[redacted] ex.

6 februari 1978

MARINE INLICHTINGENDIENST

INLICHTINGENRAPPORT

no. 11/77

DECEMBER 1977

OPMERKINGEN

1. Personeel van de Koninklijke Marine mag op "need to know"-basis kennis nemen van de in het inlichtingenrapport vermelde gegevens. Gezien de verscheidenheid van de artikelen bestaat tegen het lezen van het gehele rapport door officieren geen bezwaar.

2. Indien geadresseerden ten behoeve van de onder hun commando gestelde eenheden en/of opleidingen gebruik wensen te maken van gegevens die in dit rapport zijn vervat, dient met die gegevens de nodige voorzichtigheid te worden betracht.

3. In géén geval mag over de gegevens van dit rapport melding worden gemaakt tegenover niet-leden van de Nederlandse krijgsmacht.

4. In het geval dat in dit rapport vervatte gegevens door een geadresseerde zijn verwerkt in een cursus, waaraan tevens buitenlandse officieren deelnemen, dient terzake kontakt te worden opgenomen met hoofd MARID c.q. SOI-CZMNED.

5. De geadresseerden dienen slechts tien opeenvolgend gedateerde uitgaven aan te houden. Bij ontvangst van een elfde dient de oudste uitgave te worden vernietigd onder indiening van een proces-verbaal aan het hoofd MARID.

6. Indien geadresseerde één of meer uitgaven wenst aan te houden dient hij dat schriftelijk mede te delen aan het hoofd MARID.

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d/ HWO - 3/5'79 verm.	13
d/ MARAT [redacted] - 29/9'78 verm.	14
d/ MARAT [redacted] - 13/9'78 verm.	15
MARAT [redacted] - 4/9'79 verm. l.B.	16
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DGB/CKMARNS tevens t.b.v. C 1-AGGP en C W-INFCIE	18 t/m 20
d/ CZMNA d.t.v. SOI - 5/2'79 verm. d/ DGB/CKR 10/5'78 verm. cac. 18 d/ DGB/CKR 10/5'78 verm. cac. 19 d/ DGB/CKR 18/5'78 verm. cac. 20	21
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HWKC	83 t/a
BU INL	84 t/m ~~90~~ 94

d/ via DGB/CKMARNS 9/10'79 verm 23 t/m 43 en 45 t/m?

[redacted]

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EVALUATIE DER INLICHTINGEN

Bij het evalueren (graderen) van de waarde van de ontvangen inlichtingen stelt men de betrouwbaarheid van de bron vast en bepaalt vervolgens de waarschijnlijke juistheid van het bericht zelf.

Reliability of the source

A = completely reliable
B = usually reliable
C = fairly reliable
D = not usually reliable
E = unreliable
F = reliability cannot be judged.

Accuracy of the information

1 = confirmed by other sources
2 = probable true
3 = possible true
4 = doubtfully true
5 = improbable true
6 = truth cannot be judged.

[redacted]

[redacted]

HOOFDSTUK 1

DIVERSE ONDERWERPEN

THE SOVIET NAVY AND ITS DEMAND FOR OIL

1. [redacted] Much has been written in recent years on the menacing growth of the Soviet Navy and on the global expansion of Soviet seapower. The emphasis in the various discussions was naturally placed on describing several especially combat-effective types and classes of warships, and also on accentuating spectacular Soviet successes in the policy of establishing military bases.

2. [redacted] What was given less prominence, probably because it is not as impressive to the rank and file of readers, was the fact that the Soviets, with the logical development of their fleet of support ships, have produced the logistics component urgently needed for the operations of surface and underwater forces.

3. [redacted] Thus far the question has remained unanswered concerning how much supplies the Soviet Navy needs, especially how great their need for oil is and what basic requirements are given for supplying the fleet with fuel. This is all the more astonishing as the course of World War II showed most clearly how dependent seapower and warfare are on a sufficient supply of fuel and what a vital role this supply played in strategic planning and the course of military engagements. One need only remember the oil embargo that the United States inflicted against Japan in the summer of 1941 and which threatened to cripple the Japanese Navy, the Japanese invasion of the Dutch East Indies with the goal of capturing the oil fields there, and Germany's Russian offensive of 1942 which aimed at the occupation of the oil fields in the Caucasus.

4. [redacted] Lack of fuel ultimately caused the offensive of the German Afrikakorps to slacken and in the final years decisively limited the operational latitude of the Wehrmacht. In the battle of the Atlantic, allied tankers were the preferred targets of German submarines and the

[redacted]

[redacted]

[redacted]

"floating replenishment" of naval forces generally proved to be a problem of considerable importance.

5. [redacted] In all reflections concerning Soviet seapower it is probably tacitly assumed that the U.S.S.R., which has a wealth of raw materials, does not have any problem in any way with supplying its Navy with oil. After the oil shock of 1973 roused the Western industrial nations and demonstrated to them their dependence on the supply of oil, it has, nevertheless, become well worth the effort to also determine the oil needs of the Soviet Navy and simultaneously to study what the economic power behind the support capacity is.

6. [redacted] Of course there are no official data on the consumption of fuel oil and diesel-fuel oil by the Soviet Navy. However, it can be ascertained by a rough estimate in which it is assumed that a third of all the units are constantly at sea and proceeding at cruising speed. The interval - possibly spent at anchor on limited operational standby and thus involving less consumption, as well as the demand of ships lying in harbor - should not be taken into account. On the basis of decreased engine output necessary for cruising speed, this estimate yields a daily requirement of 10.000-15.000 tons of combustible or engine fuel.

7. [redacted] This considerable amount corresponds approximately to the carrying capacity of a rather large replenishment oiler of the BORIS CHILIKIN Class.

8. [redacted] The oiler fleet available to the Soviet naval forces for replenishment at sea or in port has a total carrying capacity of about 270.000 tons. This is, in fact, a considerable floating supply capacity which only non-military tankers approach, when required.

9. [redacted] No doubt the Navy command has also constructed large fuel depots as strategic reserves. The established daily consumption, expressed in terms of a year, amount to a requirement of from 4 to 5 million tons. At first glance this seems likes an enormous amount but actually constitutes only one percent of the total Soviet consumption, as the following statements should show.

[redacted]

10. [redacted]. If other large consumers are added in, for example, the merchant and fishing fleets, which comprise almost 20 million GRT, the other services, air ground transport, and expanding industry - the chemical industry alone has an annual requirement of 12 million tons - then it becomes clear what vast quantities of oil the Soviet Union itself requires.

11. [redacted] The next section should treat how it meets this need and to what extent it can then assume export commitments.

Petroleum Output in the Soviet Union

12. [redacted] Centuries ago Russia was already in the fortunate position of having petroleum deposits in the Baku region. The development of these oil fields was at first severely impaired by the Bolshevik October Revolution; after relations were stabilized however it was intensively pushed by the Soviet government.

13. [redacted]. New oil fields were discovered and exploited, so that, especially after World War II, total output managed to increase sharply. Figure 1 (blz. 4) shows this development since 1950 and the scheduling for 1980.

14. [redacted]. In the meantime, the Soviet Union has taken first place among the oil-producing countries, ahead of the United States. Annual capacity is in the neighborhood of 500 million tons; by 1980 the proud figure of 600-620 million tons is to be attained.

