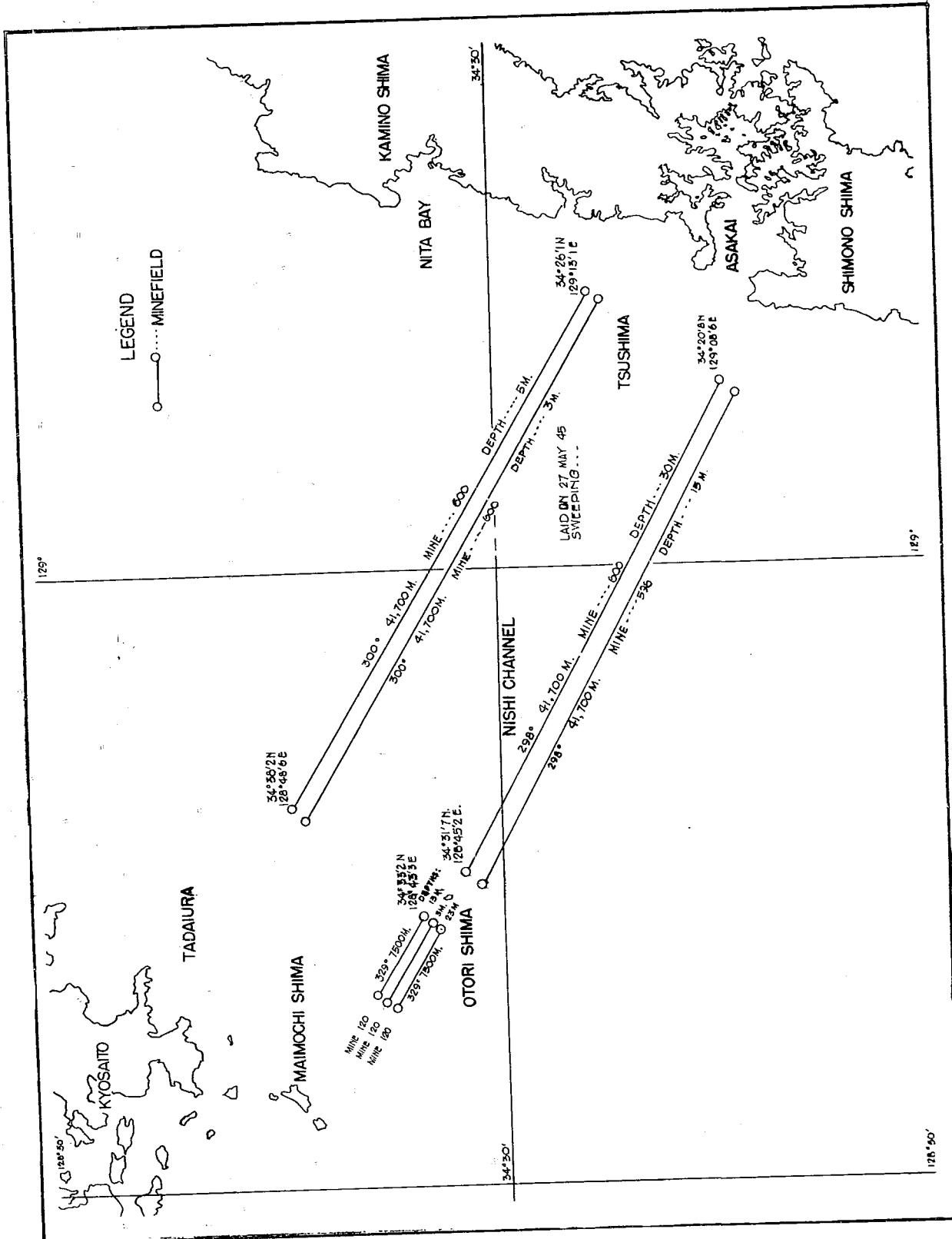
Q-05

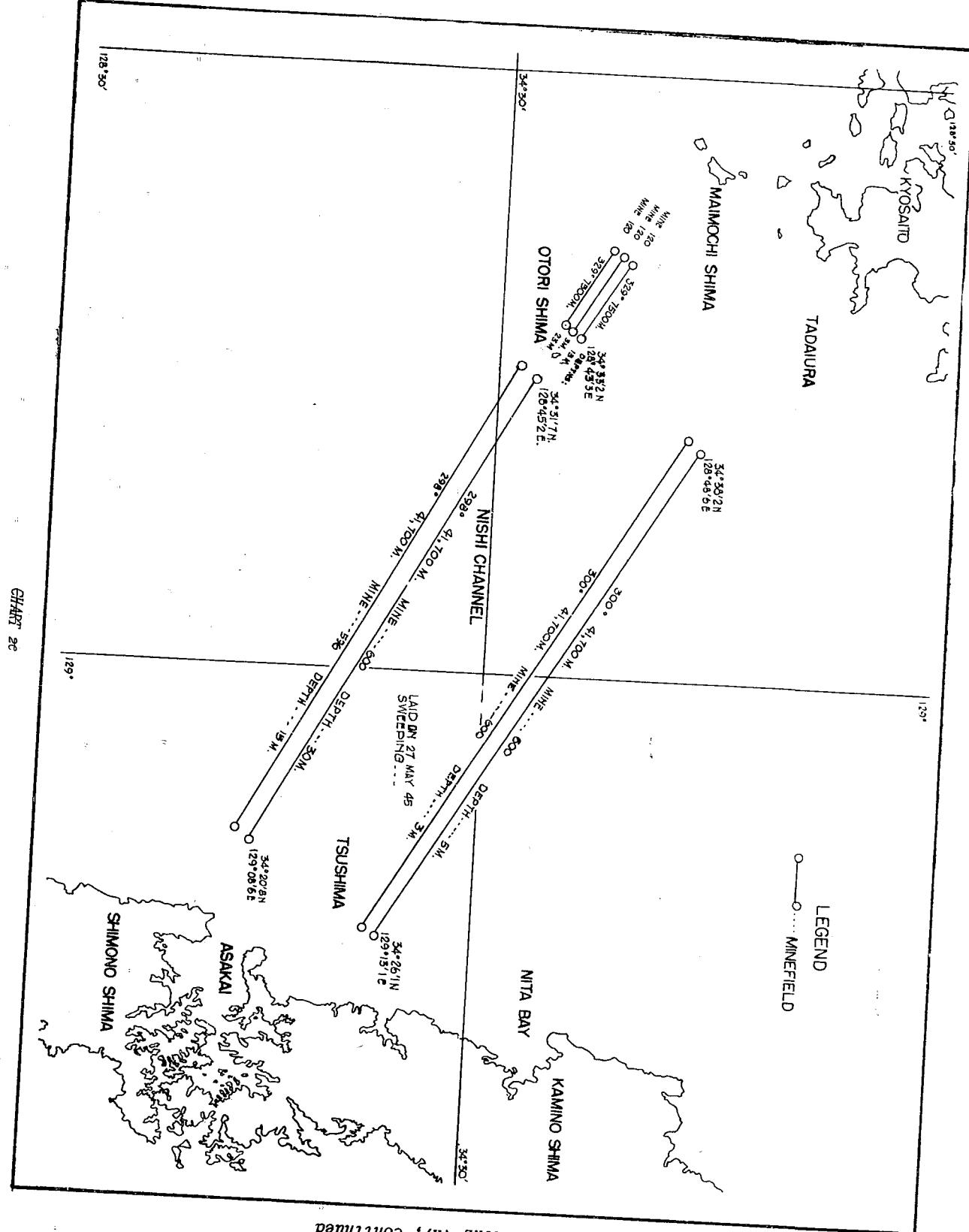
