

NRL B-00017-73

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20 Dec 1972

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## NAVY SPACE PROJECT OFFICE (PM 16)

~~(S)~~ NATIONAL RECONNAISSANCE OFFICE, PROGRAM C

WASHINGTON, D.C.

OFFICE OF THE DIRECTOR

PM-16-531/1c

20 December 1972

MEMORANDUM FOR DIRECTOR, NAVAL RESEARCH LABORATORY  
DIRECTOR, NATIONAL SECURITY AGENCY  
DIRECTOR, CENTRAL INTELLIGENCE AGENCY  
DIRECTOR, NRO STAFF (SS-4) AND (SS-7)  
COMMANDER, NAVAL SECURITY GROUP  
CHIEF OF NAVAL OPERATIONS (OP-094W)

Subj: POPPY Technical Operations Group (TOG) Meeting; report of

Encl: (1) List of Attendees  
(2) TOG Agenda  
(3) CNSG Operational Report

1. A TOG meeting was held at 0930 on 30 November 1972 at NRL. The list of attendees and the agenda are forwarded as enclosures (1) and (2).

2. The following specific items were discussed:

a. POPPY Project Officer. (PM-16)

[redacted] who was recently assigned the PM-16 POPPY Project Officer for all aspects of this program except the software maintenance contract with HRB Singer, for which [redacted] will act as the Contracting Officer's Technical Representative (COTR).

[redacted] is head of the Ground Systems Division of the PM-16-5 (SPO) organization.

b. Mission 7107 Status. (NRL)

The basic system status remains normal. The spacing between [redacted] is not now optimum, however, because of a recent microthruster failure. An apparent clog in satellite A, microthruster #2, caused a halt in planned operations to move the pairs apart. Because of drag differences, the [redacted] separation is decreasing at a very low rate; by mid 1975, the [redacted] center separation is predicted to be one-seventh of an orbit [redacted] separation. What is now [redacted] between [redacted] will shrink to [redacted] by March, 1975. Since 7107C is not gravity-gradient stabilized, the others must be micro-thrusted relative to 07C. The [redacted] spacing is not affected and remains within the NRO SOC (JUNO 0109) desired spacing of:

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In view of the above, NRL recommended the following:

- (1) No additional thrusting on O7AB at this time
- (2) Continue to monitor drift
- (3) Use thrusting only to control [ ] spacing within desired limits
- (4) A future option to turn A and B around and thrust in reverse if this becomes desirable.

The above status report indicates that there is no operational impairment of 7107 capability.

c. Mission 7107 Collection Highlights. (NSG)

Enclosure (3) is a summary of the 7107 collection highlights since the last meeting. This period was marked by 2 major Soviet Naval transits between the North Fleet and the Mediterranean. Numerous intercepts of the transiting Soviet submarines were made.

d. Mission 7107 Processing Highlights. (NSA)

Two items of interest were reported:

(1) From a recent [ ] emission which illuminated two 7107 satellites simultaneously at an intercept geometry that provided an angular [ ] analysts now assess that this system was unidirectionally sector scanning vertically, from the horizon upward. SLM was tasked at the time of intercept but the signal saturated the SLM counter.

(2) In tapes received from the field, the signals were recorded at 108 KHZ vice the standard 54 KHZ. The NSG representatives agreed to correct the field sites to return to 54 KHZ.

The NSG representatives requested that NSA give the sites some indication of the usefulness of products/analyses performed at NSA request. Even "showing interest" in the results would encourage field personnel to greater interest. A regular wrapup report (perhaps weekly) was suggested as a mechanism for conveying processing highlights.

e. Site Update at [ ] (NRL)

The site updates are progressing as planned. The required down times and the purpose and nature of the updates was discussed. At the end of this update, the sites will be as standardized as possible, including the latest approved technology (isolated power grounding, for example).