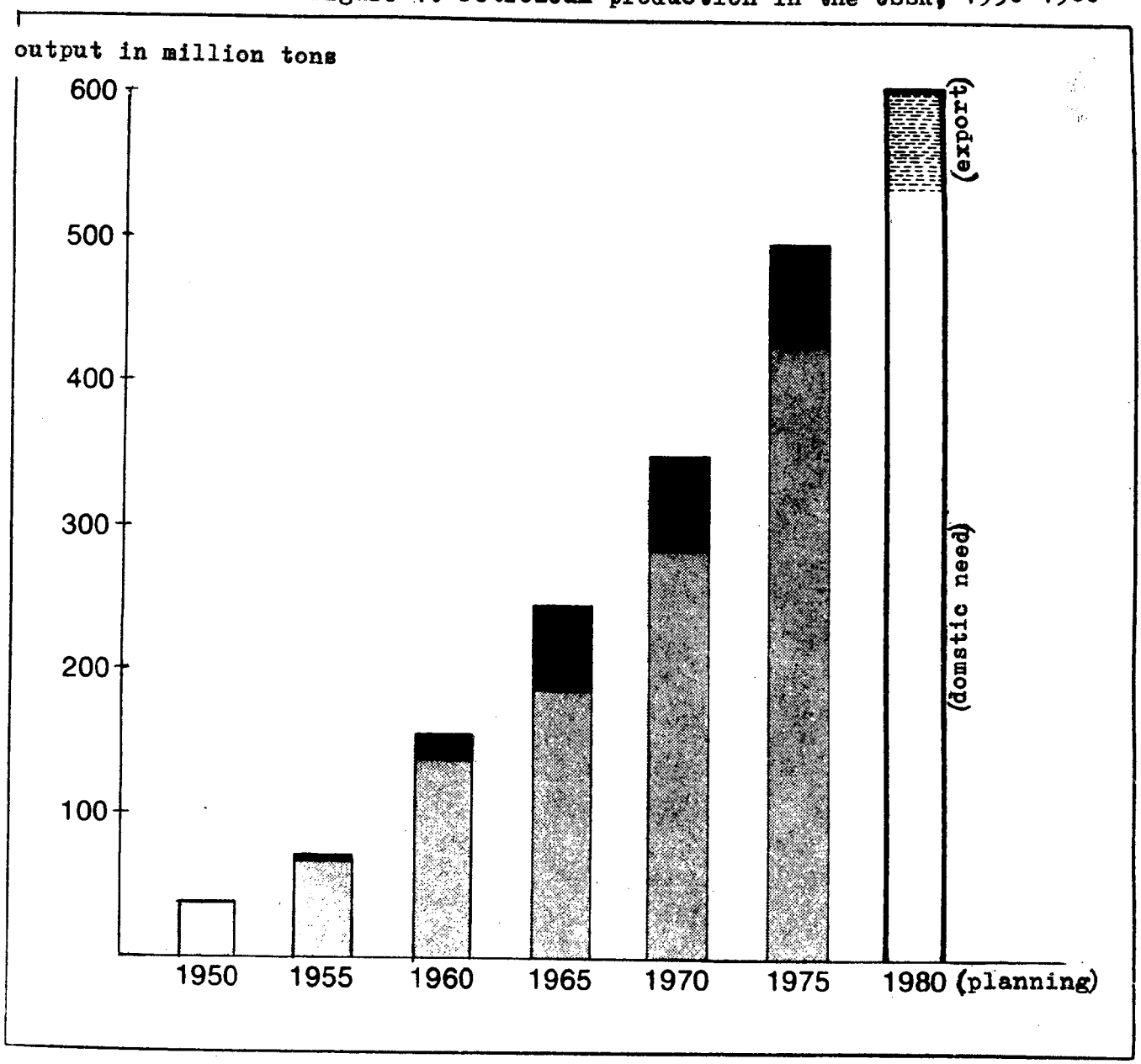
15. [redacted]. However, in addition to a constantly increasing domestic need, the requirements of the CMEA countries must also be met which, with the exception of Romania, have no oil deposits of their own worth mentioning and procure from 90 to 100 percent of their oil imports from the Soviet Union.

16. [redacted]. The volume of exports which can be set aside annually and supplied to the satellites in quantity amounts to approximately 70 million tons.

17. [redacted]. Western experts have alertly recorded the fact that the growth rate of Soviet petroleum production in 1976 only came to 4 percent.

[redacted]

figure 1. Petroleum production in the USSR, 1950-1980



From this, one may infer that while domestic requirements are becoming greater and greater, petroleum production is increasing somewhat more slowly, and boosts in exports will not be possible. This is indicated by the fact that the Soviet government could not make a firm promise to the Japanese concerning the annual supply of 25 million tons of oil for Japanese cooperation during the pipeline construction in Siberia.

18. [redacted]. Perhaps the Soviet Union in the future will only be able to meet up to 2/3 of the needs of the CMEA countries. These countries will have to be on the lookout, therefore, for other import possiblities. Even the Soviet Union previously has obtained negligible amounts of oil from the countries of the Middle East. For this reason the Arab World is also likely to play an important role in the policy of the Soviet bloc.

Russian Petroleum Production Areas and Pipeline Hookups

19. [redacted]. Russian petroleum deposits are concentrated essentially in the following areas:

a. The Area Around the Caspian Sea. This includes, on the west bank, the oil fields in the Republic of Azerbaydzhan, especially the Baku region. On the east bank of the Caspian Sea the Mangyshlak and the Cheleken fields must be mentioned. The Caspian Sea itself is gradually being covered by oil derricks; its underwater oil deposits are being tapped with the help of modern offshore technology. The Red Barricade Shipbuilding Yard in Astrakhan specialized in the construction of drilling platforms which can be emplaced in water to a depth of 60 m and can drill down to a depth of 6000 m. Finally, the Hamburg Blohm + Voss Shipyard received two contracts for the oil production in the Caspian Sea. It will deliver a floating crane of 2500 m lifting capacity and will construct a plant for steel construction. A Norwegian shipbuilding yard will construct replenishment ships for the offshore installations.

b. The Volga-Ural Area. It ranges approximately between Volgograd (the former Stalingrad) and Perm and was first exploited in the 1930s. Because of its importance it was also called the "Second Baku"; in fact, however, it has already far exceeded the old Baku district in capacity.

[redacted]

c. The Tyumen' Area. This is looked upon as the most important production area for the future and is also designated as the "Third Baku" and, for all that, eclipses all other areas with its petroleum reserves. Not having come on stream until the mid-sixties, the West Siberian oil region around Tyumen', Shaim, and Surgut has, in the interim (1975), attained an output of 148 million tons. The yield is to be increased to 270 million tons by 1980; that is to say that 45 percent of the entire Russian petroleum production is to come from West Siberia. Until that time, however, huge capital expenditures will still be required, inter alia, in pipeline construction. All projects in the West Siberia oil region have been proclaimed with a great display of advertising and represent a first-class status symbol.

d. The oil fields on the island of Sakhalin are also worth mentioning as the only deposits in the eastern part of the colossal empire.

20. [redacted]. At this point the petroleum-processing industry, whose refineries likewise established themselves around the discovery sites and the large overcrowded industrial regions will not be adressed.

21. [redacted]. We should rather take a closer look at the pipeline system as the most important means of transport for crude oil and petroleum products. Figure 2 (blz. 7) also reflects the development of the most important oil pipelines to the extent that information could be obtained from prevailing, partly contradictory publications and special maps.

22. [redacted]. The simplified presentation reveals that Tuymazy is the junction of the immense pipeline system, whose total length was given as 45.000 km (1966).

23. [redacted]. The best known section is the CMEA Pipeline (Russian: Nefteprovod DRUZHBA; FRIENDSHIP Pipeline) with a length of 4300 km. In Byelorussia it forks into a southern track which leads to Hungary and into a northern track with Rostock as the terminus. This pipeline chiefly supplies the CMEA countries.

[redacted]