RESTRICTED

**RESTRICTED**

0-05

*ENCLOSURE (A), continued*





ENCLOSURE (A), continued

Q-05

RESTRICTED

RESTRICTED

O-05

ENCLOSURE (A), continued

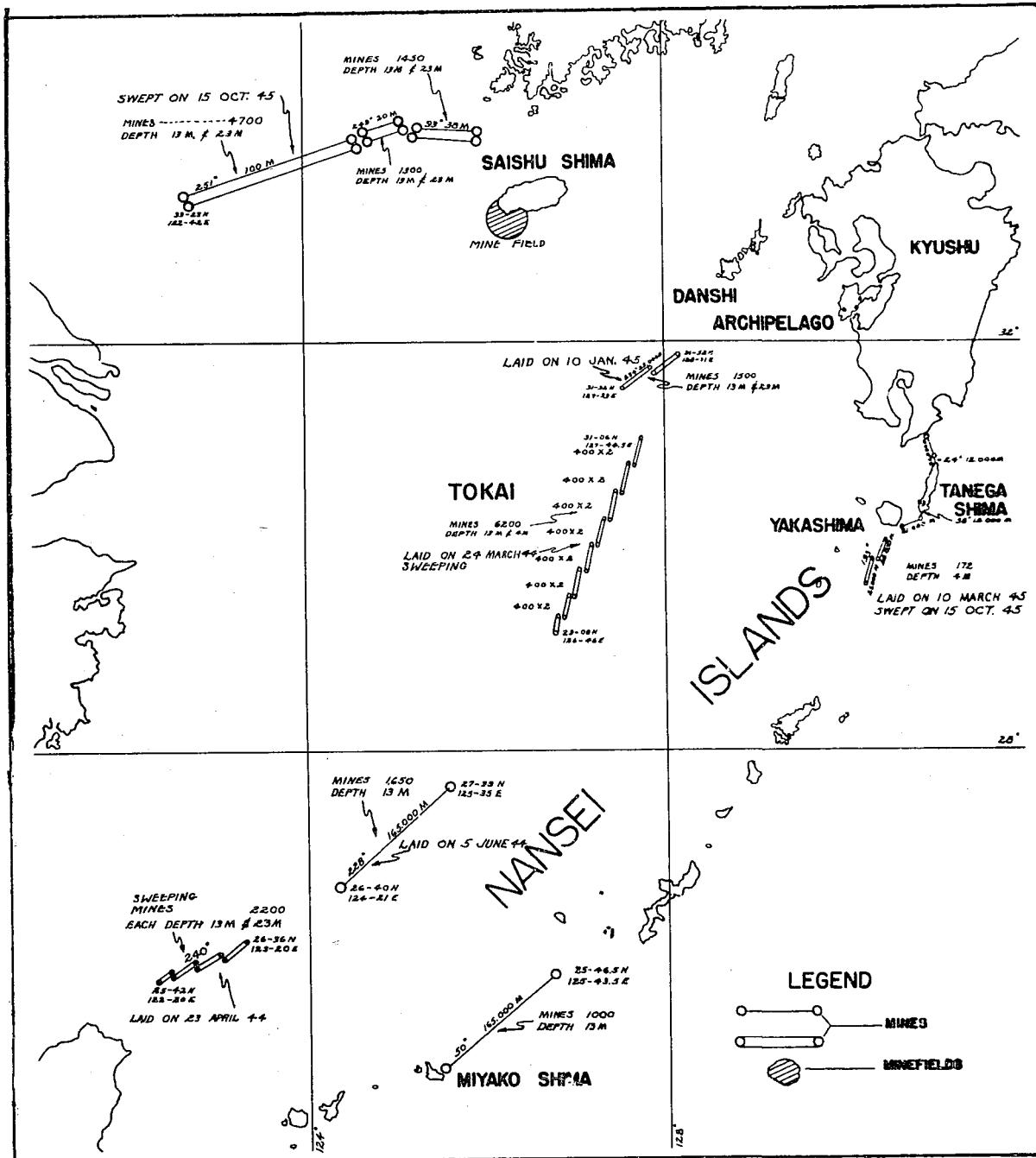
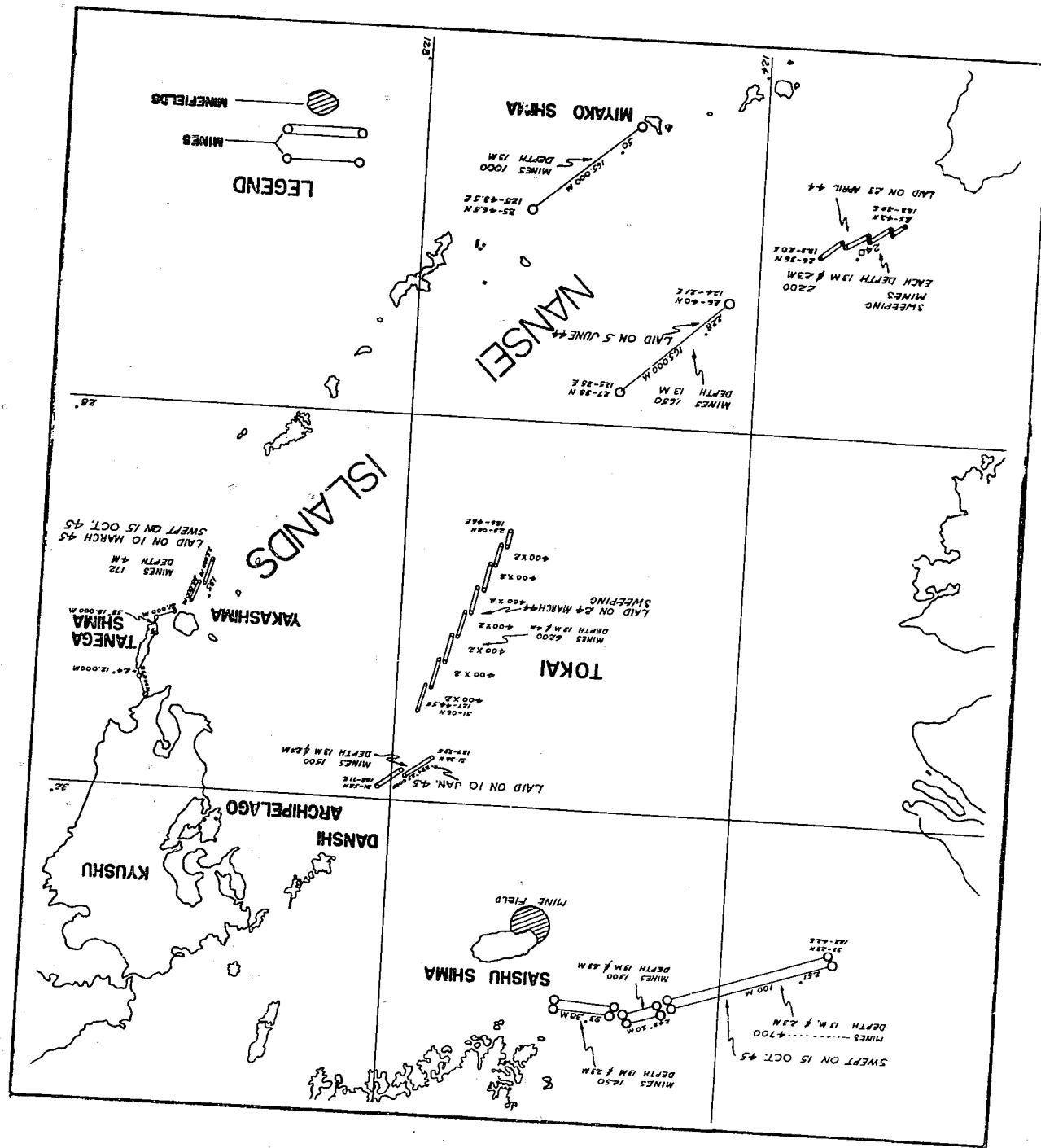