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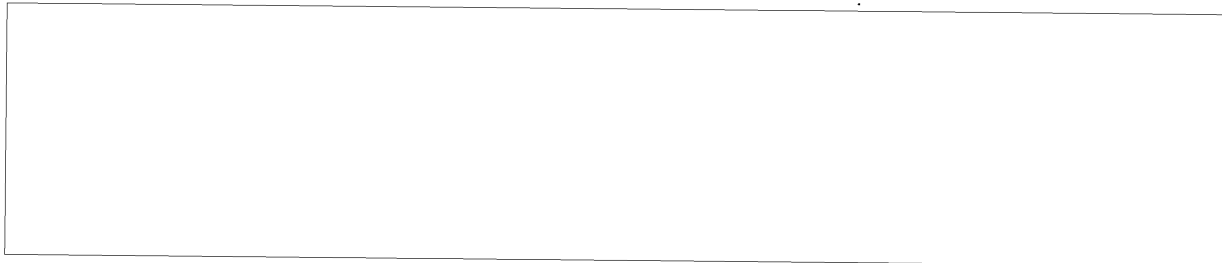
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The updates involve about seven days down time at each site.

f. Engineering Evaluation. (NRL)

The regularly scheduled engineering evaluation is scheduled at the end of the [ ] site update and will involve those items previously discussed, leading to an NRL report at completion. Coordination of the required down times and tasking with the NRO SOC was discussed.

g. U. S. Ship Location. (PM-16)



h. Statistical Evaluation of [ ] Usefulness. (PM-16)

A few weeks ago the Director, Program C asked for some definitive information on how [ ] information is being used in the fleet resource allocation decision process. It was considered desirable to ask an outside party to examine the information available for an objective evaluation.

[ ] of the NRO Staff was asked to compile some statistics that might lend insight to these questions. NRL, NSG and NOSIC were contacted and all have contributed. Some preliminary results, based upon [ ] and [ ] outputs during NATO exercise STRONG EXPRESS, were presented. Future TOG meetings will include more on this subject.

i. Disposition of Computer Equipment. (PM-16)

The POPPY program has excess assets in the form of computer equipment. There is a possibility that two GFE SEL 810 systems now used in another program, might become available for POPPY. The second SEL 86 is in the final stages of acceptance at [ ] and requires a decision as to future employment. PM-16 will acquire system specific information on the two SEL 810 systems and will contact the concerned parties for further discussion on this subject prior to the next TOG.

3. The next TOG meeting will be held on 28 December at CNSG Headquarters.

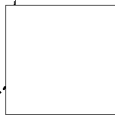
  
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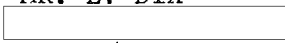
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LIST OF ATTENDEES

PM-16   
MR. R. MAYO  



NRL MR. L. HAMMARSTROM  
MR. E. DIX  
  
MR. P. WILHELM

NRO 

NSA 

NSG 

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Encl: (1)

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[ ] TOG AGENDA ITEMS, 30 NOVEMBER 1972

1. 7107 Status (NRL)
2. 7107 Collection Highlights (NSG)
3. 7107 Processing Highlights (NSA)
4. Site Update at [ ] (NRL)
5. Engineering Evaluation (NRL)
6. U. S. Ship Location (SPO)
7. Statistical Evaluation of [ ] Usefulness (SPO)
8. Disposition of Computer Equipment (SPO)