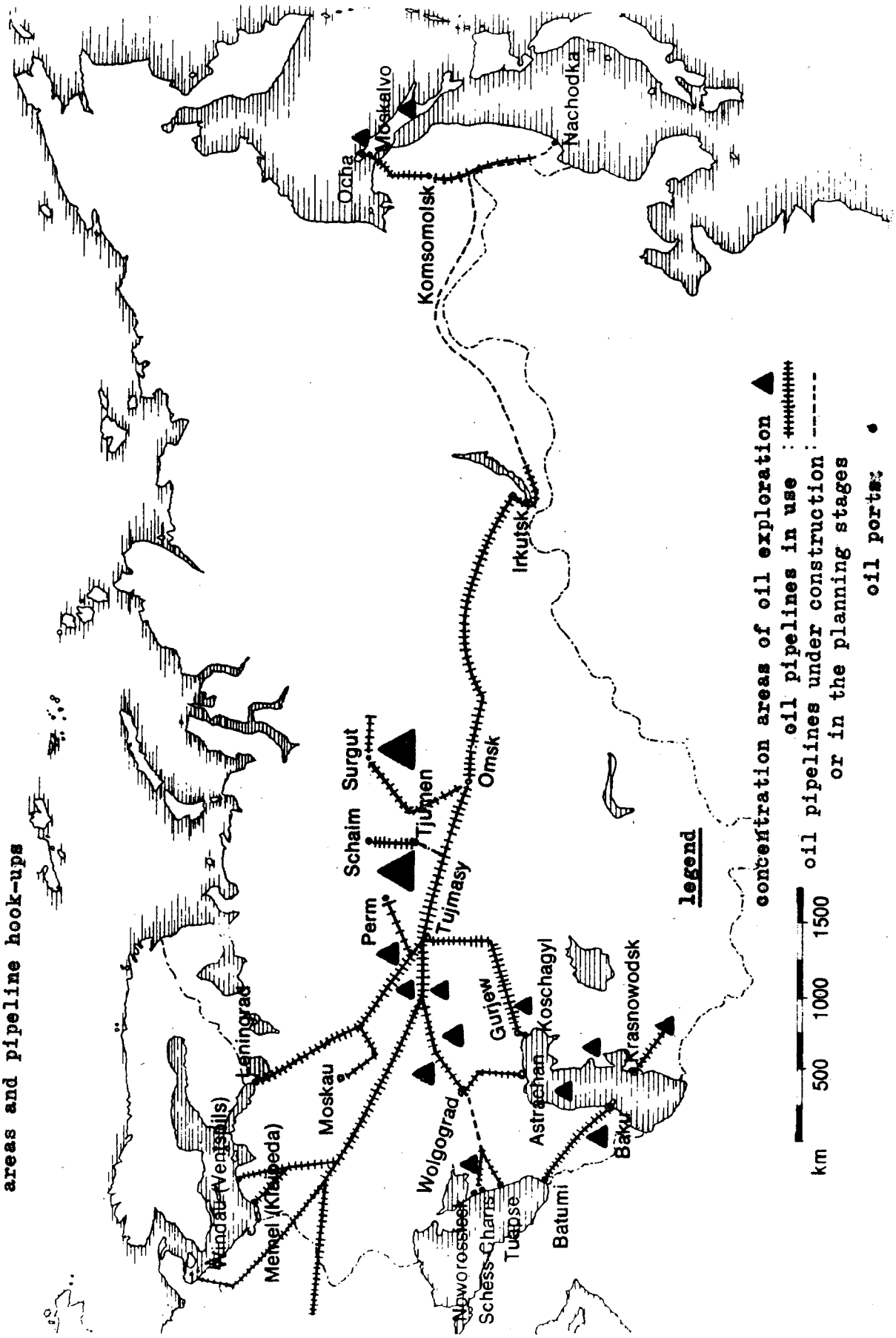


figure 2. Soviet Petroleum production areas and pipeline hook-ups

24. [redacted]. The most important Soviet ports in the Baltic and the Black and Caspian Seas also meet with the entire Russian pipeline system or will be linked up in the near future. However the through connection to the Far East is still wanting. The technical problems appear considerable and cannot be overcome without Japanese assistance. According to press reports, however, discussions with Japanese companies are presently not making any headway. What is also interesting is the fact that on a section of the Siberian pipeline British pumping stations having Rolls-Royce gas-turbine propulsion are to be used.

25. [redacted]. The most important oil ports are Ventspils in the Baltic, Novorossiysk on the Black Sea with the adjacent Shess-Charis under construction, and in the Pacific Moskalvo on the island of Sakhalin. Nakhodka, which was enlarged into the most important port in the Far East, for example, as a transshipment site for container service, will presumably also become an oil port after the completion of the trans-Siberian pipeline.

26. [redacted]. There is no pipeline to the Arctic Ocean, and none of the ports there can be looked upon as a port of trans-shipment for crude oil or petroleum products.

Soviet Tanker Shipping

27. [redacted]. Next to the pipeline system, Soviet tanker shipping must be cited as an important means of oil transport. According to official data on 1 January 1977 it comprised 443 ships totalling 3976 million GRT. From this figure a very small average size for the tankers could be inferred, which in this respect is misleading as the Soviet Union has a large number of small tankers for employment along the coast. In fact most of the seagoing ships have a carrying capacity between 20.000 and 50.000 tons.

28. [redacted]. The Soviet Union does not have any supertankers at all, as such. Thus the State shipping companies do not have the problems which have accrued in Western shipping concerns, since the great tanker boom ended. On the contrary, it was not until quite late that Russian shipbuilders tackled the construction of a series of ships which, at 150.000 DWT are, to be sure, not super-tankers according to Western or Japanese standards, but which are designated as such in the Soviet Union.

[redacted]

29. [redacted]. The first ship, the KRYM, was put into service in 1974; the KUBAN followed in 1976; and this year the third tanker of the series, the KUZBASS, is to be delivered. Plans for the construction of a series of 300.000-ton tankers which were announced earlier in the technical press are no longer mentioned in more recent publications and probably have been quietly dropped.

30. [redacted]. There are various reasons why the Soviets have not participated in the race for the construction of ever larger supertankers. For one thing their tanker fleet seems to have been conceived more for their own needs and less for export and international competition in tanker shipping. The bulk of export oil (about 50 million tons per year) flows through the DRUZHBA pipeline to the CMEA countries.

31. [redacted]. The following example, therefore, may illustrate what the situation is like with respect to exports to western countries, by ship: In Wilhelmshaven, the most important oil import harbor in West Germany, about 25 million tons of oil are unloaded annually. The Soviet share of it amounts to a scant 10 percent.

32. [redacted]. The Soviets obviously do not discern any great prospects in international oil transport. They have rather initiated a competition, ruinous for the West, in general cargo shipping and are seriously harming other seafaring countries with extremely low cargo rates.

33. [redacted]. This is substantiated by the fact that the Soviet fleet of general cargo ships increased by about 65 percent in the past 10 years. The tanker fleet, on the other hand, registered a tonnage increase of "only" 35 percent.

34. [redacted]. For another thing Soviet tanker operation must be viewed from the aspect of their military applicability. In addition to the already considerable number of fleet oilers, non-military tankers can also be enlisted to supply warships with fuel oil. Several tankers are intended, from the beginning, to be replenishment ships for fishing fleets and can be just as well employed as fuel replenishment ships for warships. From this point of view it is ultimately more advantageous to have a large number of medium-size military employable ships than some few supertankers

which, admittedly, can be operated economically in peacetime but are nevertheless useless for Navy purposes.

35. [redacted]. Finally, one other, probably the crucial, reason: Supertankers are neither suitable for service in the Baltic nor can they transit the Dardanelles and the Bosporus when they are loaded. Therefore, they cannot put in at the most important Russian oil ports. Ships of 150.000 DWT thereby represent the maximum employable size.

Summary and Outlook

36. [redacted]. There is probably no reason for the Soviet naval command to view the future with alarm with respect to the fuel replenishment of the Navy. The logistics requirements, all told, are far more favorable than for the naval forces of NATO.

37. [redacted]. For the Soviet Union as an oil power, however, all in all, future development in the energy sector is by no means problem-free. In any event, the Soviets are doing everything possible to guarantee their energy supply. That includes primarily the development of enormous natural gas reserves, especially in Siberia.

38. [redacted]. In Siberia also, and in Tadzhikistan as well, additional water power can be utilized.

39. [redacted]. The construction of nuclear powerplants is still in the initial stage. Nuclear power for ship's propulsion has thus far been employed only on submarines and icebreakers.

40. [redacted]. Probably no one is able to say how long the petroleum reserves of the U.S.S.R. will last. In this connection the demand is increasing steadily, while no noticeable relief has yet come about in the form of other energy sources.

41. [redacted]. Alongside the expanding economy there is the population of civilian consumers which has an enormous backlog in

the supplying of consumer goods and which lately is believed to be enjoying increased seasonal transport.

42. [redacted]. The report that the Soviet Union will possibly have to curtail its oil exports gives pause for thought. That means that the Soviet bloc must take a special interest in the friendship of the Arab members of OPEC.

43. [redacted]. A failing in the development of the Soviet petroleum industry is the fact that it will not function without Western or Japanese know-how. The past year in Bremen alone steel pipe having a diameter of 1.42 m and a total weight of almost 150.000 tons was shipped to the U.S.S.R. This example very clearly demonstrates how strongly the industrial and oil might of the Soviet Union still depends on the West.

RECENTE INFORMATIE MET BETREKKING TOT DE ELEKTRONISCHE DREIGING (Periode 13 september - 8 december 1977)

44. [redacted]. Nieuwe infrarood-versie van de AA-2 (ATOLL)

Een nieuwe infrarood (IR) variant van het AA-2 (ATOLL) air-to-air missile is waargenomen op de FLOGGER-BRAVO. Voorlopig zijn de volgende karakteristieken vastgesteld:

a. dark missile head;
b. slightly larger forward fins;
c. cooled detector which should improve detection sensitivity and lock-on-range.

Commentaar:

45. [redacted]. De verwachting is reeds uitgesproken dat deze variant ook zal worden aangebracht op andere vliegtuigen o.a. van de taktische luchtstrijdkrachten en mogelijk op vliegtuigen welke een dreiging voor de KM vormen (FORGER ?).