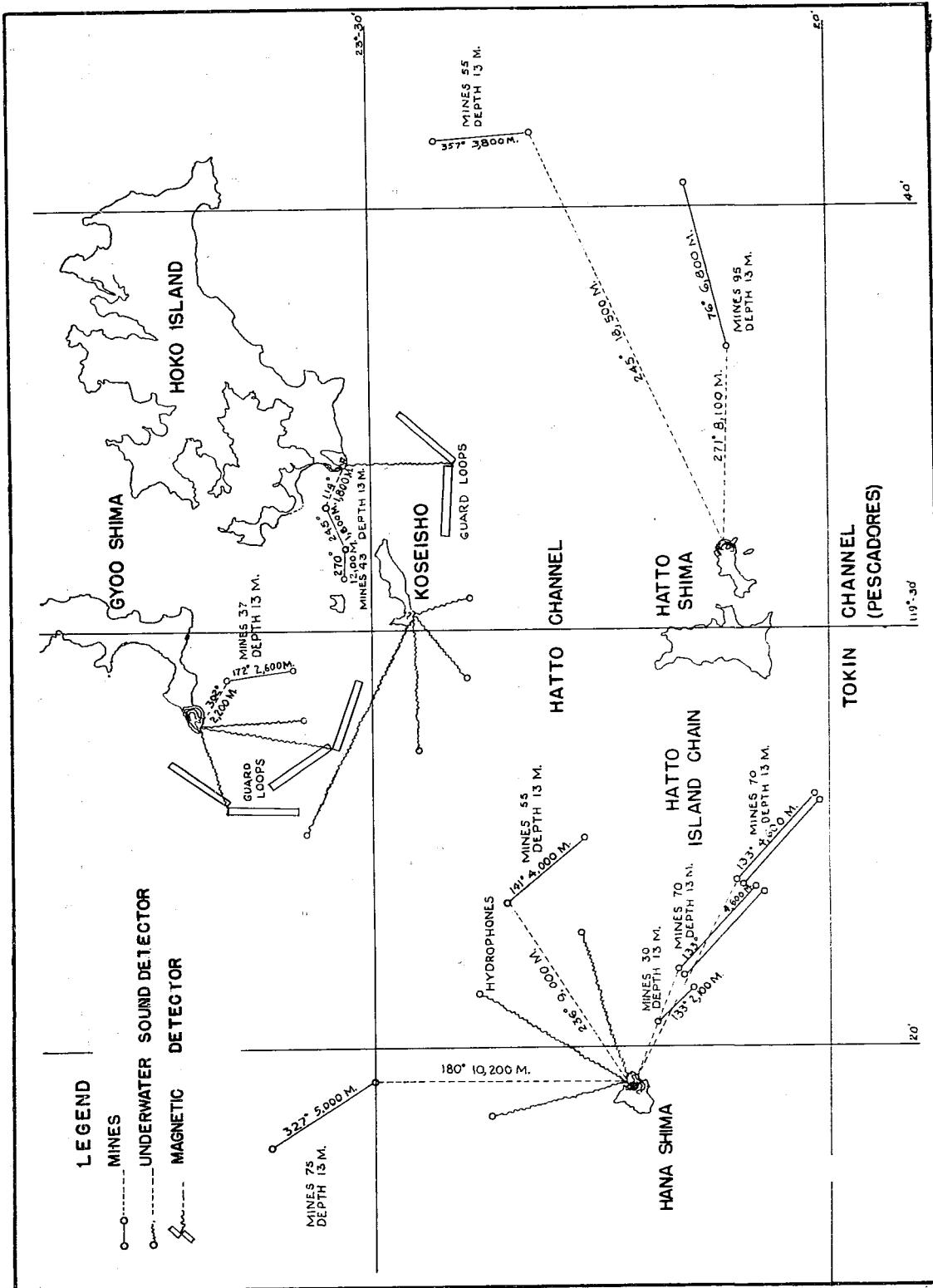
CHART 22



RESTRICTED

*ENCLOSURE (A), continued*

0-05