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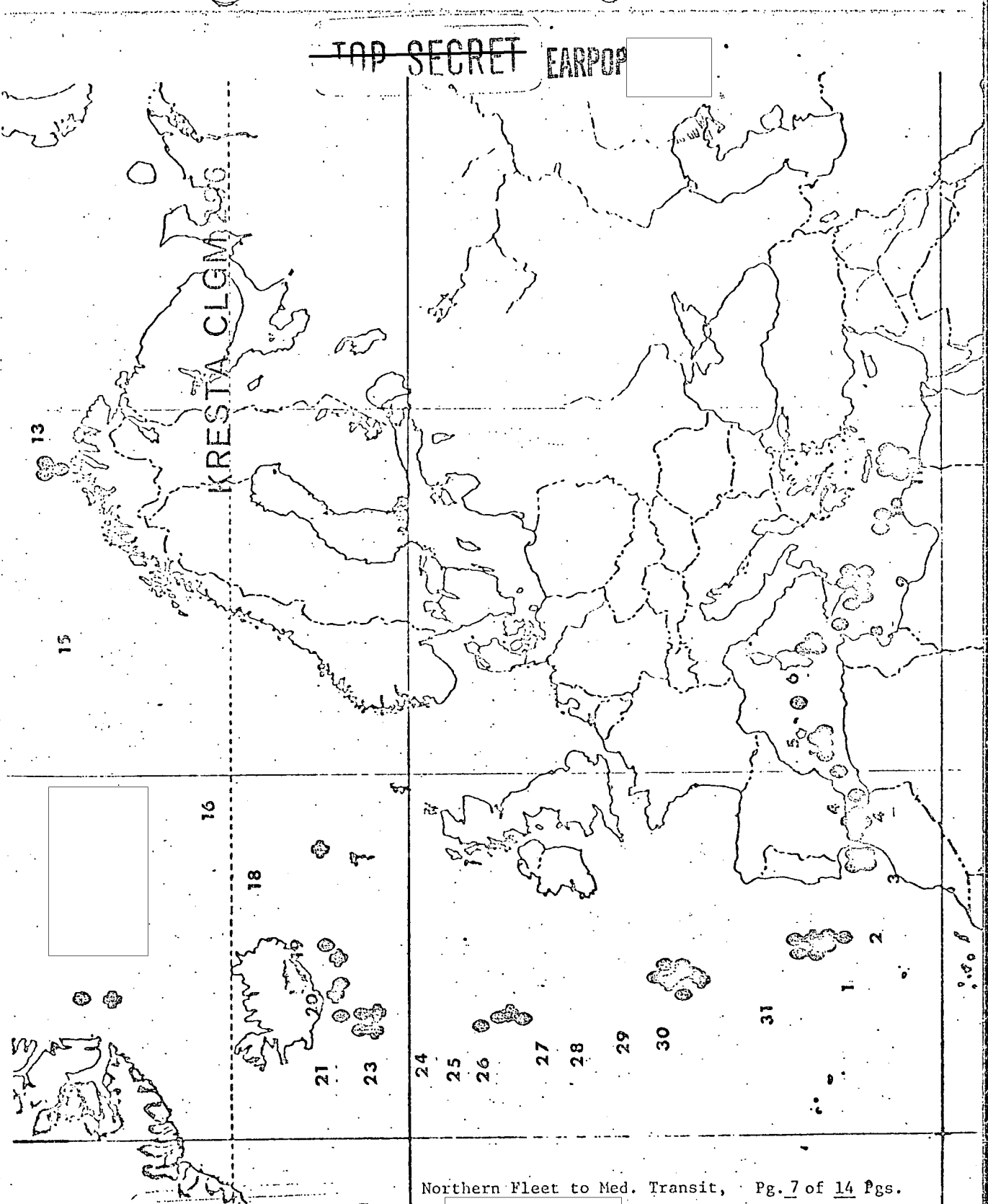
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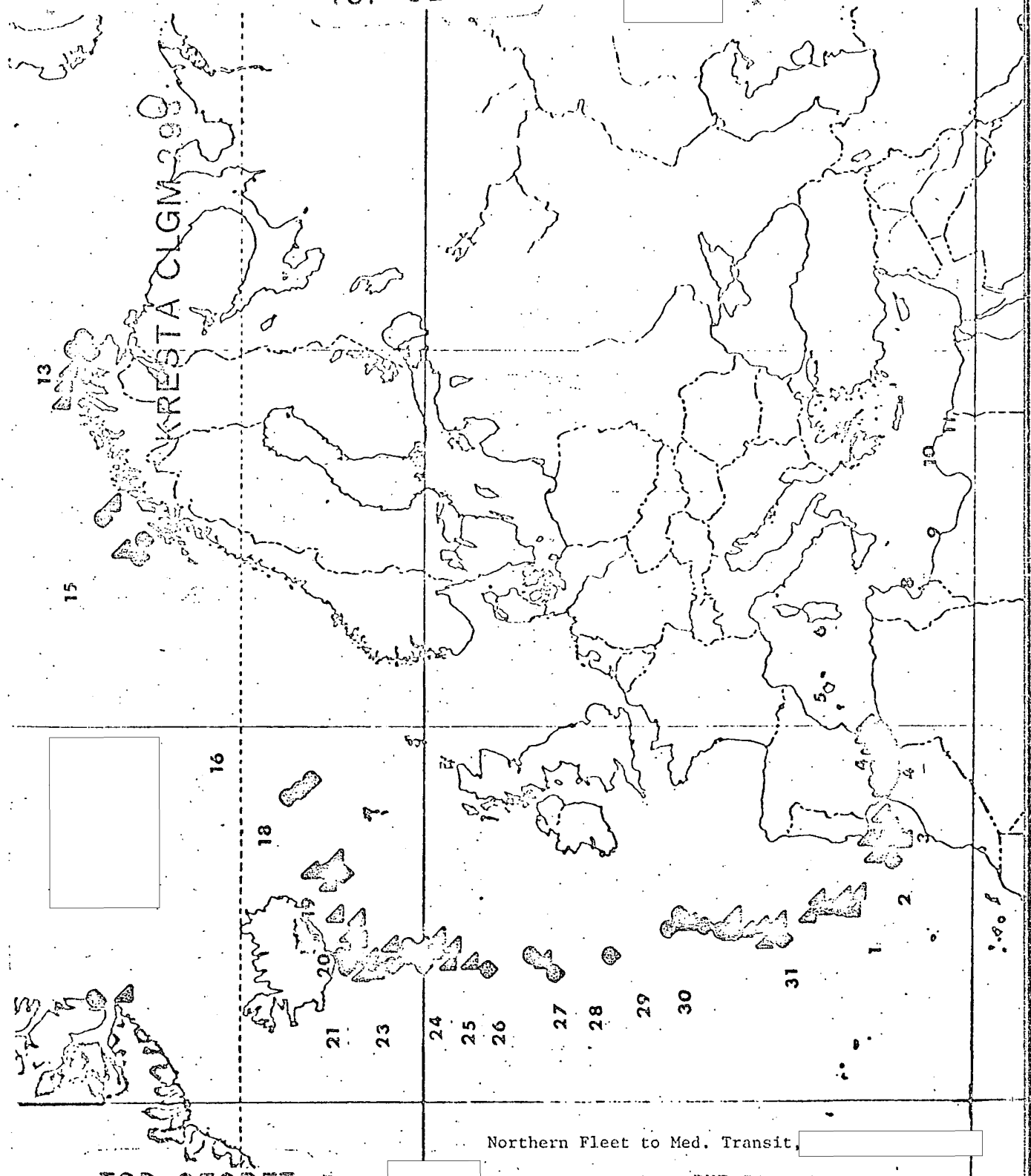
Northern Fleet to Med. Transit, Pg. 7 of 14 Pgs.

