AD-A148 860

USAMC (UNITED STATES ARMY WAR COLLEGE) MILITARY STUDIES

1/1

PROGRAM SOVIET MERCHANT MARINE(U) ARMY WAR COLL

CARLISLE BARRACKS PA P N JOHNSON 16 MAY 84

F/G 5/9

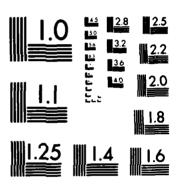
NL

END

CARLISLE BARRACKS PA P N JOHNSON 16 MAY 84

F/G 5/9

NL



MICROCOPY RESOLUTION TEST CHART NATIONAL BUREAU OF STANDARDS-1963-A

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This

document may not be released for open publication until it has been cleared by the appropriate military service or

STUDY PROJECT

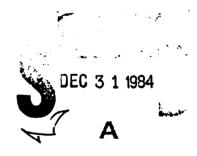
AD-A148 860

government agency.

SOVIET MERCHANT MARINE

BY

COMMANDER PAUL N. JOHNSON UNITED STATES NAVY



DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

16 MAY 1984

US ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013

FILE COPY

84

0:

2. GOVT ACCESSION NO. 1. RECIPIENT'S CATALOG NUMBER TITLE (and Additio) SOVIET Merchant Marine STUDENT PARK 6. PERFORMING ORG. REPORT NUMBER AUTHOR(s) CDR Paul N. Johnson PERFORMING ORGANIZATION NAME AND ADDRESS US. Army War College Carlisle Barracks, PA 17013 CONTROLLING OFFICE NAME AND ADDRESS Same 10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 12. REPORT DATE 16. May 1984 13. NUMBER OF PAGES 61 MONITORING AGENCY NAME & ADDRESS(II different from Controlling Office) DISTRIBUTION STATEMENT (of the Report) DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, If different from Report)	REPORT DOCUMENTATION I	PAGE	READ DISTRUCTIONS BEFORE COMPLETING FORM
STUDENT PARER 6. PERFORMING ORG. REPORT NUMBERS DIS Paul N. Johnson PERFORMING ORGANIZATION NAME AND ADDRESS SATHS WAT College CONTROLLING OFFICE NAME AND ADDRESS Same 10. PROGRAM ELEMENT, PROJECT, TARK AREA & WORK UNIT NUMBERS. 11. REPORT DATE 16. May 1984 19. NUMBER OF PARES 10. May 1984 11. REPORT DATE 16. May 1984 18. SECURITY CLASS, of this report) Unclassified 18. DECLARRICATION/DOWNGRADING CONTRIBUTION STATEMENT (of the Report) DISTRIBUTION STATEMENT (of the abeliant entered in Block 29, if different from Report) SUPPLEMENTARY NOTES KEY WORDS (Continue on reverse olds if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and	REPORT NUMBER	2. GOVT ACCESSION NO.	
STUDENT PARER 6. PERFORMING ORG. REPORT NUMBERS DIS Paul N. Johnson PERFORMING ORGANIZATION NAME AND ADDRESS SATHS WAT College CONTROLLING OFFICE NAME AND ADDRESS Same 10. PROGRAM ELEMENT, PROJECT, TARK AREA & WORK UNIT NUMBERS. 11. REPORT DATE 16. May 1984 19. NUMBER OF PARES 10. May 1984 11. REPORT DATE 16. May 1984 18. SECURITY CLASS, of this report) Unclassified 18. DECLARRICATION/DOWNGRADING CONTRIBUTION STATEMENT (of the Report) DISTRIBUTION STATEMENT (of the abeliant entered in Block 29, if different from Report) SUPPLEMENTARY NOTES KEY WORDS (Continue on reverse olds if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			
AUTHOR(s) DEPARTMENT ORG. REPORT NUMBER(s) DEPARTMENT OR GRANT NUMBER(s) DEPARTMENT OR GRA	TITLE (and Substite)		S. TYPE OF REPORT & PERIOD COVERED
AUTHOR(s) DR Paul N. Johnson PERFORMING ORGANIZATION HAME AND ADDRESS IS Army War College Barlisle Barracks, PA 17013 CONTROLLING OFFICE HAME AND ADDRESS Same IS NUMBER OF PAGES I	Soviet Merchant Marine		STUDENT PAPER
DER Paul N. Johnson PERFORMING ORGANIZATION HAME AND ADDRESS IS Army War College artisle Barracks, PA 17013 CONTROLLING OFFICE HAME AND ADDRESS II. MEPORY DATE 16 May 1984 IS MUMBER OF FARES 61 MONITORING AGENCY HAME & ADDRESS(II different from Controlling Office) Unclassified IS. SECURITY CLASE (of this report) Unclassified IS. DECLASSIFICATION/DOWNGRADING DISTRIBUTION STATEMENT (of this Report) DISTRIBUTION STATEMENT (of this abstract entered in Block 20, II different from Report) SUPPLEMENTARY HOTES REY WORDS (Continue on reverse side if necessary and identify by block number) ABSTRACT (Continue on reverse side if necessary and identify by block number) The Soviet Merchant Martine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			5. PERFORMING ORG. REPORT NUMBER
DER Paul N. Johnson PERFORMING ORGANIZATION HAME AND ADDRESS IS Army War College artisle Barracks, PA 17013 CONTROLLING OFFICE HAME AND ADDRESS II. MEPORY DATE 16 May 1984 IS MUMBER OF FARES 61 MONITORING AGENCY HAME & ADDRESS(II different from Controlling Office) Unclassified IS. SECURITY CLASE (of this report) Unclassified IS. DECLASSIFICATION/DOWNGRADING DISTRIBUTION STATEMENT (of this Report) DISTRIBUTION STATEMENT (of this abstract entered in Block 20, II different from Report) SUPPLEMENTARY HOTES REY WORDS (Continue on reverse side if necessary and identify by block number) ABSTRACT (Continue on reverse side if necessary and identify by block number) The Soviet Merchant Martine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and	AUTHOR(a)		A CONTRACT OF COART MINISTRA
PERFORMING ORGANIZATION NAME AND ADDRESS IS. Army War College Carlisle Barracks, PA 17013 CONTROLLING OFFICE NAME AND ADDRESS Same II. REPORT DATE 16 May 1984 II. NUMBER OF PAGES 61 MONITORING AGENCY NAME & ADDRESS(II different from Combrolling Office) Unclassified III. SECURITY CLASS. (of the report) Unclassified III. DECLASSIFICATION/DOWNGRADING DISTRIBUTION STATEMENT (of the abstract entered in Block 29, If different from Report) DISTRIBUTION STATEMENT (of the abstract entered in Block 29, If different from Report) ABSTRACT (Continue on reverse side if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and	THE HOME		G. CONTRACT OR GRART RUBBERGS
AREA & WORK UNIT NUMBERS AREA & WORK UNIT NUMBERS To Army War College arlisle Barracks, PA 17013 To Controlling office name and address To May 1984 The number of Fages Both Assertion of the second of the controlling office) Unclassified The Distribution statement (of the Report) DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited. Distribution statement (of the sherect entered in Block 20, if different from Report) Supplementary notes KEY WORDS (Continue on reverse olds if necessary and identify by block number) Abstract (Continue on reverse olds if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and	CDR Paul N. Johnson		}
AREA & WORK UNIT NUMBERS AREA & WORK UNIT NUMBERS To Army War College arlisle Barracks, PA 17013 To Controlling office name and address To May 1984 The number of Fages Both Assertion of the second of the controlling office) Unclassified The Distribution statement (of the Report) DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited. Distribution statement (of the sherect entered in Block 20, if different from Report) Supplementary notes KEY WORDS (Continue on reverse olds if necessary and identify by block number) Abstract (Continue on reverse olds if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and	DEBEODMING OBGANIZATION NAME AND ADDRESS		10 000000000000000000000000000000000000
CONTROLLING OFFICE NAME AND ADDRESS Same 12. REPORT DATE 13. NUMBER OF PAGES 61 - MONITORING AGENCY NAME A ADDRESS(II different from Combrolling Office) Unclassified 18. SECURITY CLASS. (of this report) Unclassified 18. DEC, ASSIFICATION/DOWNGRADING SCHEDULE DISTRIBUTION STATEMENT (of this Report) DISTRIBUTION STATEMENT (of the abstract universal in Block 20, if different from Report) DISTRIBUTION STATEMENT (of the abstract universal in Block 20, if different from Report) SUPPLEMENTARY NOTES KEY WORDS (Continue on reverse of the if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and	PERFORMING CROWNIZATION NAME AND ADDRESS		AREA & WORK UNIT NUMBERS
The Source of the Processory and Identify by block number) ABSTRACY (Continue on reverse olds if necessary and Identify by block number) ABSTRACY (Continue on reverse olds if necessary and Identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and	JS Army War College		
Same 16 May 1984 13. MUNISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) ABSTRACT (Continue on reverse olds if necessary and identify by block number) ABSTRACT (Continue on reverse olds if necessary and identify by block number) ABSTRACT (Continue on reverse olds if necessary and identify by the statement of the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			
Same 13. NUMBER OF PAGES 61 16. SECURITY CLASS. (of this report) Unclassified 18. DECLASTICATION/DOWNGRADING DISTRIBUTION STATEMENT (of this Report) DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) SUPPLEMENTARY NOTES KEY WORDS (Continue on reverse side if necessary and identify by block number) ABSTRACY (Continue on reverse side if necessary and identify by block number) ABSTRACY (Continue on reverse side if necessary and identify by block number) In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and	CONTROLLING OFFICE NAME AND ADDRESS		
MONITORING AGENCY HAME a ADDRESS(II different from Controlling Office) Unclassified 18e. PECLASSIFICATION/DOWNGRADING DISTRIBUTION STATEMENT (of the Report) DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited. DISTRIBUTION STATEMENT (of the obstract entered in Block 20, if different from Report) SUPPLEMENTARY NOTES KEY WORDS (Continue on reverse olds if necessary and identify by block number) ABSTRACT (Continue on reverse olds if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and	Same		
Unclassified 18a. DECLASSIFICATION/DOWNGRADING DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited. DISTRIBUTION STATEMENT (of the electract entered in Block 20, if different from Report) SUPPLEMENTARY HOTES KEY WORDS (Continue on reverse side if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			61
DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited. DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) SUPPLEMENTARY NOTES KEY WORDS (Continue on reverse olds if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and	MONITORING AGENCY NAME & ADDRESS(II different	from Controlling Office)	18. SECURITY CLASS. (of this report)
DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) SUPPLEMENTARY NOTES KEY WORDS (Centinue on reverse side if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			Unclassified
DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) SUPPLEMENTARY NOTES KEY WORDS (Centinue on reverse side if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			184. DECLASSIFICATION/DOWNGRADING
DISTRIBUTION STATEMENT A: Approved for public release; distribution is inlimited. DISTRIBUTION STATEMENT (of the obstract entered in Block 20, if different from Report) SUPPLEMENTARY NOTES KEY WORDS (Continue on reverse side if necessary and identify by block number) ABSTRACT (Continue on reverse side if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			
ABSTRACT (Continue on reverse side if necessary and identify by block number) ABSTRACT (Continue on reverse side if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			
ABSTRACT (Continue on reverse side if necessary and identify by block number) ABSTRACT (Continue on reverse side if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and	. DISTRIBUTION STATEMENT (of the abstract entered i	in Block 20, if different fro	m Report)
ABSTRACT (Continue on reverse side if necessary and identify by block number) ABSTRACT (Continue on reverse side if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			
ABSTRACT (Continue on reverse side if necessary and identify by block number) ABSTRACT (Continue on reverse side if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			
ABSTRACT (Continue on reverse olds if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and	SUPPLEMENTARY NOTES		
ABSTRACT (Continue on reverse olds if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			
ABSTRACT (Continue on reverse olds if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			
ABSTRACT (Continue on reverse olds if necessary and identify by block number) The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			
The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and	KEY WORDS (Continue on reverse side if necessary an	d identify by block number)
The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			
The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			
The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			
The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			
was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and			
In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments. The growth has produced a Soviet Merchant Marine sufficiently large and		•	
The growth has produced a Soviet Merchant Marine sufficiently large and	In the late 1950s development of i	its merchant flee	et was accelerated. This
	expansion resulted from greatly in	creased seaborne	e merchant shipments.
	The growth has aroduced a Sou	riet Merchant Max	rine sufficiently large and