46. [redacted]. Nieuw type ELINT Ocean Reconnaissance Satellites:

In het onderstaand overzicht betreffende Sovjet militaire ruimtevaartaktiviteiten, wordt melding gemaakt van een nieuw type ELINT satelliet, de "Electronic Ocean Reconnaissance Satellite" (EORSAT). Deze satelliet is in staat om verzamelde ELINT-informatie en peilgegevens rechtstreeks aan de gebruikers (schepen) door te geven.

a. Soviet military space delivery.
On the 8th of September 1977 there were 84 Soviet satellites in orbit around the earth which had a full or partial operational military mission. The types of satellites in orbit are listed below with some brief details of their probable roles.

b. Photographic Reconnaissance Satellites.
There are two basic types of Soviet photographic reconnaissance (PR) satellites, the high resolution PR (HRPR) and the medium resolution PR (MRPR). The MRPR is used for ground search and mapping of large areas and the HRPR's role is to obtain more detailed information on selected targets. Normally these PR satellites have a mission length of 12-13 days after which the vehicle, complete with film, is recovered. However, they can be brought down to earth earlier than this if the military of political situation so dictates. A later development is the ability to eject film capsules back to earth, this allows the PR satellite to provide frequent and timely photographic

intelligence while remaining in orbit longer than the normal. In recent times about 35 PR satellites have been launched each year. Currently there are 3 PR satellites in orbit.

c. Electronic Intelligence Satellites.
The electronic intelligence (ELINT) satellites mainly collect intelligence on medium to high powered radars for the maintenance of order of battle of emitters, and detection of major changes in technical characteristics or introduction of new types of equipment. ELINT satellites can also provide information on the movements of ships at sea unless a high degree of emission control is enforced. Collected data is stored and transmitted to ground stations in the USSR once or twice daily and generally there are enough satellites in orbit at an approximate height of 500 km to expose any point on the earth's surface to an ELINT satellite at least 20 times a day. Early generations of ELINTs have a limited, poor capability to locate emitters, but the latest type probably has a direction-finding facility which will enable more accurate location. There are 8 ELINT satellites currently in orbit and active.

d. ELINT Ocean Reconnaissance Satellites.
The ELINT ocean reconnaissance satellite (EORSAT) is a new type of vehicle under development which may become operational in the near future. It consists of the latest type of "direction-finding" ELINT with a potential capability to pass collected data directly to users. It would be of most benefit to Soviet naval forces, particularly if used in a complementary role with the radar ocean reconnaissance satellite (see below). There is probably one EORSAT currently in orbit.

e. Radar Ocean Reconnaissance Satellites
Radar ocean reconnaissance satellites (RORSAT) are in the operational evaluation stage; only one or two are launched each year.
RORSATs operate at heights of about 270 km and can probably detect medium to large ships in up to moderate sea states. Collected data can probably be transmitted directly to suitably equipped Soviet ships at sea. Positive identification of located ships by a RORSAT alone will be difficult to establish without the use of collateral information from ELINT satellites, aircraft or ships, and it is likely that on operational missions the RORSAT and EORSAT will be used to complement each other.

f. Communications Satellites.
Communications satellites operate in three basic orbital patterns:

(1) In an equatorial, geo-synchronous orbit the satellite is stationary, relative to the earth, some 40.000 km over a point on the equator. This orbit provides an instantaneous relay station between transmitter and receiver.

(2) A semi-synchronous orbit is a highly eccentric, elliptical orbit (perigee - 500 km, apogee - 40.000 km) during which the satellite appears to hover over an area on the earth's surface for about 7 hours during its 12-hour orbit; this type of orbit is also used for the immediate relay of signals between stations.

(3) When a near-earth orbit is used the satellite stores messages received and transmits them when within range of the recipient.

Communications satellites handle commercial and military traffic. There are about 45 currently in orbit.

g. Navigation satellites.
Navigation satellites probably give valuable military support to the Soviet Navy. There are 12 in orbit.

h. Geodetic Satellites.
Geodetic satellites are used to refine geographical data. There is one in orbit.

i. Meteorological Satellites.
Meteorological satellites provide weather information on a global basis. There are 5 in orbit.

j. Radar Calibration Satellites.
Radar calibration satellites are probably used to calibrate and test radars associated with the ABM defence system around Moscow. There are 6 in orbit.

k. Missile Launch Detection Satellites.
Missile launch detection satellites are apparently being developed by the Soviets to detect the launch of strategic missiles. It is believed there are 3 in orbit.

l. Outlook
There is a continuous replacement of satellites which have become inactive. In addition the Russians are increasing the numbers in space to provide more comprehensive networks of various systems. It is assessed that activity in the Soviet military space programme has not reached its peak.

47. [redacted]. Nieuwe VHF - data link antenna:

Recente foto-analyses tonen aan dat de HORMONE-ALFA helikopter is uitgerust met een nieuwe "sword-type" antenne. Deze antenne werd voor het eerst gezien, in een waarschijnlijk ingetrokken toestand, op een HORMONE-ALFA aan boord van een KASHIN (DDG). Vervolgens werd deze antenne in 1975 op HORMONE-ALFA helikopters aan boord van andere eenheden waargenomen. In 1976 werden 3 HORMONE-ALFA helikopters aan boord van de KIEV en 1 HORMONE-ALFA aan boord van een KARA-klasse - met dezelfde antenne uitgerust - gefotografeerd. Aangenomen wordt dat de verdere "fitting-out" voortgang vindt.

Technische gegevens:

a. type : a 67 cm sword antenna installed on a cylindrical mounting 14 cm high and 18 cm diameter, located aft of the engine cowling.

b. function : the antenna is assessed to be used in a VHF datalink, VHF datalink signals have been previously associated with HORMONE-ALFA, but up to now no dedicated antenna had been firmly identified with this helo.

c. comment : a VHF datalink could provide search vectors to the HORMONE-ALFA, as well as tactical control data from the HORMONE to the host ship.

48. [redacted]. COB WEB intercept antenna:

In februari 1977 werd aan boord van de MAYAK-klasse AGI GS-242 (Oostzee eenheid) een grote parabolische reflector gefotografeerd. Inmiddels is hieraan de naam COB WEB toegekend. Foto analyse en technische analyse van de "conical feed" leveren de volgende informatie:

a. nickname : COB WEB

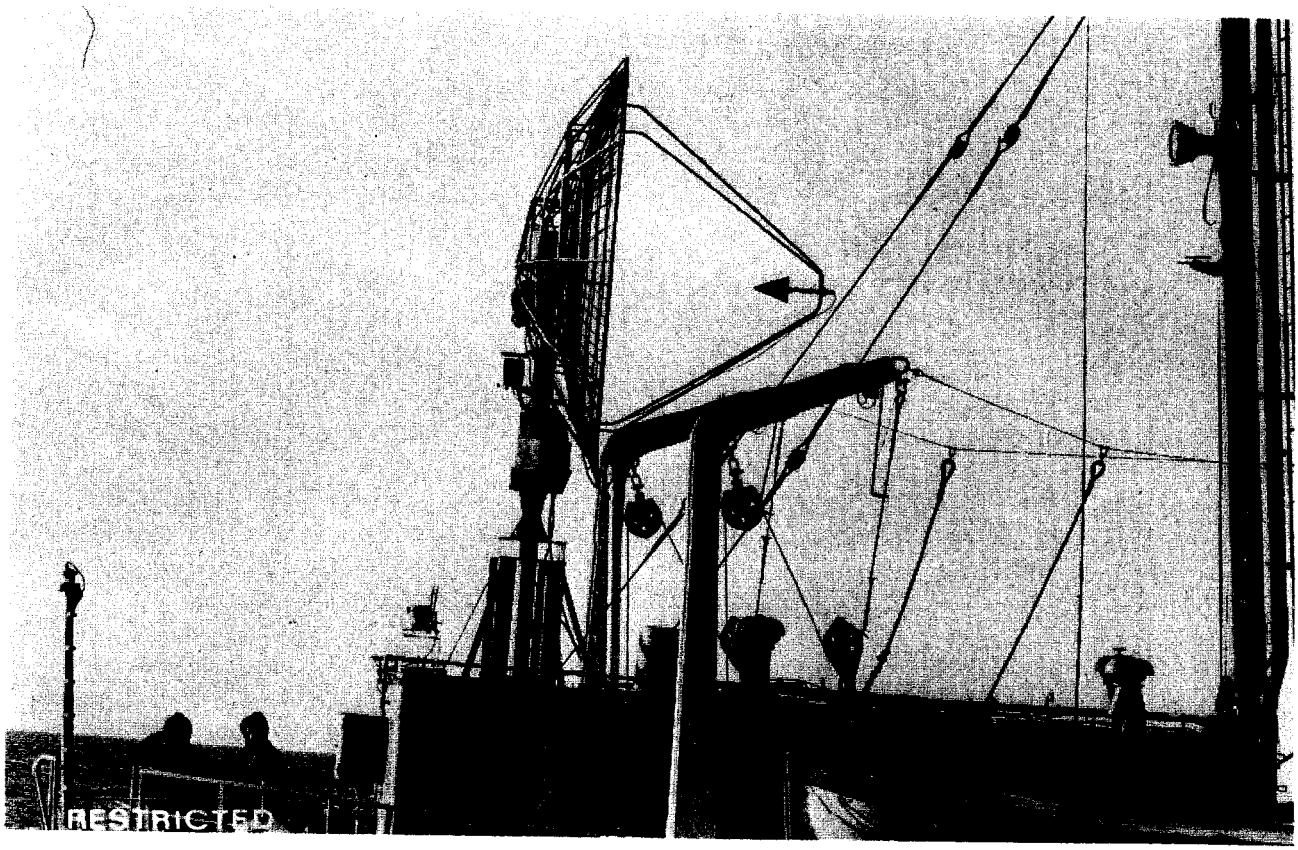
b. function : intercept of telemetry and microwave communications