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Encl: (3) Fig. 1

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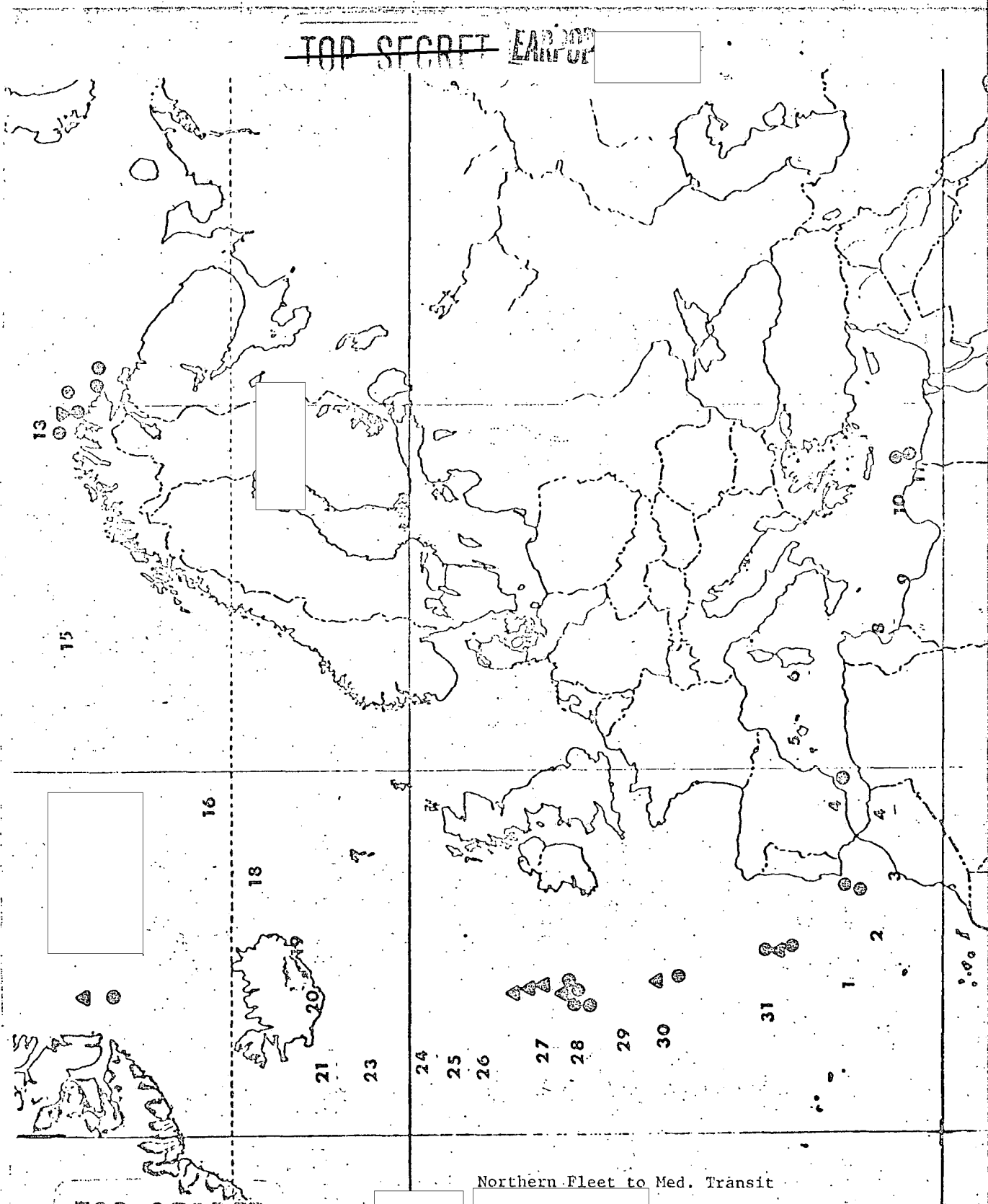
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Northern Fleet to Med. Transit