DD 1 JAN 73 1473 EDITION OF T NOV 45 IS OBSOLETE

SECURITY CLASSIFICATION OF THIS PAGE (When Date E

Unclassified

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE(When Date Bristed)

RECAT ROMBEMS

Item 20 - continued.

and economic aid without dependence of foreign ships, to satisfy basic domestic needs in sea transport, and to earn enough foreign currency to pay for the Soviet charter of foreign ships and supplement the Soviet need for foreign currency. Apparently, by grand design these increased Merchant Marine resources are actually contributing toward a more powerful Soviet strategic naval capability. In addition to the positive political and economic aspects of a large Merchant Marine fleet, the Soviets continue as well to enhance the military capabilities of this fleet. Ultimately, they have the apparent goal of using portions or all of their Merchant Marine fleet to support their naval forces in the event of a limited or global conflict.

is a set of the contract of t

Unclassified

: 1473 C. 1473

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

USAWC MILITARY STUDIES PROGRAM

SOVIET MERCHANT MARINE

INDIVIDUAL STUDY PROJECT

bу

Commander Paul N. Johnson United States Navy

US Army War College Carlisle Barracks, Pennsylvania 17013 16 May 1984

> DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

ABSTRACT

AUTHOR(S): Paul N. Johnson, CDR, USN

7 6.15 c

TITLE: Soviet Merchant Marine

FORMAT: Individual Study Project

DATE: 16 May 1984 PAGES: 58 CLASSIFICATION: Unclassified

The Soviet Merchant Marine's growth from 1900 to the middle of the 1950s was generally slow and uneven compared to its expansion in more recent years. In the late 1950s development of its merchant fleet was accelerated. This expansion resulted from greatly increased seaborne merchant shipments.

The growth has produced a Soviet Merchant Marine sufficiently large and diversified to carry most of their own foreign trade cargo, to deliver military and economic aid without dependence of foreign ships, to satisfy basic domestic needs in sea transport, and to earn enough foreign currency to pay for the Soviet charter of foreign ships and supplement the Soviet need for foreign currency. Apparently, by grand design these increased Merchant Marine resources are actually contributing toward a more powerful Soviet strategic naval capability. In addition to the positive political and economic aspects of a large Merchant Marine fleet, the Soviets continue as well to enhance the military capabilities of this fleet. Ultimately, they have the apparent goal of using portions or all of their Merchant Marine fleet to support their naval forces in the event of a limited or global conflict.

TABLE OF CONTENTS

	PAGE
ABSTRACT	ii
OVERVIEW	1
Soviet Grand Strategy	3
Soviet Concept of War	5
Soviet Naval Strategy	6
Soviet Merchant Fleet-Instrument of Soviet National	
Policy	11
SOVIET MERCHANT MARINE DEVELOPMENT	12
Development Prior to World War I	12
World War I	14
Inter-bellum Development	15
World War II	18
Post-World War II Development	18
ORGANIZATION OF THE SOVIET MERCHANT FLEET	27
NAVAL MILITARY BENEFITS FROM THE MERCHANT MARINE	34
CONCLUSION	41
SELECTED BIBLIOGRAPHY	53

Accession For	
FFIS GRA&I	Ø
FILE TAR	Ŏ
Lunnuounced	
1010acton	
s the assessment	
in a secondarity	ាែ៤ខ ន
evidi mi	, or
ist profet	
1/11	
I ndiana di dana	



OVERVIEW

Any discussion of Soviet strategy for or design of their Merchant Marine forces should take into account the overall Soviet political and maritime picture. In a controlled society where a free market does not exist, it makes little sense either economically or militarily not to totally integrate political and maritime structures. In this overview, I will briefly discuss my perceptions of the integration of Soviet grand strategy—taking into account their concept of war, their naval strategy, and their proposed uses of the Soviet merchant fleet as an instrument of national policy.

The groundwork for Soviet uses of its maritime Navy was established on 5 February 1918, when Lenin signed a decree issued by the Council of People's Commissars nationalizing what remained from the October Revolution of the Russian merchant fleet. Thus the Soviet state became the sole owner and operator of all their Merchant Marine, establishing the basis for effective coordination of these assets to pursue national goals.

In the initial stages of its development, the Soviet Union concentrated on freeing itself from reliance on foreign shipping. At this time, less than ten percent of Soviet exports and twenty percent of their imports were carried in Soviet merchant ships. The Soviets annually expended 150 million rubles in gold to charter foreign ships. Because the Merchant Marine was in competition for rubles with naval ship building and other greater economic needs of the country and, later, because of the devastation of World War II, Soviet Merchant

Marine growth was relatively slow until the 1950s. As happened after her revolutionary war, World War II left the Soviets economically and militarily decimated. It wasn't until Nikita Khrushchev assumed power in the 1950s as First Secretary that the Merchant Marine industry really started to accelerate. His policy of penetrating the economic markets of less developed countries necessitated broader relations with non-Communist states. Khrushchev's Five Year Plans and Soviet courting of the less developed countries boosted Soviet foreign trade and aid, which in turn stimulated a need for building more merchant ships.

From 1950 to 1981, the Soviet merchant fleet increased an average of 68 vessels per year from 412 vessels of 1.8 million deadweight tons to 2,541 vessels of 22.1 million deadweight tons.² This well planned buildup has enhanced Soviet naval and diplomatic capabilities. As a political tool, the Soviet merchant fleet serves its masters well. Their ships go where others don't, providing support and service to poor Third World countries. The Politburo uses this leverage for influence in these countries. Some other political uses of their merchant fleet include carrying arms to Communist revolutionaries in Third World countries, undercutting Western shipping rates, and earning hard currency needed by the Soviet economy. The Soviet merchant fleet is also a very important element of sea power. It provides their fourth arm of defense. Deputy Minister of Defense and Commander-in-Chief of the Soviet Navy, Fleet Admiral of the Soviet Union Sergei Gorshkov confirms this role:

... the transport fleet should be regarded as a versatile component of the sea power of a country which has an important role in wartime and in peacetime.

Soviet Grand Strategy

Grand strategy is a means to achieve a goal. Does the Soviet Union have a grand strategy? If so, what do they want to achieve? The Soviet Union is a Communist state which obviously takes, an active role in the world today. As a Communist state, they are hostile to other forms of government. In my opinion, those who think otherwise are only deceiving themselves, for Lenin (Vladimir Ilich Ulyanov), wrote that all socialist states are continuously at war with capitalism, that peace is merely a continuation of war by other means.