c. description : type: parabolic mesh reflector with a cone shaped feed
size: 3,5 m diameter

d. frequency : 1 - 5 Ghz

e. fit : some MAYAK- and MOMA-class AGI's

[redacted]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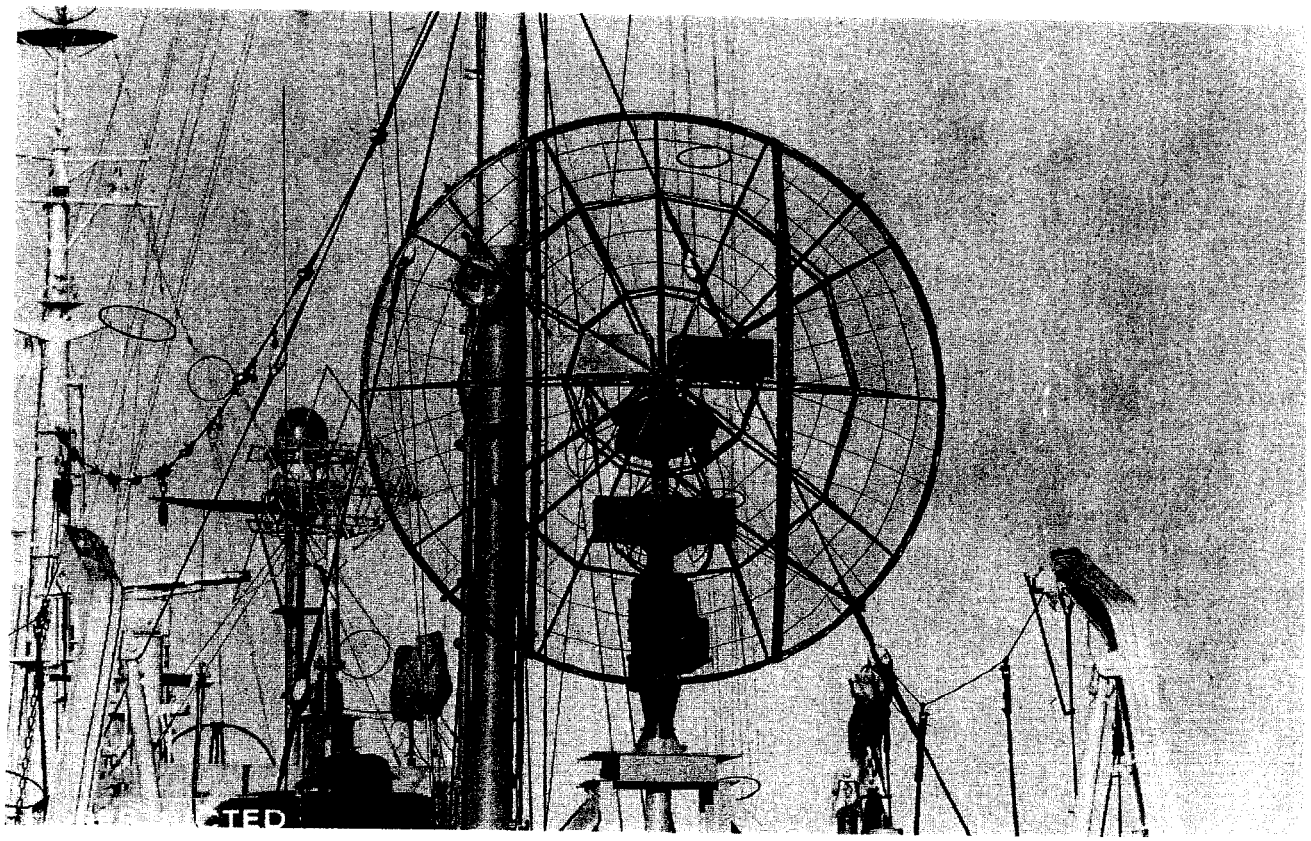

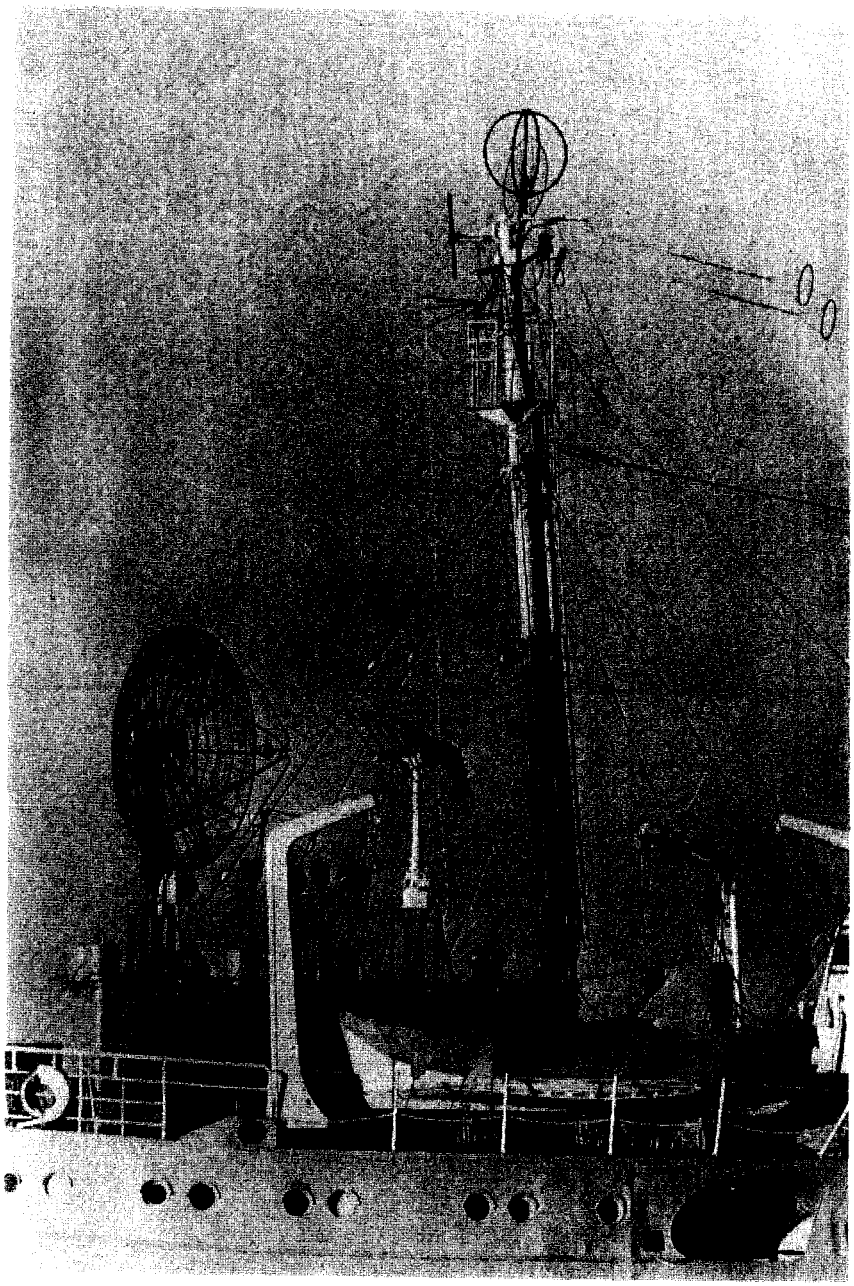

49. [redacted]. Her-evaluatie scheeps- ECM systemen:

Soviet shipborne jamming capabilities estimates.
A recent review of limited evidence accumulated from two poor quality photographs and a single distant observation of Soviet electronic warfare (EW) system antenna configurations, with radomes removed, indicates that the Soviets may be using horns as radiating and receiving elements.

50. [redacted]. Estimated EW-system performance is:

a. Noise Jammers

SYSTEM	BAND (GHZ)	EFFECTIVE RADIATED POWER (ERP) (KW)
BELL SLAM	2-4	110
BELL SLAM	4-6	176
BELL TAP	6-8	80
BELL TAP	8-12	126
RUM TUB	4-6, 6-8	355
RUM TUB	8-12	200
RUM TUB	12-18	100

(The RUM TUB estimate shows a net increase due to the re-estimate of band divisions rather than antenna change. A decrease to 100 KW for upper RF limit ERP reflects lower available tube powers at the J-band).

b. Deceptive Jammers

SYSTEM	BAND (GHZ)	PEAK ERP (KW)
BELL NEST	8-12	631
BELL NEST (VARIANT)	8-12	200

(Using probable slotted array in place of a horn array for BELL NEST (VARIANT).

c. Comment:

Parabolic antenna elements were previously estimated for these EW-systems but no actual observations existed for confirmation. The use of horn antennas in place of parabolic antennas in ESM/ECM-equipment is assessed as applying to equipment operating above 2 GHZ since horns are not compatible with these systems at lower frequencies. The net effect of this estimate is to revise the capabilities of ESM/ECM-equipment by a small lowering of the antenna gains. Due to this gain reduction, the transmitting systems must then be assigned a lower ERP. The Soviets may have chosen horn antennas for improved sidelobe supression, but the more likely reason would be more extensive Soviet experience in their use in EW.