O-05

RESTRICTED

ENCLOSURE (A), continued

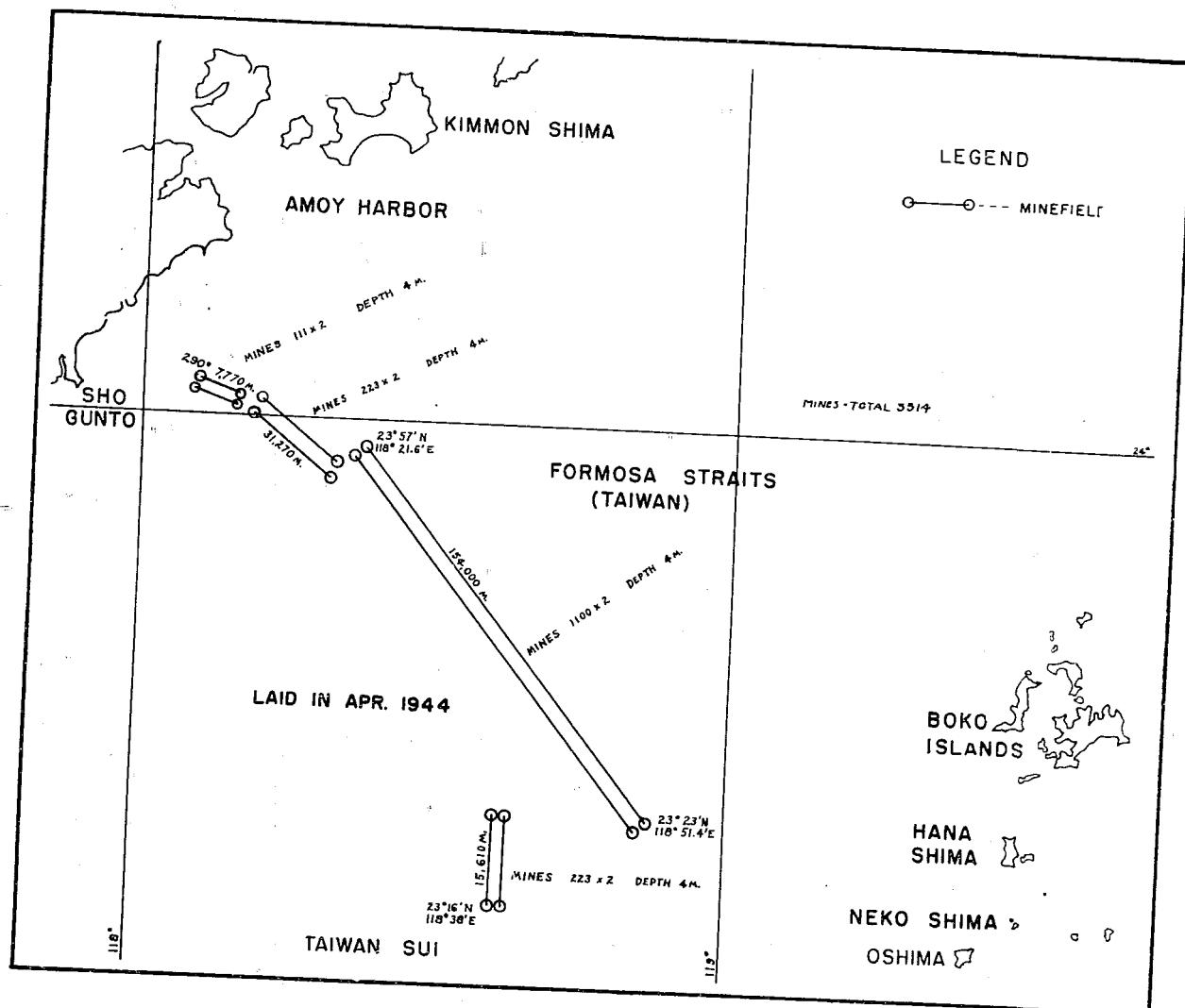


CHART 25