Soviet global strategy evolves inexorably from Russian history and Marxist-Leninist ideology. For nearly ten centuries Russia, now the Soviet Union, has remained essentially at war in various conflicts with foreign adversaries. Russian history is replete with foreign powers invading the homeland. Millions of Russian people died and great economic destruction took place on Russian soil because of these incursions. Historically, then, the Russians have considerable reason for an overwhelming base of insecurity. History likewise reveals the development of a Russian inferiority complex vis-á-vis the West, for they have been playing economic, political, and military catch up with the United States and other Western nations.

Further, Soviet Marxist-Leninist ideology provides the instrument that legitimizes their regime. Their ideology is enforced by military and police forces. For the Soviet politicians, there is no other means to keep themselves in power and maintain internal security. Truth therefore resides in their ideology. Words are defined in conformity with their ideology. Finally, the Communist Party espouses and promulgates this ideology, which then becomes the rigorous instrument of Party power. We see, then, a vicious, Communist Party-controlled circle.

Soviet grand strategy is designed to achieve the ultimate goals of peace and security. To the Westerner, these goals seem noble and desirable. But these concepts of peace and security must be considered through the Communist thought process, not in terms of Western philosophy. The Soviet Politburo thinks of peace and security under a Communist state, not under a democratic state. Ideological peace to the Soviets means an end to world class struggle between the Marxist-Leninist socialist states and capitalist states. The Soviets believe that the struggle between these philosophies will resolve itself in their favor. Otherwise, the struggle must continue in order to eliminate exploitative capitalist systems. Likewise, under their ideology security means fighting no wars on Soviet soil, continuing to live under Communism, and conforming to Soviet political ideals. It appears, then, that the Soviets seek eventual world domination under their Communist system, offering no fixed time when this will occur.

The idea of a Soviet Communist-dominated world expressed above is certainly not new. It has been written and talked about extensively. In the last couple of decades, this theory has been much maligned and put aside by some Western intellectuals as being outdated, irrelevant, unrealistic, or just a Soviet sham. The West continues to probe for new clues from the Kremlin, trying to get inside the inner sanctum of the Politburo. We want to find out what they really want to achieve. Knowing this, the Soviets tightly control the information released for public reading. We continually try to influence the Soviets to settle for something less than a Soviet Communist-dominated world, and we always seek proof of some Soviet willingness to compromise their ultimate and historically proclaimed goals. We feel that they couldn't

possibly want to dominate this mixed-up modern world. From a more practical point of view, some claim that they don't have the means to achieve such domination. Despite such fond hopes and rationalizations, we must face some hard truths. First, the Soviets really haven't departed from their Marxist-Leninist ideology. Second, they continue to expand and upgrade their military capability beyond what we think is sufficient for self-defense. Even though this military power has now grown to the extent of giving them a first strike capability against the West, it is not a certainty that they will use it in this manner. But what it does mean is that they have a credible military power in the eyes of the world. Further, they will use this power if such use is vital to their national interests. Thus the Soviets appear to be satisfied with the approach of taking two steps forward and then one backwards as they spread their ideology and exert their influence over other nation states.

Soviet Conept of War

War, as Clausewitz has written, is a means for political ends. The Soviet Union also believes that war is an instrument of political policy. They feel war between the superpowers is not necessarily inevitable, yet it remains possible. This includes nuclear war, for nuclear weapons have not changed their political or military views concerning the utility of war. The Soviets also feel that if war comes victory will not be automatic, but they maintain that the Communist system will eventually prevail and the capitalist system will collapse. Hence, they must prepare for victory. For the Soviets to win the war, they believe they need winning capabilities across the military spectrum. Because of

this and because of their inherent motivation to "Defend the Mother-land," the Soviets have continued to expand and increase their military capability in all areas.

Soviet-Naval Strategy

In 1955, Khrushchev designated then Admiral Sergei Gorshkov to replace Admiral Kuznetsev as the Commander-in-Chief of the Soviet Navy. Only 46, Gorshkov was a young, bright, and capable officer when he was promoted from the position of First Deputy Commander-in-Chief of the Soviet Navy. Since he took the helm, the Soviets have leapfrogged from a third-rate naval power to the world's largest navy. In addition to this growth, the capabilities and operations of the Soviet Navy have expanded under Gorshkov's leadership to the point where many people now think of the Soviet Navy as an offensive "blue-water" navy, rather than their traditional coastal-defense navy.

Russia is a land-locked nation. They have been preoccupied with expansion and defense of land frontiers. Before Joseph Stalin's death, Soviet leadership viewed their developing navy as an extension and guard of their army fronts. Following Stalin's death in 1953, Khrushchev methodically increased their production of warships and expanded their role and influence in world events. With annual expansion of the Soviet Navy, the perimeter of the homeland defense continuously pushed outward. Soviet naval strategy moved forward, just as their unchecked naval fleet started in 1965 to steam across all the world's major waterways.

The Soviet Navy's strategic mission is to support Soviet Grand

Strategy. Gorshkov has written that for the Soviet Union, whose chief

political goal is the expansion of Communism, sea power is one of the

most important factors for strengthening their economy, for accelerating

scientific-technical development, and for cementing economic, political, cultural, and scientific relations between the Soviet people and allied peoples and countries.⁵

Gorshkov, a student of history and especially of Admiral Alfred

Thayer Mahan, states in <u>Sea Power</u> that a great power must have a great
navy or lose its status.⁶ He draws upon the history of past major
powers, such as England, to validate this concept. Thus he uses history
and his professional experience and acumen to develop the politics of
Soviet sea power. In his pursuit of a larger and more versatile Soviet
Navy, Gorshkov does not lose sight of Soviet national goals. He is an
advocate of the total force concept, wherein the navy is regarded as a
component force within the framework of total armament.⁷

According to Gorshkov, control of the seas is the key to a great maritime strategy. He understands that to accomplish the various Soviet missions the Soviet Navy may have to control specific ocean areas for certain periods of time. Such periods can be measured from hours to years. He advocates situational strategy, which depends on many factors, including tactics, mission and capability.

In <u>Sea Power</u>, Gorshkov also notes the need for careful advanced preparation in large-scale planning for naval warfare:

Establishing the conditions for gaining sea control has always required lengthy periods of time and the execution of a series of measures while still at peace.

Gorshkov strongly believes that defense of the homeland begins at the enemy's doorstep. So he asserts that the Soviet Navy, in concert with the other Soviet armed services, should have an assured capability to destroy the enemy's military and industrial power quickly in their own countries. To accomplish these objectives, the USSR needs a

strong Navy capable of extended operations. In support of these goals, growth of the Soviet nuclear submarine fleet (armed with cruise/ballistic missiles and torpedoes) as well as their overseas porting facilities have increased tremendously over the past ten years. The Soviet naval inventory now includes over three hundred fifty submarines of all types. Additionally, there has been an increasing emphasis to improve the professionalism of their Navy in order to meet all contingencies.

As a land-locked continental power--self-sufficient in mineral and energy resources and land linked to Europe and Asia, the Soviets should not need a large, powerful navy. In fact, they are not dependent on sea lines of communications for trade and raw materials in wartime. Further, they are obsessed about defense of the Motherland. As President Reagan has put it:

Though the Soviet Union is historically a land-power, ..., it has created a powerful blue ocean navy that cannot be justified by any legitimate defense need. I

So as the US sees it, these circumstances should preclude them from aspiring to be a great sea power. But despite these delimiting factors—as well as many others, including geographical and psychological ones—strong recent Soviet leadership and clearly defined long—term national objectives have produced enormous Soviet "global" sea power. They continue to build more and better warships and are now building an aircraft carrier similar to ours. Their amphibious warfare capability is expanding. Likewise, they are expanding their sustainment capability with their merchant fleet. Thus Soviet naval growth has been constant. Like the US, the Soviets believe that sea control means not merely the capacity to destroy one's maritime enemy, but it also provides the state with a means to advance national purposes in any part of

the maritime world, from transporting oil to supporting its fishing to handling large-scale shipping. Based on their present force structuring and operating procedures, it appears that the Soviet Navy is assigned several missions during wartime:

- a. Defend coastal regions and homeland (primary).
- b. Support land forces (primary).
- c. Project power ashore -- SSBNs (primary).
- d. Deny US and allies sea lines of communications (SLOC).
- e. Protect Soviet SSBNs (primary).
- f. Destroy US and allied antisubmarine warfare forces.
- g. Destroy US and allied SSBNs (primary).
- h. Protect sea lanes to friendly Third World countries necessary for the Soviet Navy's staying power.
 - i. Conduct amphibious warfare.

Likewise, the Soviet Navy has assigned peacetime missions:

- a. Provide a force necessary to help deter war.
- b. Protect the homeland from encroachment by the US and European NATO countries.
- c. Protect Soviet interests in the sea, which is a resource for strategic material and food products.
- d. Prevent blockades of ports and sea lanes vital to Soviet national interests.
- e. Evacuate Soviet citizens and their property in Third World countries.
 - f. Extend Soviet political power and influence.
- g. Counter Western sea-based delivery systems that are aimed at the homeland.
 - h. Project power ashore--SSBNs.

It appears, then, that Gorshkov's goal is to change the capability of the Soviet Navy from a stay-at-home coastal defense fleet to a "go anywhere, anytime" navy in support of Soviet policy. Having expanded the Soviet Navy into the world's largest navy, Gorshkov is close to realizing his objective.