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Encl: (3) Fig. 2

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Northern Fleet to Med. Transit

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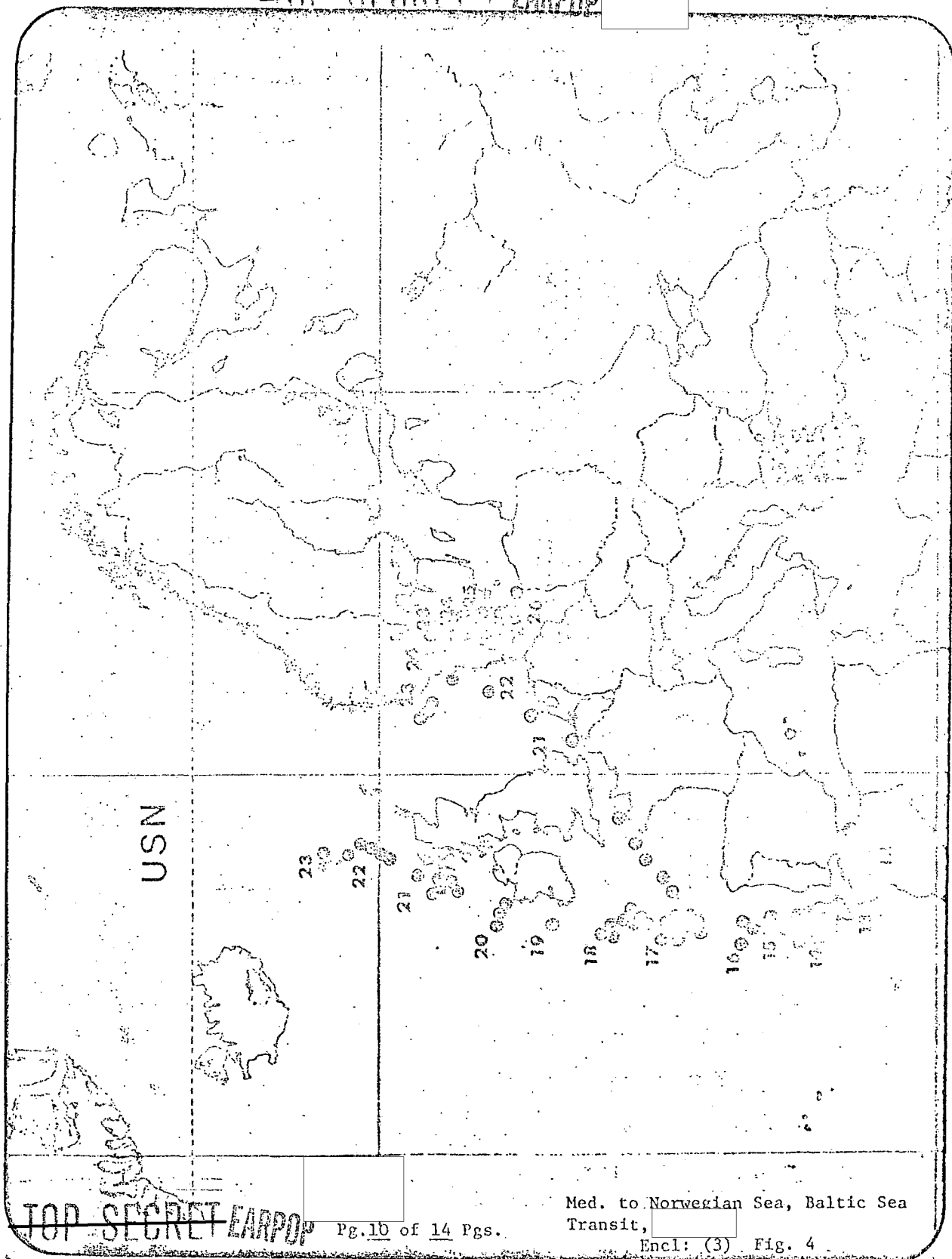
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Encl: (3) Fig. 3