[redacted]

51. [redacted]. Overzicht ECM-dreiging voor de KM:

a. Naar aanleiding van de in het voorgaande artikel vermelde her-evaluatie van de "Effective radiated powers" van Sovjet scheepsjammers en n.a.v. de tot op heden aanwezige achtergrondinformatie, is een nieuw overzicht van de ECM-dreiging opgesteld.

b. Deze opgave geeft een beeld van de ECM-apparatuur aan boord van de belangrijkste eenheden van de Sovjet vloot en de haar ondersteunende vliegtuigen. In verband met mogelijke "interfleet-transfers" zijn noodzakelijkerwijs zowel eenheden van de Noordelijke- en Baltische Vloot als van de Zwarte Zee Vloot opgenomen. Bij operaties op de Atlantische Oceaan kan derhalve een "random"-selektie hieruit als dreiging worden ontmoet.

c. Een beeld van de toekomstige EW-dreiging is onder het hoofd "General Soviet EW-threat assessment through the 1980's" opgenomen. De huidige ECM-dreiging is vervat in de artikelen "Shipborne ECM" en "Airborne ECM".

d. Het wordt niet uitgesloten geacht dat de in overzichten opgenomen ERP van vliegtuigjammers met een faktor 2 moeten worden verhoogd.

52. [redacted]. General Soviet EW threat assessment through the 1980's:

a. Intercept systems (all frequencies), computer aided for identification/selection of targets.

b. Disruption and deception of command and control systems.

c. Jammers against all types of radars and certain types of communications systems.

d. Rapid blooming chaff (large quantities).

e. Countermeasures against electro-optical/infrared systems and electronic systems.

f. Fourth generation ELINT satellites with a DF accuracy of approx. 5-25 NM (est.).

g. Radar Ocean Reconnaissance Satellites giving data for targetting anti-ship missiles with an accuracy of approx. 1-2 NM (est.).

53. [redacted]. Shipborne ECM:

a. The Soviet navy is believed to be the world's best equipped navy in terms of ESM and ECM equipments. The newer ships have as many as eight separate jamming systems and have the indications of a fully coördinated EW-package.

b. A fitting list of shipborne ECM-equipment performing the present shipborne ECM-threat is summarized in the following table (blz. 20).

[redacted]

FREQUENCY (MHZ)	EQUIPMENT	TYPE	ERP (KW)	BANDWIDTH (MHZ)(EST.)	KIEV	MOSKVA	KRESTA-1	KRESTA-2	KYNDA	SVERDLOV	SAM-SVERDLOV	KARA	KRIVAK-1	KRIVAK-2	KASHIN	MOD-KASHIN	KANIN	NANUCHKA	PRIMORYE-AGI	N.ZUBOV-AGI	YEAR DEPLOYED
200- 2000	BELL CLOUT	noise	15	0.5-100		X	X	X	X			X							X	X	1967
1000- 8000	BELL SQUAT	decept.	-	-									X	X		X					1969
1000-18000	SIDE GLOBE	decept.	140	-	X	X	X	X				X									1967
2000- 4000	BELL SLAM	noise	110	0.5-100		X	X	X	X			X			X	X	X		X	X	1967
4000- 6000	BELL SLAM	noise	176	0.5-100		X	X	X	X			X			X	X	X		X	X	1967
4000- 7000	TOP HAT-B	noise	4.5	2-80					X	X					X		X				1956
4000- 8000	RUM TUB	noise	355	-	X							X									1976
6000- 8000	BELL TAP	noise	80	5-110 (25 observ.)		X	X	X	X			X					X	X	X	X	1967
7000-11000	TOP HAT-A	noise	5.3	2-100					X	X	X				X		X				1956
7000-11500	BELL STRIKE	-	-	-	X		X		X												?
8000-12000	BELL NEST	decept.	631	-														X			1969
8000-12000	BELL TAP	noise	126	5-110 (25 observ.)		X	X	X	X			X					X	X	X	X	1967
8000-12000	RUM TUB	noise	200	-	X							X									1976
8000-15000	BELL SHROUD	decept.	124.5	-									X	X		X					1969
12000-18000	RUM TUB	noise	100	-	X							X									1976

NOTE: The older type TOP HAT-A and TOP HAT-B being replaced by BELL SQUAT and BELL SHROUD (on MOD-KASHIN)

54. [redacted] Shipborne Chaff:

Operational evidence has firmly established a Soviet shipboard chaff capability. Incidents have included apparent chaff rocket launchings from combatants and AGI's.
It is estimated that Soviet shipboard chaff is the same as standard chaff materials dispersed from Soviet aircraft.
The following classes of surface units are fitted with chaff-launchers:
KIEV, MOSKVA, KRIVAK-1, KRIVAK-2, KARA, KRESTA-1, KRESTA-2, MOD KASHIN, NANUCHKA.

55. [redacted] Airborne ECM:

a. The Soviets appear to place heavy emphasis upon ECM as a penetration aid for their aircraft.
ECM support aircraft are preceding the strike force by several minutes and commence jamming and chaff dispensing against early warning radars, then enter a stand-off jamming orbit. The chaff trails are up to 500 kilometers in length. The trailing strike force, often conducting electronic jamming flies through the chaff trails and performs a series of air-to-surface missile launches against naval targets.

b. A fitting list of airborne ECM-equipment performing the present airborne ECM-threat is summarized in the following table (blz. 22).

56. [redacted] Airborne Chaff:

a. Various methods for dispensing chaff have been developed by the Soviets. Because of the brittleness of glass fiber chaff, it is probable that this material would be pre-packaged and dispensed in bundles. Aluminium foil chaff is cut as it is dispensed. The Soviets have developed an automatic chaff cutter and dispenser which is controlled and activiated by passive detection equipment.

b. The following aircraft types are all fitted with chaff dispensers; BACKFIRE, BADGERS, BLINDERS, BEARS, CUB-C/D, BISONS, BEAGLE.

FREQUENTIE (MHZ)	EQUIPMENT	TYPE	ERP (KW)	BANDWIDTH (MHZ)(EST.)	BACKFIRE	BADGER-A/D	BADGER-C	BADGER-G	BADGER-F	BADGER-H	BADGER-J	BADGER-K	BLINDER-A	BLINDER-B	BLINDER-C	BEAR-A	BEAR-B	BEAR-C	BISON	BEAGLE	CUB-C	CUB-D	YEAR DEPLOYED
122- 235	CHIP THORN	noise	1.8	3-45		X	X	X	X	X			X				X	X	X	X	X	X	1969
150- 1000	SPS-1	noise	0.3	3-8					X											X			± 1960
300-10000	AMG-24	noise	12	-																X			1960
790- 1000	AIRB. JAM.-6	noise	-	4-30		X				X	X		X							X	X	X	1971
900- 1560	AIRB. JAM.-7	noise	9	10-340	X	X				X	X		X	X			X	X	X		X	X	1971
1400- 2400	AIRB. JAM.-8	noise	6	3-120	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X	X	1971
2000- 3150	SPS-2	noise	2.4	5-15					X											X			± 1964/65
2100- 3350	AIRB. JAM.-10	noise	6	100	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X	X	1970
2300- 4500	AIRB. JAM.-3	noise	2.4	2-60		X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	1969
2690- 2770	AIRB. JAM.-17	decept.	-	-						X	X								X	X			± 1970
3050- 4500	AIRB. JAM.-11	noise	-	100	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	1972
4300- 5200	AIRB. JAM.-22	noise	-	100	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X	X	1976
4900- 5400	AIRB. JAM.-1	noise	-	6-20						X	X								X	X	X		1970
5000- 7000	AIRB. JAM.-21	-	2.5	-							X												1972
8420-10110	AIRB. JAM.-5	noise	6	5-70		X				X	X		X							X	X	X	1970
9120- 9600	AIRB. JAM.-15	noise	-	1.5-8							X										X		1975
12880-13200	AIRB. JAM.-18	noise	-	-																X			± 1975

[redacted]

CURRENT TRENDS AND FUTURE DEVELOPMENTS OF THE SOVIET MERCHANT FLEET

57. [redacted]. The Soviets are continuing to expand and modernize their Merchant Fleet. In this article significant trends in this program are discussed including the development of container ships, roll-on/roll-off (ro/ro) ships, and Seabee barge transport ships. Trends and projections are summarized in a table covering from the end of 1975 through the year 2000.