Basically, the US and Soviets agree on their functions of strategic and tactical sea control in wartime and peacetime. However, former CNO Admiral Holloway notes that in wartime

. . . the only truly fundamental mission of the Soviet Navy is defending the shores of the USSR in depth; while the US Navy must also protect the vital SLOCs between the US and her allies. 12

So in wartime the Soviets can survive without sea communications between her allies, whereas the US cannot. On the other hand, Gorshkov's arguments in his book, <u>Sea Power</u>, emphasize the basic importance of the sea and the necessity of constructing a unique Soviet Navy fully capable of defending the Soviet Union and operating on the world's oceans without impunity.

For all practical purposes, the free world must look at the Soviet naval strategy in the long term. The US Navy perceives that, although the Soviets espouse a sea control strategy, they currently have only the capability of a sea denial strategy, given their present forces (no sircraft carriers) and limited overseas porting facilities. However, as the Soviets methodically extend their sea line of defense farther away from their coastline, it appears their ultimate goal of a sea control strategy is what free nations should plan to counter. Soviet plans were in fact forged years ago to meet their future maritime challenges. Our counterstrategies must take into account both the recent rapid increase

in Soviet sea power and her determination finally to dominate the seas of the world.

Soviet Merchant Fleet--Instrument of Soviet National Policy

Maritime power is the sum total of maritime resources. It includes geographical position, naval weapons systems, commercial shipping, fishing activities, advanced bases, and oceanographic capability which, when employed in an effective manner, achieve national objectives. The link between Soviet maritime power and national power has been noted by Norman Polmar:

Soviet sea power is one of the most significant factors of contemporary international politics. In certain respects, it is a dominant consideration in a world that is 70 percent covered by water, that trades more than 95 percent of its goods by sea, and that feeds an increasing portion of its people from the sea. 13

So the Soviet's maritime system is totally controlled and integrated by the state. Overseeing this awesome responsibility is FADM(SU) Gorshkov. 14 Their maritime system is a subsystem of their Grand Strategy. The Merchant Marine is only one element of the maritime system. However, it is a very important element because it serves a dual role. Not only does the Soviet merchant fleet play a strong political/economic role for the USSR worldwide, but it also complements their naval strength, thereby giving their navy an even greater worldwide capability.

SOVIET MERCHANT MARINE DEVELOPMENT

Although the Soviet Union encompasses nearly one-sixth of the earth's surface, it does not necessarily view itself in today's world as solely a land power. The USSR has 28,000 miles of coastline--two-thirds

of its entire national frontier—bordering on the Pacific, the Sea of Japan, the Atlantic, the Arctic Ocean, the Sea of Okhotsk, the Bering Sea, the Barents Sea, the Baltic Sea, and the Black Sea. Most of this coastline is icebound for the better part of the entire year. This operating restriction, however, does not appear to be slowing Soviet maritime growth. (See Figure 1.) Instead, the USSR is pushing forward and using its merchant fleet to plow the sea lanes of the world. Their merchant fleet now boasts of more than 2,400 ships of more than 1,000 gross tons; they call at 1,200 ports in 124 countries. Soviet FADM(SU) Gorshkov clearly supports this strong, active merchant fleet:

An important integral part of sea power is the equipment and personnel which make possible the practical utilization of the oceans and seas as transport routes connecting continents, countries, and peoples. For this it is essential to have a merchant marine, a network of ports and services supporting its operation, and a developed shipbuilding and ship repair industry. 16

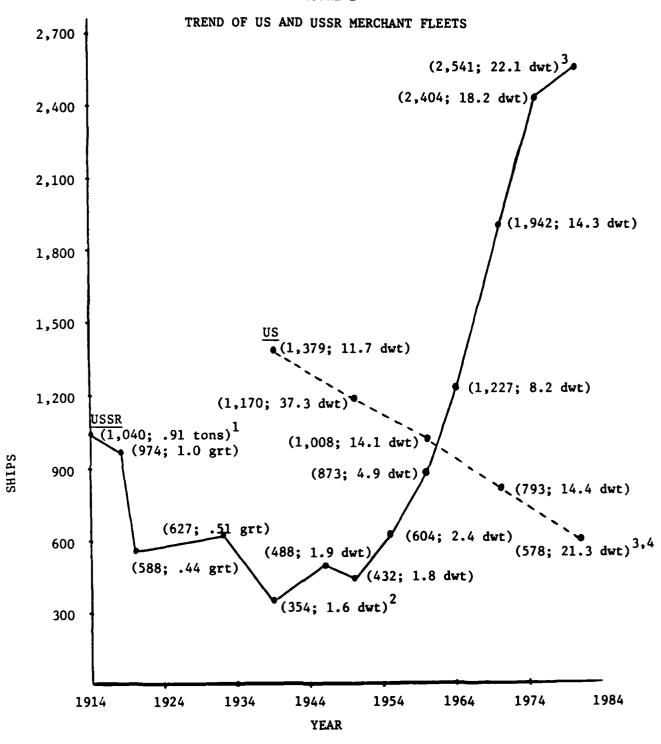
This fleet began as a national effort to free the Soviets from dependence on foreign ships to move its commerce. From this inauspicious beginning, it has expanded and evolved into a powerful merchant fleet earning hard currency and providing direct support to Soviet foreign policy and to their naval forces. The strategic implications are unavoidable: (1) Support of subversion of the West and the Third World countries, (2) easier purchase of technology and consumer durables to relieve pressures at home, and (3) easier purchase of grain.

Development Prior to World War I

Western-oriented Tsar Peter I (1682-1725) introduced Russia's maritime system. He was interested in shipping, shipbuilding, and the domestic support necessary to expand Russia's maritime capability.

Prior to this, Russia's Tsars showed very little interest in building a





Number of ships; millions of tons.

⁴There are approximately 900 US owned ships registered in foreign countries

(Flag of Convenience Ships).

Ships of 1,000 gross tons and over (1939-1982).
Some references exclude merchant ships (1,000 gross tons and over) which support their fishing fleet, oceanographic fleet, icebreaker fleet, and other requirements. If all are counted, the number of Soviet merchant ships is 2,541. If just those Soviet merchant ships operating in their domestic and international trade are counted, the number is 1,725. The importance of these figures is the overall trend not just the total number of ships. The graph is constructed from three sources (footnote 16), counting all their merchant ships.

maritime capability. There were very few secure ports from which ships could operate, nor was there a viable naval fleet to protect a merchant fleet.

Following the reign of Peter the Great, the Russian aristocracy spasmodically supported building a maritime system. They recognized to some extent that ships were necessary to deliver goods into some of the remote areas of Russia, to Europe, and to the Far East. There were no overland routes to some of these areas, so it was cheaper to develop sea transportation. The lack of full economic support by the tsars for a merchant fleet and a naval fleet to protect it were the greatest factors for the slow and uneven growth of their fleets during the 18th and 19th centuries. However, by the end of the 19th century, ships in the Soviet Marine inventory did support that part of their domestic economy and those regions of their country which depended upon sea transport.

World War I

At the beginning of World War I (1914-1918), the Russian merchant fleet was a hodgepodge group of ships (1,040), most of which were lost during the war and in the three years of civil war that followed. Many of the ships were old and very slow--technically obsolete steamships and sailing vessels. Traditionally, the Russian merchant fleet was of little significance in world activities, and by one account its Merchant Marine system was in very sad condition:

Tsarist Russia had barely a million gross registered tons in merchant tonnage, which corresponded to 2.1 percent of world maritime tonnage. Seven percent of its exports and 15 percent of its imports were carried in Russian bottoms. The Russian Empire had to spend 100 million rubles annually to charter foreign tonnage. The Russian port system was in poor condition; only a few had a depth of more than seven meters. Warehousing was practically non-existent. Almost all cargo handling was done by hand.

Inter-bellum Development

During World War I and the chaos of the Revolution (1917) and particularly during the Russian Civil War (1918-1920), many merchant ships were sunk, taken overseas by the White Guards, or confiscated by foreign states that had stockholders who invested in Russian steamship companies. By the time the situation had stabilized, the Soviets were left with approximately 580 ships, totalling 500,000 tons of shipping for domestic and international trade. 19

In 1918 Lenin nationalized the Soviet merchant fleet and formed the Baltic company, TRANSBALT, to handle Soviet and foreign shipping. At this time, a significant portion of the Soviet's total exports consisted of timber, grain, and oil to pay for the imported machinery and technical equipment needed to rebuild their country. Lenin's Merchant Marine planning and construction for the next few years placed priority on domestic transport to meet the Soviet's internal needs, with a modest portion of resources going to an ocean-going fleet. He assigned a small number of operational ships for foreign trade, anticipating the resumption of foreign trade would help ease the economic dislocation of the Soviet Union, restore their industry, and reduce chartering of foreign tonnage.

From 1920 to 1925 the Soviets increased their merchant fleet capacity by salvaging and repairing sunken ships and repairing those that were broken down. During this time the Tenth Party Congress of the Soviet Union ordered the reconstruction of the domestic shipbuilding industry. Various steamship lines were also organized and brought into an operational status. Among them were the Directorate of Sea Transport for White Sea-Murmansk (1920), the Black Sea Steamship Line Company (1920), the Northern State Steamship Line Company (1922), and the Baltic

State Steamship Line (1922).²⁰ Two companies, the White Sea and Baltic, started carrying foreign cargo almost immediately. The money they earned provided for the repair of more ships and the construction of new ones at a much faster rate than they had first expected. However, in relation to other countries' Merchant Marine fleets, this growth was not particularly significant. In fact, they were still forced to use much of their hard currency to charter foreign freighters.