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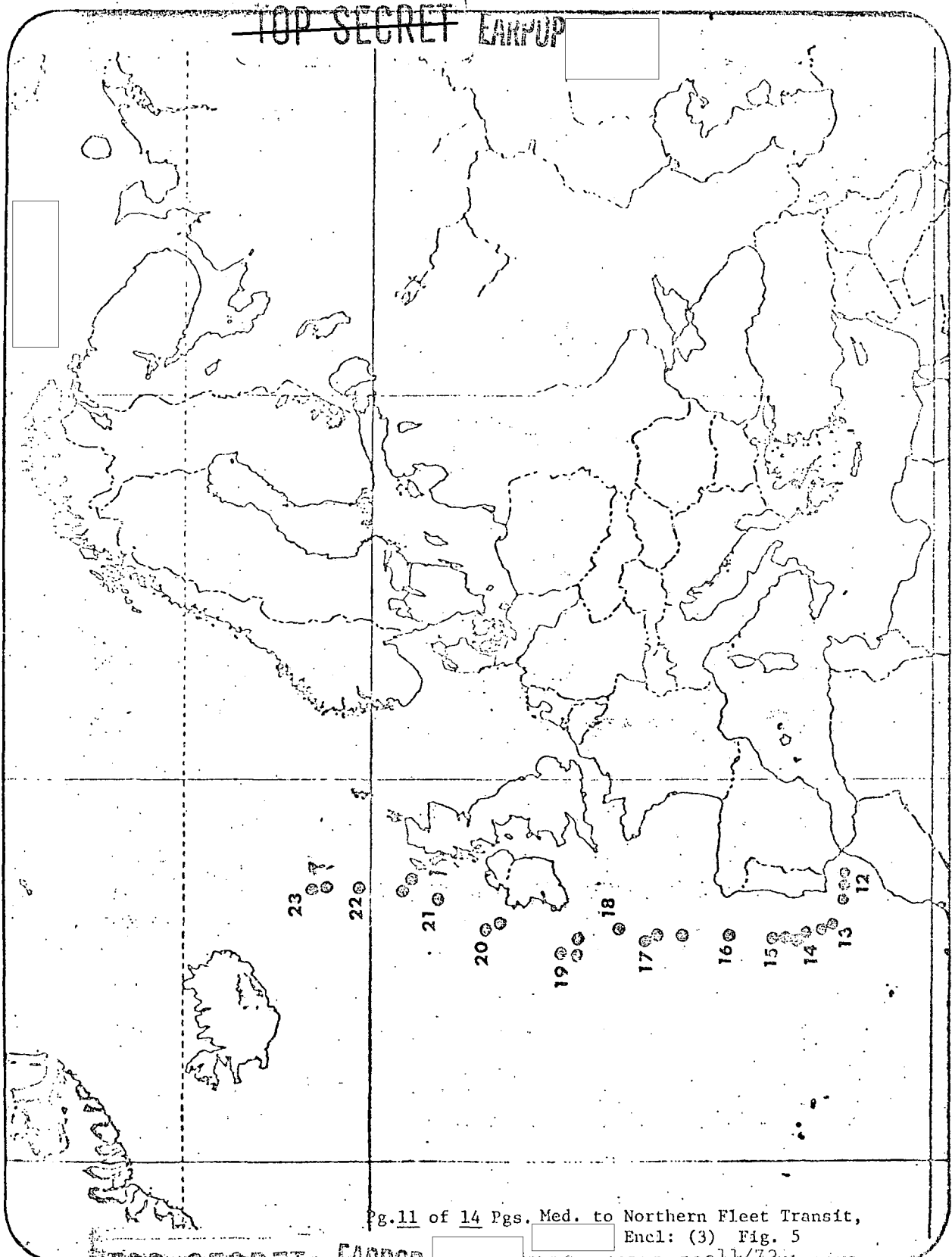
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Med. to Norwegian Sea, Baltic Sea  
Transit, [ ]