Discussion

58. [redacted]. The basic concept of Sea Transport has been changing since World War II when merchant ships were categorized simply as cargo, tanker, and passenger. Today, there are over 70 types of specialized cargo carriers, with more developing constantly. Many merchant ships no longer are considered "go-anywhere, do-anything" platforms, but rather, as the maritime link of a vast transportation network. Some have become so specialized that they can no longer perform basic military sealift functions.

59. [redacted]. The most noticeable change has been in the break bulk/general cargo fleet. In the last 20 years it has been changed by the so-called "Container Revolution". The container/containership combination is more evolutionary than revolutionary. It represents an extension of the vertical cargo-handling concept of lifting cargo from the pier, over the side, and into the hold. Container operations can more than double cargo loading/unloading capabilities; cargo-handling rates of 600 to 700 tons per hour are not uncommon.

60. [redacted]. In terms of military logistics, the "container" offers some important advantages, since it allows a user to prepackage and safely store cargo for long periods in storage areas not normally associated with sea transport. When needed, the container can quickly be placed on a tractor-trailer frame or railway flatcar and rapidly transported to an embarkation area for loading. Most significant is the fact that the contents of the container have remained anonymous throughout the entire storage/loading/delivery cargo.

61. [redacted]. Containers can accommodate up to 35 tons and be used to transport a wide variety of cargoes. Container development

[redacted]

is far from complete; concepts such as containerized armament for modular ships are projected which will package weapon systems, such as v/stol and antiship missiles.

62. [redacted]. For the military logistician, the container system has many disadvantages. The cargo is limited by the size of the container. Even more significantly, the container ships are usually large, high-speed platforms, with little or no cargo handling capability. Container ships can efficiently handle only container-size loads at highly specialized port facilities. Since container ships reduce military logistics versatility, the Soviets have approached container ship acquisition cautiously, and to date have only five fully cellular container ship classes in service; by the late 1970s the fleet will consist of only 21 hulls, with no additional units projected beyond that date. The dilemma of commercial efficiency versus military versatility clearly demonstrates the communist concept of sea power. They have not fully accepted modern container technology with its resultant loss in versatility and henceforth, reduced potential for military application.

63. [redacted]. The Soviets accepted an alternative option: "The development of the ro/ro vehicle and container carrier, designed primarily for cargo that can be rolled or driven aboard". Cargo discharge rates as high as 2.000 tons an hour have been achieved. Unlike other methods, the ro/ro ship usually delivers its cargo in an operating condition.

64. [redacted]. Access into the ro/ro ship is via a large articulated stern ramp that reaches out to 21 meters. When the ship arrives at its destination, the ramp is lowered to the pier, the watertight stern doors are opened, and the vehicles are driven out. The ramps are large enough to handle two large tractortrailer rigs abreast simultaneously, with a maximum load of 60 tons.

65. [redacted]. Once on board the ship, the vehicles are directed by a sophisticated traffic system to the correct deck and parking position and then secured by a simple in-deck pad-eye/chain arrangement.

66. [redacted]. Although such ships normally operate from established vehicle piers, it is reported that the ship can operate

[redacted]

[redacted]

to any surface because the massive door-support guide wire system will tape up any ground pressure in excess of two tons per square meter. In addition to ro/ro cargo capabilities, these ships can also carry containers. Hence, it is possible that these units could be used to rapidly transport whole mobile military units and would be ideal for brush-fire or trouble-spot situations.

67. [redacted]. The sophisticated nature of the stern ramp/wire system introduces another significant operational possibility. Since the wire system is designed to compensate for downward pressures imparted to the ground by the ramp and its load, it is possible that it could also handle the strain if the ramp were lowered into the water. Recent studies indicate that this is feasible, and that it would be possible for the stern ramp/wire system aboard an advanced ro/ro unit to discharge light military vehicles such as a PT-76 amphibious tank or an armored personnel carrier directly into the water. If this concept were accepted, the direct amphibious assault potential of the communist bloc would grow significantly greater with each new ro/ro delivery.

68. [redacted]. The massive commitment to ro/ro ships represents a new and sophisticated military threat. Any form of military cargo can be moved and unloaded anyplace in the world by ships that attract little or no attention. The ro/ro ship totally changes the communists seaborne response posture, but at the same time, allows them to compete more effectively in modern maritime markets.

69. [redacted]. Another significant development occurred in mid-1975 when the Soviet Union ordered two Seabee large transport ships from Finland. These ships are projected for delivery in late 1978 or early 1979.

70. [redacted]. In appearance, the Soviet 38,000 dead weight ton (DWT) Seabee resembles a dock landing ship or amphibious transport dock. The ship will be 267 meters long, 35 meters wide, and will draw 10 meters in normal service. The Soviet units will be diesel-powered, with twin screwe capable of a service speed of 20 knots and a range of 8.000 nautical miles. The 26 cargo barges are 38 x 11 x 5.3 meters, with a capacity of 1.070 DWT and a hold volume of 460 gross registered tons. The Seabee loads and unloads at anchor, without the need for a pier or any shore cargo-handling equipment, and acts as a mother ship for cargo barges which serve as the ship/shore interface.

[redacted]

71. [redacted]. The heart of the cargo-handling system is a sternmounted elevator with a lift capability of 2.700 tons. The Soviet system is designed to load/unload the 26 barges in about 13 hours. In operation, the elevator lifts the cargo to one of three long unobstructed cargo decks, a low-slung transporter unit slips under the cargo, lifts in off the elevator, and moves it to its storage position on the cargo deck. The transporter units move between two rails that run the entire length of each deck on both the port and starboard sides of the ship. The two transporters can work both sides of a cargo deck simultaneously.

72. [redacted]. Militarily, these units can be used in scenarios such as the resupply effort that the communists conducted in Vietnam or a Logistics-Across-The-Shore (LOTS) operation. The Seabee mother ship can quickly place a few barges offshore for a waiting tug that would then tow them into some backwater, river, or fishing harbor for unloading. The Soviet Seabee barge could carry as many as 10 T-62 medium tanks.

73. [redacted]. Since the system is designed to place barges on large open decks, it can transport an unlimited variety of cargoes, with few limitations on size, weight, or shape. The Seabee can carry almost any piece of military equipment in the Soviet military inventory, as well as many of the smaller vessels in their navies. One ship could carry all the men, equipment, and stores of either a Soviet motorized rifle or tank regiment.

74. [redacted]. Seabee could also transport 10 LEBED- or GUS-class amphibious assault landing vehicles on her upper deck and thus could be used as an amphibious mother ship similar to us amphibious general assault ships or amphibious transport docks. Amphibious assault equipment such as the PT-76 tank, BTR-50p armored personnel carrier, T-4 class mechanized landing crafts can be transported by Seabee to an offshore site, and by using her elevator as a water-level loading platform, unload the landing craft and then serve as an offshore resupply base. For example, the Soviet Seabee could carry 125 amphibious BTR-50p's.

75. [redacted]. The clear upper decks on Seabee will enable the transporting of large objects such as AIST-class amphibious assault landing crafts, or provide deck space for operating large helicopters. The military logistics and amphibious scenarios that could be supported by Seabee are almost unlimited.

76. [redacted]. Experience has shown that surveillance of communist military and paramilitary logistics movements have been difficult. With the advent of the rapid and secure cargo movements that ro/ro and Seabee operations afford, the ability to survey their logistics movements will become even more difficult.

Trends and projections

77. [redacted]. Projections for 1980, summarized below, have a fairly high confidence level since they are largely based on Soviet announced goals for the current five-year plan. The Soviets indicate that they will add 5.0 million DWT to inventory, but would only have a net gain of 3.4 million DWT. This would require a massive scrapping or transfer program; no indications of this program have been observed. It is very likely that Soviet figures were deceptively low because of exposure to international pressure concerning their Merchant Fleet expansion. It is estimated that actual net growth may be between 4.0 and 5.0 million DWT.

78. [redacted]. The projections for 1985, 1990, and 2000 have a lower confidence level. The Soviets are approaching a major transitional stage in their Merchant Fleet development. Many older units are rapidly approaching the end of their useful life, and it is likely that they will be replaced by fewer but much larger and more efficient units. Expanding international commitments and the need to handle over-increasing amounts of modularized cargoes will require more specialized carriers, such as ro/ro and barge ships. It is estimated that the Soviets will build no more fully cellular container ships after the MERCUR-class and will probably concentrate on ro/ro ships. The general cargo to ro/ro unit ratio could reach 1350/125 instead of 1385/80 as reflected below.