Under Lenin's New Economic Policy in 1921, all steamship companies started to operate on a self-supporting basis--which meant they were no longer financed by the state. In order to attract private capital, the joint stock shipping companies Dobroflot and Sovtorgflot were organized. To attract foreign capital, the Soviets formed mixed companies such as the Russian-German Company (1921), Derutra, and the Russian-Norwegian Steamship Company (1923). The formation of these companies brought in much needed foreign capital and allowed the Soviets to use them to avoid a blockade of Soviet foreign trade and to gain experience in operating steamship lines. These ventures both assisted the growth of the Soviet Merchant Marine and improved relations with many foreign states. Eventually, these joint stock and mixed companies were liquidated for various reasons, but Russia's brief venture in using capitalistic methods to help improve their economy served their purposes well.

By 1923 the Soviet shipbuilding industry had sufficiently recovered from the turmoil between 1914 and 1920 so that ship repairs on the whole speeded up. By 1925 restoration of the majority of their ships were completed. The Soviet shipbuilding yards started to build more new ships, and ship procurement abroad was initiated. The Counsel of Labor and Defense supported this new construction, because they knew that in

three years eighty percent of their ships would be more than twenty years old. An aging fleet could not sufficiently support their planned economic growth.

In pre-World War II period, the first Five Year Plan (1928-1933) continued to reinforce the Soviet Merchant Marine with a sizeable number of new constructions. This plan set a goal of increasing cargo sea transportation more than four times and total tonnage of ships more than two times. Although the plan was not entirely fulfilled, their Merchant Marine received one hundred thirty-six new ships with a total cargo capacity of close to 500,000 tons.²³

During December 1930 and the first few months of 1931, the Soviet transportation system, which was lagging considerably behind their increasing domestic demands, became the object of the special consideration of the government, which led to a number of decisions to improve the situation. To improve overall efficiency of administering the operations of the Soviet merchant fleet, the Soviets established the Peoples' Commissariat for Water Transport and six directorates: The Azov, Baltic, Caspian, Northern, Pacific and Black Sea.²⁴

During the second Five Year Plan (1933-1937) merchant ship construction was almost negligible. The Soviet merchant fleet received only twenty-three new ships with a total cargo capacity of 130,000 tons. The primary reason for Stalin's slowdown in constructing/buying merchant ships was Russia's need to build warships to counter the German's war making capability. At this time, The Soviets did not have the shipbuilding capability nor the hard currency to build or buy both a merchant fleet and a naval fleet. Their need to move goods overseas with indigenous waterborne transportation continued to exceed their own

resources by at least ninety percent--thereby adversely affecting their balance of payments.

World War II

In the Soviet's third Five Year Plan (1939-1943), Stalin attempted to correct the tonnage shortage; however, World War II prevented Russia from making any gains. By 1940 the tonnage of the Soviet merchant fleet was between 1.5-2.0 million tons, but qualitatively the majority of their ships were obsolete and in no way able to satisfy the needs of sea transportation, either in peacetime or during war. 26

During World War II the activities of all their steamship companies were immediately subordinated to the needs of the military command, and firm military control was established over them.²⁷ The merchant ships were used to haul cargo, troops, and civilians. Heavy casualties were suffered by the Soviet merchant fleet. Three hundred and eighty ships were lost, and practically all the remaining ships were badly in need of repairs.²⁸ The war also took its toll of Soviet Merchant Marine support facilities:

Twenty-four seaports were in enemy hands . . . were made almost totally useless. Sixty-seven percent of the country's berths were destroyed as well as seventy-nine percent of its warehousing and seventy-eight percent of its cargo handling equipment . . . Because dredging had been neglected during the war, the rivers and canals (and harbors) were heavily silted up. Shipyards . . . had been leveled. There was a lack of people to fill jobs aboard ships and in the ports. Technical schools to train specialists were virtually non-existent. 29

Post-World War II Development

At the end of World War II, the Soviets collected all the Axis shipping they could as reparations. Furthermore, they retained nearly

one hundred US lend-lease merchant ships (including 38 liberty ships), which further offset their losses. The Soviets were devastated by World War II and were at an industrial standstill. They faced a tremendous job of rebuilding their society and economy—to say nothing of their fledgling Merchant Marine industry. Compared with the US Merchant Marine fleet at the close of World War II, the Soviet's fleet was nearly nine times smaller and twenty times as light in tonnage.

Stalin's merchant fleet totalled 573 ships, weighing 1,939,000 deadweight tons. 31 Up to the early 1950s, Soviet shippards were in a state of repair, thus little new construction was accomplished by the Soviets. Those shippards which ere operational produced warships. Because of this, the Soviets were forced into procuring—at the cost of 2.6 billion rubles—some of their merchant ships from abroad. Most of these ships were small cargo types of limited durability, used mostly in Soviet domestic trade. With a limited input of new ships and the retirement of old and obsolete vessels, there was an overall reduction during this period of fifty—six Soviet merchant ships with a total shipping capacity of 54,000 tons. 32

Facing this loss of maritime capability, the Soviets emphasized in their economic planning the rebuilding of their shipbuilding infrastructure as well as that of their satellite states. In the fifth Five Year Plan (1951-1955), the growth of the Soviet Merchant Marine exceeded that in the previous five-year period by 63.8%.³³ More than half of the new ships were built by the Soviets. In addition, many ships underwent major repairs. Because of these efforts, the Soviets were able to increase their shipping capability by approximately 630,000 tons.³⁴

In 1956 the accelerated development of the Soviet Merchant Marine was underway. Only a year earlier, Admiral Sergei Gorshkov was

appointed Commander-in-Chief of the Soviet Navy by Khrushchev. The 20th Communist Party Congress, under Khrushchev's direction, made the decision to emphasize the development of a Merchant Marine that would enable the Soviet leadership to enter foreign trade on a competitive basis anywhere in the world and to allow Soviet aid (mostly military) to be delivered to selected countries in Soviet vessels. Khrushchev's decision was probably the turning point in Soviet concentration on the strategic potential that could be gained by a large, powerful, and versatile Merchant Marine fleet. The sixth Five Year Plan (1956-1960) envisaged a merchant fleet growth of 1.6 million tons, which represented about a 65% increase in tonnage and greatly increased transportation of Soviet foreign trade cargo. 35 Even though this plan was never fulfilled (it was replaced by the 1959-1965 Seven Year Plan), the measures provided in it did play an important role in the development of the Soviet Merchant Marine. During its first three years (1956-1959), more funds were allocated and spent for ships in Russia and abroad (Finland, Yugoslavia, GDR, Poland, Hungary, Rumania, and Bulgaria) and more domestic shipbuilding capacity was allocated and utilized for civilian construction than during any other three year period previous to this.

Precisely at this time a real linkage began to form between the political, military, and economic capabilities of their merchant fleet. Lenin and Stalin foresaw the economic strength that a strong Merchant Marine could provide for the Soviet Union. Khrushchev recognized the political potential in influencing less developed countries by establishing shipping lines vital to their developing commerce and by supplying military aid. Although not specifically documented by the Soviets, it can be assumed from Gorshkov's later writings, in which he

specifically focused on their Merchant Marine, that he was the catalyst and driving force for total integration of the naval and Merchant Marine capabilities.

During the Seven Year Plan, Soviet merchant fleet tonnage grew from 2,840,000 registered tons in 1958 to 7,150,000 registered tons in 1965, or a 250% increase. In 1958 the Soviets had about 250 ships suitable for long hauls, while in 1965 they manned over 800 such ships. The average cargo carrying capacity of the dry cargo ships increased 150%, while that for the tankers increased 180%. The Soviet merchant fleet jumped from 12th place in world ranking in 1958 to 6th place in 1965. On tonly did the Soviet merchant fleet become one of the youngest fleets in the world during this period, but the Soviets also started turning out more ships of sufficiently large size for high seas operations. Using satellite countries such as Poland and East Germany to construct many of their ships (up to 40%) and also building large numbers of series-built (concentrating on a few standard vessels) merchant ships, Soviet planners were well on their way to achieving economic independence in waterborne trade by the mid-1960s.

By 1966 the Soviet Union had increased its deadweight tonnage at least tenfold in fifteen years. Its fleet now exceeded 1,000 merchant ships. In the meantime, the US was steadily declining in its Merchant Marine capability. (See Figure 1, p. 13.) Soviet directives for the 1966-1970 Five Year Plan again approved large increases in tonnage, total cargo turnover, and port productivity. In concert with modernization, average ship operating time was scheduled to increase by about 5%. This would allow for greater profits and efficiency. Although the plan was not completely fulfilled, actual performance was close to the planned figures. The fleet was augmented by 340 ships totalling 4.5 million

tons, an increase of 42% over the five year period; total cargo turnover in 1970 was increased 15%, allowing for handling of 1,300 million tons of cargo; and average ship operating time increased for dry cargo ships from 310 days in 1965 to 331 days in 1970, and for tankers from 311 days to 322 days.

By end of 1970, the Soviet Merchant Marine had established 65 foreign lines, including 33 with a published schedule. Accordingly, smaller and less developed countries of the Third World became almost entirely dependent on the Soviet Merchant Marine for their ocean transport. Likewise, the Soviet merchant fleet shipped arms into the war zone in Vietnam, supplied strategic weapons to Cuba in 1962, and transported troops and supplies to Angola. It also became apparent that a significant portion of their Merchant Marine assets were assigned direct support missions of refueling and resupplying their expanding fleet.