Encl: (3) Fig. 4

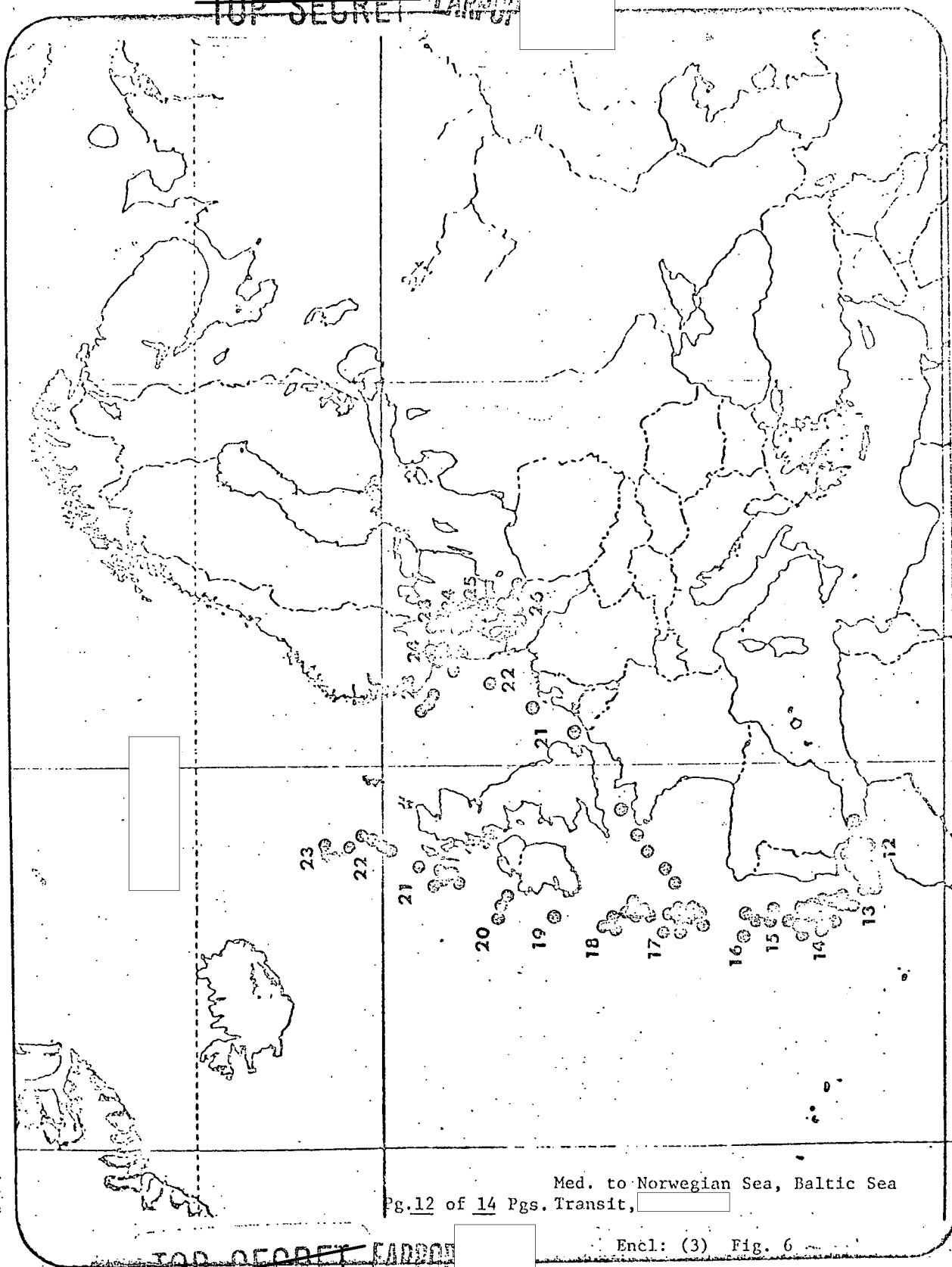
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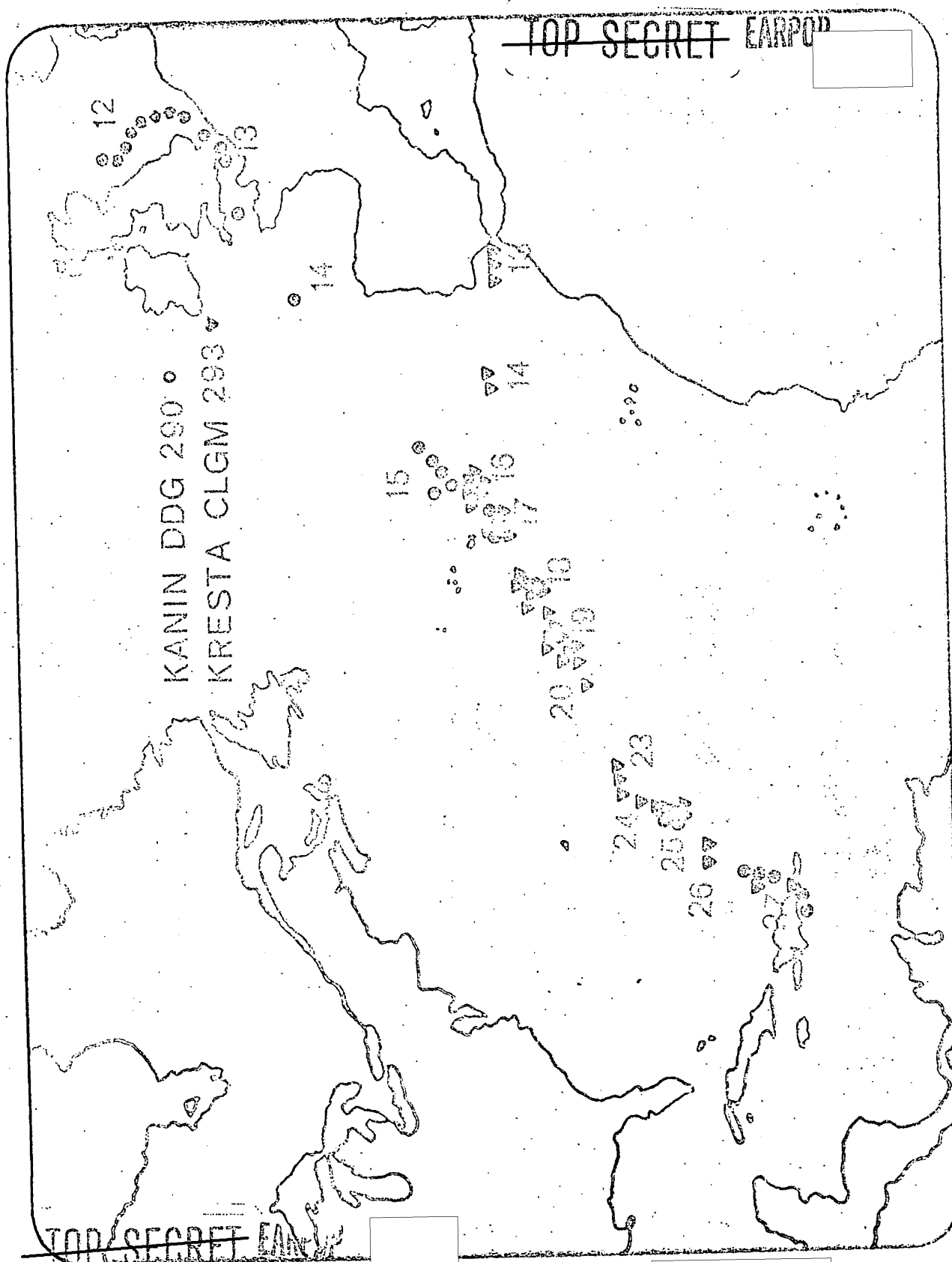
Med. to Norwegian Sea, Baltic Sea  
Pg. 12 of 14 Pgs. Transit,

Encl: (3) Fig. 6

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CUBAN TRANSIT,

Encl: (3) Fig. 7

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