79. [redacted]. Energy sources will dictate the future of the Maritime Transport Fleet and will probably become a determining factor in ship power plants by 1990 and beyond. It is estimated that the Soviet Merchant Fleet will consist of approximately 2.400 ships totaling 28,5 million DWT in 2000. The number of Soviet Merchant ships will probably begin to level off at this time with newly constructed ships, replacing the older ships as they become obsolete. The deadweight tonnage will probably continue to increase as larger ships are built to replace the older smaller ships. Other changes expected

to occur by the year 2000 will probably be the construction of specialized dual-purpose ships, the increase in speeds of ships, and the greater use of automation and advanced cargo handling techniques.

80. [redacted]. Soviet Merchant Fleet Status and Projections (1975-2000) (number of units/DWT (millions)) (as of 31 December 1976).

	1975	1976	1980
break bulk general cargo	1116/8.18	1133/8.31	1300/8.90
refrigerated cargo	28/.13	31/.15	40/.16
container ships	12/.08	14/.12	25/.25
roll-on/roll-off ships	13/.08	21/.17	45/.44
barge carriers	0	0	2/.08
bulk carriers 109/1.26	121/1.50	158/1.80	180/2.00
total dry cargo	1278/9.74	1320/10.25	1570/10.90
petroleum tankers	271/5.34	288/6.00	335/8.48
gas tankers	2/-	5/.04	10/.09
misc. tankers	10/.03	10/.03	10/.03
total tankers	283/5.27	303/6.07	355/7.60
passenger ships	68/.15	72/.16	75/.20
combination passenger/ cargo	19/.07	19/.07	0
total fleet	1648/15.33	1714/16.54	2000/18.70

	1985	1990	2000
break bulk general cargo	1385/8.80		
refrigerated cargo	50/.20		
container ships	25/.25		
roll-onn/roll-off ships	80/.80		
barge containers	5/.40		
bulk carriers 109/1.26			
total dry cargo	1725/12.40	1825/15.30	1925/18.30
petroleum tankers	360/9.05		
gas tankers	30/.30		
misc. tankers	10/.05		
total tankers	400/9.40	400/10.0	400/10.0
passenger ships	75/.20	75/.20	75/.20
combination passenger/ cargo	0		
total fleet	2200/22.00	2300/25.50	2400/28.50

[redacted]

HOOFDSTUK 2

SOVJET MARITIEME AKTIVITEITEN

DE ATLANTISCHE OCEAAN

De belangrijkste aktiviteiten in het Noord-Atlantisch gebied

1. [redacted]. Op 23 december verliet de KIEV (812) tezamen met KRESTA-II (297) ADM. ISACHENKOV de Noordelijke Vloot. Zij stoomden op om de zuid, bewesten Ierland. Op 30 december werd rendez-vous gemaakt met de KARA-klasse g.w. kruiser (539), KERCH. De KRESTA-II ging daarop terug naar de Noordelijke Vloot waar zij op 7 januari arriveerde. De KIEV en de KERCH gingen vervolgens in opmars naar de Middellandse Zee, die werd bereikt op 2 januari.

2. [redacted]. Commentaar: Tot dusver is uit de surveillance het volgende gebleken:

   a. Aan boord van de KIEV bevindt zich een vlagofficier.

   b. Manoeuvreerseinen worden gegeven via de onderwatertelefoon.

   c. Vluchten met de HORMONE-helikopter worden regelmatig gehouden.

   d. Op 30 december hebben twee FORGER type VSTOL vliegtuigen een vlucht gemaakt van 13 resp. 20 minuten.

   e. Regelmatig worden alarmeringsoefeningen gehouden.

   f. De KIEV vaart bijna continu met de sonar aktief bij.

   g. Een CHARLIE-klasse onderzeeboot bevindt zich nabij de KIEV.

3. [redacted]. De BEAR DELTA's welke sinds 9 december op Cuba gestationeerd waren zijn op 22 december naar de Noordelijke Vloot teruggevlogen.

[redacted]

4. [redacted]. Op 3 december verlieten 2 Oostzee Vloot-eenheden, KRIVAK g.w. jagers (245) en (247) de Middellandse Zee. Zij arriveerden op 16 december te Havanna. Daarbij voegde zich een FOXTROT-klasse onderzeeboot, vermoedelijk afkomstig uit de Zuid-Atlantische Oceaan. Vervolgens maakten zij een tocht door de Golf van Mexico en brachten een bezoek aan Cienfuegos (Cuba). Vermoedelijk zullen zij binnenkort naar hun thuishaven in de Oostzee terugkeren.

5. [redacted]. a. Medio december en op 19 oktober zijn er een aantal meldingen geweest van vissers die een onderzeeboot gezien zouden hebben in Davis Strait (tussen Groenland en Baffin eiland).

b. Commentaar: Al eerder is in NATO-kringen gesuggereerd dat de Sovjet marine onderzeeboten uit de Noordelijke Vloot zou ontplooien in de Atlantische Oceaan via de zeestraten bewesten Groenland. Aan de praktische uitvoerbaarheid hiervan wordt dezerzijds vooralsnog getwijfeld. Het feit dat een onderzeeboot zich - anders dan ten gevolge van een ongeval - daar zou laten zien, wordt als ongeloofwaardig ervaren.

6. [redacted]. De TANGO-klasse onderzeeboot welke eind november de Middellandse Zee heeft verlaten is niet meer gedetekteerd. De TANGO kan wellicht in de laatste week van december in de Noordelijke Vloot zijn gearriveerd.

De belangrijkste aktiviteiten in het Zuid-Atlantisch gebied

7. [redacted] De twee BEAR DELTA's zijn op 23 december vanuit Luanda naar Cuba gevlogen na een detachering te Luanda sinds 8 december. Op 28 december vlogen zij door naar de Noordelijke Vloot.

8. [redacted]. Te Conakry én te Luanda ligt nu een reparatiehulpschip van de AMUR-klasse; de P-56 respektievelijk de PM-139. De aanwezigheid van een AMUR is vaak gebleken een indikatie te zijn voor de aanwezigheid van een onderzeeboot. Daarbij zijn er in hetzelfde tijdsbestek onderzeebootkontakten in- of nabij beide plaatsen gemeld, zodat het vermoeden wordt versterkt dat het hier om twee onderzeeboten gaat die zich in de Zuid-Atlantische Oceaan op patrouille bevonden.

[redacted]

[redacted]

9. [redacted]. Gedurende de verslagperiode bevonden de eenheden van het Zuid-Atlantische contingent zich - op enkele uitzonderingen na - in- of nabij Conakry.

DE MIDDELLANDSE ZEE

10. [redacted]. Op 21 december verliet de nieuwste eenheid van de KARA-klasse g.w. kruisers de Zwarte Zee. Het betreft hier de PETROPAVLOVSK (527). Zij stoomde op naar de Straat van Gibraltar waar zij op 2 januari rendez-vous maakte met de KIEV-groep.

11. [redacted]. Naast de KIEV bevindt zich sedert 23 november ook het helikopterschip MOSKVA van de gelijknamige klasse in de Middellandse Zee. Hoewel het aantal combattanten niet ongebruikelijk hoog genoemd kan worden is de aanwezigheid van vier kapitale schepen uitzonderlijk.

12. [redacted]. Reeds lange tijd wordt grote waarde gehecht aan kennis omtrent de verblijfplaats van COMSOVMEDRON. Onder normale omstandigheden voert deze bevelhebber zijn vlag op een hulpschip, terwijl hij zich ten tijde van verhoogde paraatheid en spanning met zijn staf inscheept aan boord van een combattant. Sedert begin december bevindt COMSOVMEDRON zich met een deel van zijn staf op het helikopterschip MOSKVA zonder dat van grote oefenaktiviteiten gesproken kan worden.
Hoewel de situatie in het Midden Oosten verre van stabiel is, wordt aangenomen dat het gebruikelijke gedragspatroon is gewijzigd en de bevelhebber van het Middellandse Zee eskader zich meer dan voorheen aan boord van combattanten zal bevinden.

DE INDISCHE OCEAAN

13. [redacted]. Op 18 december voegde KASHIN g.w. jager (100) "STROGYY" zich bij het SOVINDRON.

14. [redacted]. Op 26 december verlieten KRESTA-II (239) en KRIVAK-II (212) het SOVINDRON en vervolgden hun opmars naar de Pacific Vloot.

[redacted]

15. [redacted]. De amphibische capaciteit van het SOVINDRON onderging een opvallende uitbreiding. Normaal is slechts één ALLIGATOR-klasse landingsvaartuig aanwezig. Momenteel bevinden zich echter 2 ALLIGATOR's, 1 ROPUCHA en 1 POLNOCNY tanklandingsschip in de Golf van Aden. Ook het aantal hulpschepen is uitgebreid met een boeienlegger KIL-33 en 2 extra sleepboten. Deze ontplooiing staat ontegenzeglijk in verband met de grotere Russische betrokkenheid in het Ethiopië-Somalië konflikt en het gedwongen ontruimen van Berbera.