Succeeding Soviet Five Year Plans provided for further increases in merchant ships, cargo turnover, and cargo carriage. Additionally, they provided for new ports and modernization of existing port facilities, thereby trying to improve ship turn-around time. Their ships increased in size and sophistication. Their drafts increased as well as their lengths. New types of ships--such as the container, Ro-Ro, and super-tanker ships--changed the capability of their Merchant Marine fleets. Thus the Soviet Union's maritime capability continued to change with new technology in the shipping industry. By 1975 tonnage had increased by 4 million, cargo carriage by twenty-three percent, and total cargo turnover by thirty-five percent in a little more than a decade. 41

In 1977 the Soviet merchant fleet's share of the world shipping

tonnage was 3.27.42 When compared with the other nations in terms of gross national product, industrial output, and size, the Soviet foreign trade grew steadily but not as fast as other nations. For example, Soviet foreign trade in 1975 was 20% of the US foreign trade. During this time, the Soviets carried between 55-60% 43 of their cargo in Soviet merchant ships, whereas the US carried only 4744 of its own cargo. This allowed the Soviets a more favorable balance of payments than that of the US. By 1982, however, the Soviet's share of the world shipping assets more than doubled to 7%, although her foreign trade was only 25% of the US foreign trade. 45 The Soviets also continued to carry more of their own cargo-up to 60-90% of it (depends on reference used).46 The plain economic fact is that compared with the United States percentage of trade carried by its own ships, the Soviets were paying less hard currency to ship goods. This saving in turn was used by the Soviets to further improve and expand their maritime capability--rather than merely to maintain it, or even reduce it.

In recent times, the Soviets have systematically and continuously upgraded their fleet. Table 1 reveals the make-up of their merchant fleet and how their various shipping inventories have grown through the last twenty years. This data shows that the Soviets have built many general cargo ships which provide them with diversified capabilities. Even though they may transport less profitable cargo, the tradeoff is that these smaller ships are well suited for trade with smaller, less developed countries of the world. In these countries, modern cargo handling equipment is practically non-existent, and their volume of trade does not require large specialized ships. Larger Soviet cargo ships, such as the Ro-Ros, bulkers and containers, are very suitable for carrying large quantities of commercial products, but they are also very

good at transporting large numbers of Soviet troops and military equipment. These ships are most likely earmarked for specific military missions in the event of war.

TABLE 1⁴⁷
COMPOSITION OF SOVIET MERCHANT MARINE

Category		<u>1981</u>	1960
Combined Carriers (passenger & c Tankers (includes gas & chemical Cargo Ships Includes:		10 319 2,212	73 134 666
Bulkers Reefers Container Carriers Ro-Ros Lighter Carriers		106 32 37 45 <u>2</u>	98 0 0 0
	TOTAL	2,541	873

Compared to the US, Soviet ships are considerably newer (Table 2). Their Five Year Plans account for block obsolescence of their merchant fleet, so they program new construction and major repair and upgrading of their ships. Their numerous cargo ships designed for carrying mixed cargos over routes serving fixed schedules (liner routes) and cruising passenger ships have the most impact on world trade and earn a considerable amount of hard currency. Future building plans seem to be emphasizing larger specialized ships which will earn more hard currency than the smaller cargo ships. It is interesting to note that throughout their accelerated expansion years the Soviets have built about 35% of their own ships and have commissioned construction of 40% by Eastern Europe, 5% by Free World countries, and 20% by Finland and Yugoslavia. 48

TABLE 2⁴⁹

AGE DISTRIBUTION OF USSR MERCHANT
MARINE FLEET COMPARED TO US

Years	<u>USSR (1982)</u>	<u>US (1982)</u>	
0-10 Years	342	32%	
11-20 Years	53%	30%	
Over 20 Years	13%	38%	

Thus the Soviets continue to make inroads into Western shipping services. They are doing this mostly by price undercutting. Since their Merchant Marine is totally controlled by the state, the Soviets have lower operational costs than western fleets because of lower wages, lower safety standards, less insurance, State Bank capital for building and replacing ships (ship operators don't need to make provisions for depreciation or replacement), political considerations always prevailing in operating their fleet, absence of profit motivation, cheap fuel oil prices (lower than oil sold to satellite states), cheaper home port charges, and inexpensive costs of training crews. The National Maritime Council estimates that Soviet freight rates in some cases range 10-35% below rates charged by Western fleets. 50 For example, Soviet merchant ships carrying military equipment to Mozambique have achieved a dominant position on the return journey from East Africa by undercutting Western rates for civil cargos by as much as 30%.⁵¹ In addition to ships, the Soviets operate the Trans-Siberian Railway (TSR) which carries containerized general cargos from Japan, South Korea and Hong Kong to Western Europe with ample cargo on the eastern return trip. This operation is growing in scope, and the Far Eastern Freight Conference members are suffering severely from this competition. Thus their merchant profits serve to support their efforts to delivering military assistance abroad. As the growth of Soviet foreign trade expanded in the middle and late 1950s, shipping became more important to the Soviets. Their merchant fleet, even though expanding at this time, carried a steadily decreasing share of Soviet cargos. The result was that as the trade expanded, the Soviet Union became increasingly dependent upon foreign shipping and was compelled to spend greater amounts of foreign exchange to charter this foreign tonnage. In its infant stages then the development of the Soviet merchant fleet was probably a result of a reaction to poor balance of payments—a reaction which prompted an accelerated rate of development of her merchant fleet. Increasing Soviet foreign economic and military aid in the 1960s was supported by a larger, more profitable merchant fleet.

For the next twenty years (1962-1982), the Soviets built a merchant fleet sufficiently large and diversified to now carry more than sixty percent of their own foreign trade cargo, deliver military and economic aid without dependence on foreign shipping, satisfy basic domestic needs in sea transport, and earn enough foreign currency to pay for the Soviet charter of foreign ships and supplement the Soviet need for foreign currency. Conducting state-supported competition against ships from Western countries and representing the commercial power of the Soviet Union on the ocean trade routes, the Soviet merchant fleet poses a real strategic threat to the West. Not only are their merchant ships a capable and strong economic force, but they are also centrally designed and controlled to support and smoothly integrate with Soviet naval forces. Robert E. McKeown concisely assesses this new Soviet capability:

The Soviet merchant marine's peacetime organization, manning, and numbers and types of ships provide the Soviet Navy with an auxiliary capability unequalled by any other maritime nation.⁵²

What does the US have to counter the Soviet maritime strategy?

There is no coherent, integrated (either unilateral or multilateral) US maritime strategy. Soviet Merchant Marine forces have made and continue to make great economic and political inroads worldwide. Unless the West counters this growth, the Soviet Merchant Marine will surely contribute to a future goal—Soviet political intimidation, economic domination, and perhaps ultimate coercion of Western nations. This is no idle threat.

ORGANIZATION OF THE SOVIET MERCHANT FLEET

In view of such features as Soviet geography and climate, its

Merchant Marine plays a leading role in handling commerce and transporting passengers in coastal shipping (especially in the extreme North
and Far East regions), as well as in foreign trade and cross-trading.

In order to conduct day-to-day domestic and international trade operations, eight shipping companies operate in the Russian Federation, three
in the Ukrainian, while Azerbaija, Georgia, Latvia, Lithuania and Estonia
have their own companies.

In 1956 the Soviet Ministry of Merchant Marine was formed by the 20th Party Congress. This ministry operates under direct control of the Soviet Politburo, which provides overall policy guidance. Khrushchev consolidated the overall operations of their Merchant Marine system to improve efficiency and to insure the system's direct contributions toward state political and economic goals. Evolution of the administration of the Soviet Merchant Marine is shown in Figure 2.

The Ministry of Merchant Marine is located in Moscow. It oversees regional organizations which administer each ocean area. These regional headquarters are located in Murmansk, Leningrad, Odessa and Vladisvostok.

Under the regional organizations are sixteen shipping lines (figure 3) which are responsible for the operations on both the intra-Soviet and international routes under their jurisdiction. The Ministry of Merchant Marine also directs the operations of Soviet ports, ship repair facilities, research institutes, and merchant training schools. Construction of both military and civilian craft is controlled by the Ministry of Shipbuilding, and close links to the Foreign and Defense Ministries insure immediate availability of merchant vessels for missions of a political or military nature. 53

Timofei B. Guzhenko sits at the head of the Ministry of the Merchant Marine. Guzhenko is assisted by deputies and representatives of line agencies in managing the operation of the fleet and support facilities. He reports to the Soviet Council of Ministers and to the Communist Party of the Soviet Union. He is supposedly equivalent in rank with seven other principal Soviet ministers concerned with maritime affairs (Figure 4). This organizational structure provides the Council of Ministers with means to oversee and integrate their maritime strategy. The steady development of Soviet maritime affairs is being coordinated by Five Year Plans. For example:

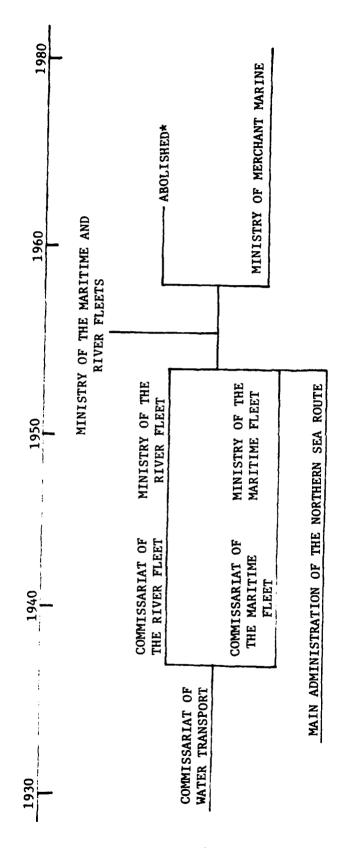
In February 1981 the 26th Congress of the Communist Party of the Soviet Union was held in Moscow.... The Congress adopted major guidelines for the USSR economic and social development in 1981-1985 and until 1990. The guidelines stipulate in particular the more efficient operation of the merchant fleet, ports and ship repair yards, better organization of cargo and passenger transportation, and higher efficiency of transport service exports. 56

Education of Soviet seamen is very formal, and maritime positions are highly sought by the Soviet People because of higher wages, foreign travel, and black marketing where merchantmen sell goods. Under the Ministry of Merchant Marine, training is conducted by the Special

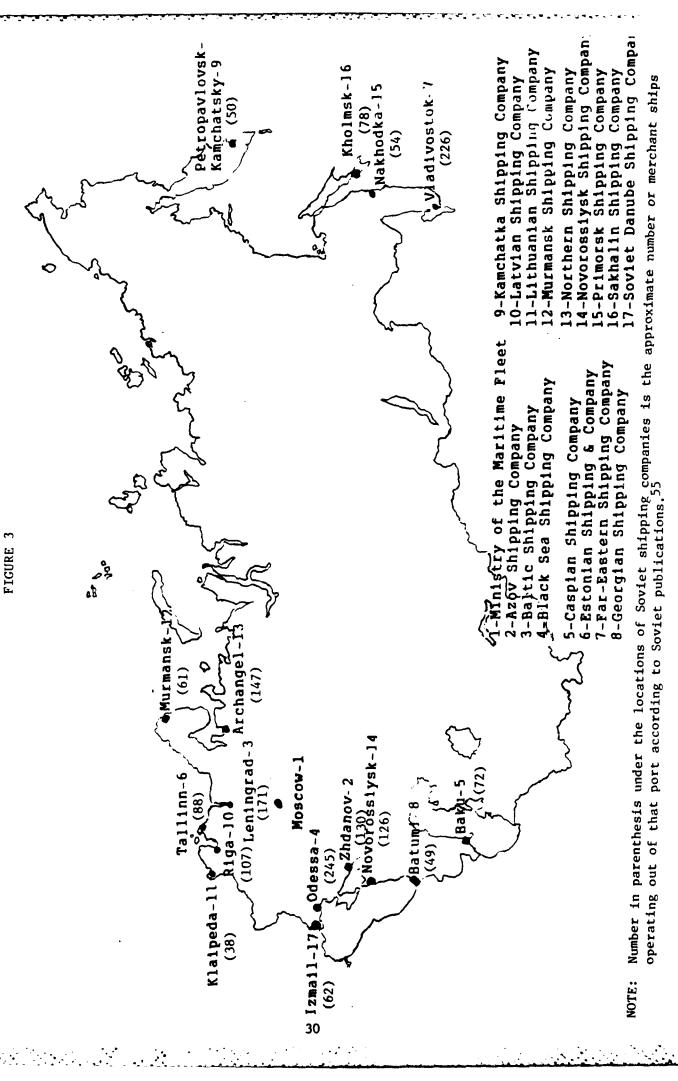
FIGURE 2⁵⁴

でんれた まないいいい

ADMINISTRATION OF SOVIET WATER TRANSPORT 1931-1980



*RIVER FLEET CURRENTLY ADMINISTERED AT REPUBLIC LEVEI..

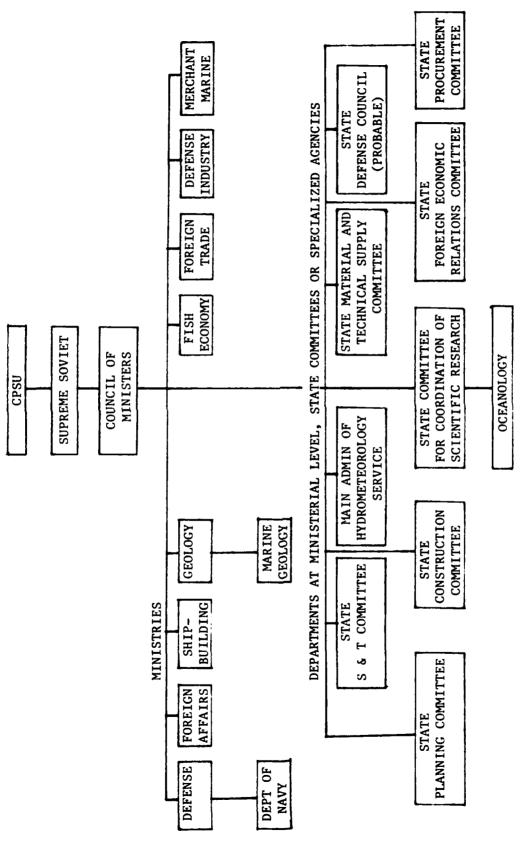


Educational Institutions Department, which is responsible for administering the activities of all maritime training establishments from merchant seamen to captains. Freight management is conducted by the Ministry through five regional directorates—the European, Middle East-African, South Asian, Far Eastern, and American directorates. They allow planning by each steamship company for the five major directional flows. Overall, the organization for controlling and directing the Ministry of Merchant Marine is multi-layered, cumbersome and bureaucratic. Even so, changes in direction are cautiously plotted and methodically implemented. This process takes an inordinate amount of time, so the Soviets have difficulty keeping up with modern technology, compared with rapid technological adaptations in Western fleets. However, once the Soviets decide to implement something new, they are very good about getting the job done.

The Soviet Union is a member of the Council for Mutual Economic Assistance (variously COMECON and CMEA). The countries participating are Poland, Czechoslovakia, Hungary, Rumania, Bulgaria, East Germany, Mongolia, Cuba, and the USSR. Their charter is designed to maximize the specific contributions that each member is able to make, based upon its capability (economic, industrial, etc.). The Soviets control COMECON, which has established its center in Moscow. COMECON's location is obviously advantageous to the Russians. First, the Soviet Ministry of Merchant Marine can directly interface with COMECON, thereby dictating Soviet needs. Secondly, it helps ensure that dealings with Western and Third World nations are on the most advantageous basis to the USSR. Finally, the Soviets greatly influence ship types produced (standardization) by members, the loaning of ships among member nations, and coordination of freightage. Thus,

FIGURE 4

PRINCIPAL SOVIET MINISTRIES/DEPARTMENTS CONCERNED WITH MARITIME AFFAIRS



It should be noted that this centralized [Soviet] control extends to the fleets of the members of the Council for Mutual Economic Assistance (CMEA), which must be considered in assessment of Soviet sealift capability.

Currently, this organization is structured for a peacetime environment. But in the transition to wartime, it is reasonable to assume that assets of the Ministry of Merchant Marine will come under the direction and control of their Navy Department, just as occurred in World War II. Gorshkov makes this observation about their merchant fleet support during World War II:

The Great Patriotic War was a very important stage in the history of the development of the merchant transport fleet of our country as well as for the national economy as a whole. In the course of the war the merchant transport fleet supplied the needs of the fronts and the economy of the nation with national economic and military shipments. 58

Limited available evidence indicates that the Ministry of Merchant Marine has been accorded a considerable degree of priority by the Politburo. This is probably true because of increased Russian emphasis on foreign trade. The number of states having seaborne trade with the Soviets has more than tripled over the past thirty years. In addition, their merchant fleet plays an active role in the implementation of political and military programs as they are outlined by the Soviet Community Party.

The US simply does not have an organized maritime system comparable with Russian maritime organization. As Rear Admiral H. Miller, USN (Ret), has noted:

No agency of the US government is responsible for coordinating all of the many and diverse US maritime arms--merchant marine, foreign trade, foreign affairs, fishing fleet, Coast Guard, and Navy--to permit the United States to compete, or even cope, with the continuous pressure of the Soviet campaign.

Major US maritime assets, particularly foreign trade and the US merchant marine, are, in short, not included in US national security planning.

NAVAL MILITARY BENEFITS FROM THE MERCHANT MARINE

Soviet merchant vessels are designed, built, and equipped to operate as naval auxiliaries. Richard Ackley has noted that: "Overall coordination is apparent in the merchant marine's support to the combat navy. Since 1969 the Soviet Union has deployed their naval ships out of their coastal waters. Most recently, naval out-ofarea deployment was made by a Soviet helicopter carrier (Leningrad) and her escorts to the Caribbean and Gulf of Mexico. By projecting their power into these regions through their naval forces, the Soviets showed political support for Cuba, Nicaragua, and Marxist-Leninst revolutionaries of the regions in their wars of national liberation. In 1980, the Soviets logged a total (including auxiliaries, amphibious, surface combatants, submarines, and other ships) of approximately 56,000 out-ofarea ship days, whereas the US logged only 48,000 days.61 Ten years previous to this, the US led the USSR by about 3,000 days. Today the gap is wider and still growing. These deployments are supported not only by naval replenishment ships and advanced naval bases (such as in Cuba) but also in great part by their merchant fleet. 62 Soviet merchant ships supply about 70% of the fuel requirements (also to a lesser amount other needs such as food, spare parts, etc.) for the Soviet naval fleet.63

The magnitude of the military threat posed by the Soviet merchant fleet should not be underestimated. One author expresses it this way:

The building of ships which can be used as naval auxiliaries in time of hostilities (or in peace), but retaining their commercial nature, has resulted in deflating the number of Soviet combatants, thus giving an illusion of fewer warships as well as having the rest of the world subsidize the operation of their Navy fleet. By sleight of hand, military capable ships are operated by the merchant marine and contribute toward the economy rather than being a drain on it... In time of crisis, these ships need only hoist the flag of an auxiliary vessel of the Soviet Navy to reveal their true status as a warship.

Gathering intelligence, replenishing the naval fleet, transporting material and personnel, supporting crises such as invasions or evacuations are some major roles played by their fleet in support of the overall operation of the Soviet naval fleet. Without their merchant fleet, the Soviets could not conduct all of their current out-of-area naval operations.

Former chairman of the Joint Chiefs of Staff, Admiral Thomas H. Moorer has observed that:

The 'greatest disparity' between US and Soviet 'combat capability' is in their merchant marine, where the Russians lead by far. 65

Other Western analysts agree, noting that the Soviet's merchant fleet now may be better than the US's in supporting a military operation. Dry cargo ships and tankers are suitably equipped for long range military sealift. They are capable of speeds greater than 14 knots and have heavy-lift booms and hatch sizes required for such use. Their RO/RO ships are essentially floating garages that load and unload cargo via a large ramp. A simple dock is sufficient as a port facility, for equipment is usually driven off the ship via the ramp. Another advantage of the RO/RO is that cargo cannot be seen until it is discharged. Thus these ships are ideal for delivery of tanks, armored personnel carriers, and other self-propelled weapons. They have already been observed

delivering heavy military equipment in Vietnam, Angola, and Ethiopia.

They have been deployed in Pact exercises (Zapad-series in the Baltic Sea). Another new Merchant Marine transport is the Seabee barge. Cargo is loaded or unloaded with a stern-mounted elevator; up to 25,000 tons of cargo can be put ashore in half a day. The Seabee can be used in military logistics and in amphibious operations. Specifically:

With this system it is possible to skip an entire step in the transit of heavy cargoes. A fully loaded barge can be shoved directly onto the 'lash' freighter and stored in its hold, with no need for the cargo to be offloaded at the port and then reloaded onto the freighter. Having arrived at its destination, the motorized barge is set down into the water once again and can continue its journey on its own. A single barge of the kind used by the Soviet fleet can accommodate up to 10 tanks, or an air-cushion landing boat of the 'Lebed' class (which makes it a virtually ideal vehicle for amphibious military operations.

It is estimated by Jorg Dedial, author of "The Threat of the Soviet Merchant Fleet," that with their RO/RO and Seabee vessels the Soviets have the capability to transport the equipment for five armored divisions. 67 With this capability, the Soviet merchant fleet could support potential amphibious operations (chokepoint strategy) to seige Greenland, Iceland, the Danish straights, or the Dardanelles.

Most Soviet freighters have electronic gear which far exceeds their actual needs. As has been observed by many Western analysts, this extra electronic equipment is used to engage in extensive real time intelligence gathering and reporting operation via satellite communications. The Soviets own over 7,500 ships in their combined merchant, fishing, research and hydrographic fleets. Using their electronic equipment, these ships provide a ready-made intelligence collecting capability anywhere in the world on short notice and report on such things as their own position; atmospheric and oceanographic conditions; other merchant

traffic movement; position and movement of naval military traffic; navigational information on ports; depth of water in coastal areas and ports; information from Western electronic emissions; and bathy-thermograph readings for use in antisubmarine and mine warfare. Additionally, they carry KGB (secret police) to support clandestine operations, Soviet naval officers under merchant marine cover to survey Western ports, and active Communist Party political officers who serve as a nucleus for propaganda and influence pedalling. 69

In case of limited or general war, passenger ships become excellent troop ships—as was evident in British transport during the Falklands War in July 1982. Today the USSR has more than seventy modern passenger ships, each with a capacity of carrying 700-800 people. A recent article on the Soviet perception of the Falklands War and the use of civilian passenger ships by the British makes note of this capability:

Yevgen'yev was also impressed by the mobilization of two other types of vessels for use by the Royal Navy: passenger liners for use as troopships... He made particular note of the speed with which the British converted the liners CANBERRA and QUEEN ELIZABETH II.

The Soviets can see a good deal when it's presented to them. Maintaining a large passenger fleet not only brings in hard currency but it also gives them a speedy and abundant troop-carrying capability whenever the occasion should arise. From all indications, the Soviets will continue to expand this capability.

There are approximately 250,000 to 300,000 mines in the Soviet inventory. Mines are used both offensively to block ports, harbors, chokepoints, and straits and defensively to protect bases, SLOCs and ballistic missile submarines. The US has heavily emphasized antisubmarine warfare for SLOC protection, but it has neglected

developing defenses against the mine. The Soviets realize this; thus they must foresee a potentially big payoff for a relatively small investment (mines are inexpensive, costing only thousands of dollars, when compared to ships, which obviously cost millions of dollars). So the Soviets plan for both offensive and defensive mine warfare, just as they did in World War II. This strategy calls for use of maritime vessels—from fishing trawlers to merchant ships—as well as aircraft, naval ships, and submarines. Thus the merchant fleet can sow minefields close to home in defense of the Motherland, can sow them surreptitiously at strategic sites in a coordinated first strike blow, or can sow them offensively under the cover of deception (flying flag of a neutral) in lieu of using a combatant vessel.

Ships in a centrally controlled merchant fleet can be quickly readied and/or diverted to go in support of naval forces. On more than one occasion Soviet submarines in trouble have received assistance from merchant vessels which were diverted from their original mission. In most instances, a merchant ship was the first vessel at the scene. Their communications are closely tied in to their naval fleet system, which can direct them at any time to assist naval ships.

To project their power overseas, the Soviets must definitely use their merchant fleet as a "logistical tail." They simply do not otherwise have the naval assets to support such overseas ventures. Gorshkov has alluded to this fact many times, as has been previously noted. Most recently, Rear Admiral I. Uskov, Deputy for Rear Services, spoke of such a "mobile rear" in his analysis of the Falklands War:

He emphasized that the creation of a logistical support structure for the operational fleet made possible the sustained operations by the British in the theater. This logistical structure Uskov described as a 'mobile rear' (podvizhnyy tyl), and

he pointed out that fully half of the ships in the British task force were auxiliaries. 72

Thus Soviet literature clearly reveals that their merchant vessels are important military assets—just like their ground and naval forces.

Their military forces have the equipment and capability to survive in a chemical, biological, and radiological environment. Therefore, that same protection is being built into their merchant ships. For instance, an external water washdown system for the skin of the ships can be used as a CBR protective device. Air defense for merchant ships is also important to the Soviets. Again, their recent analyses of the Falklands campaign notes this capability:

The central conclusion that they [Soviets] drew from the air battles was that modern air defense requires an integrated system that can deal with both planes and cruise missiles. Admiral Kapitanets stated that . . . fleet auxiliaries and transports [including merchant ships] must be equipped with air defense systems that include the latest radio-electronic technology, automated control systems, and SAM and AA complexes that provide a high density of fire on multiple targets. The system should also include active and passive electronic measures against cruise missiles. 13

Some modern Soviet merchant ships are seen capable of serving antisubmarine warfare. The Soviets are likely to adopt the US developed Arapaho system (ASW helicopters, crews and modularized support equipment loaded aboard designated US merchant ships). These vessels could provide excellent platforms to help protect their ballistic missile force. Likewise, in an amphibious warfare environment, Soviet merchant ships could serve as platforms for attack helicopters or V/STOL jets. Conversion of merchant ships for such purposes could be rapidly accomplished using container boxes for support equipment and clearing/reinforcing main decks as necessary for the aircraft. These limited assets would not, of course, have the sophistication of regular Soviet naval ships

(operational in all weather), but they could be pressed into service when needed to augment an operational force.

Since the merchant fleet is centrally controlled by the government, they may well be designated for other supplemental military roles. For example, merchant ships might carry explosives for scuttling in shallow restricted waterways. Their timber carriers, which have huge open well decks, could be used as missile carriers to launch long range missiles at land targets from the sea. Or they could be used to carry air cushioned vehicles (ACVs) which can be used in amphibious or logistic operations. Commercial hydrofoils could also be employed in this role, especially in the Baltic Sea. With the proper electronic equipment, some of their larger cargo ships could be turned into command and control platforms. Further—even though they would not welcome this task—merchant ships could serve as decoys to draw enemy forces away from the main naval fleet.

without doubt, the Soviet merchant fleet today plays an integral part in the sustainment of their naval fleet. It provides a trained personnel pool ready to be called into active service of their naval fleet. It gives them more mobility globally and provides the Soviet leadership with broader options for moving in where US power and influence may recede. In many cases their civilian merchant ships can be converted quickly to carry out a military role in order to supplement the Soviet Navy's firepower. In view of their combined naval and maritime assets, it is prudent to assume that the Soviets perceive a more favorable overall naval capability relative to the US than they did fifteen years ago. In all likelihood, the Soviets will continue to press forward and challenge US maritime strength worldwide.

CONCLUSION

To many seapower observers the Soviets have established one of the greatest maritime forces known to man. Furthermore, they are upgrading, expanding, and using these forces to support integrated political, economic, and military goals on every continent. Even though they have blundered on occasion, their steady and aggressive progress across the maritime spectrum from shipbuilding to transporting commerce has produced impressive results and gained them international prestige and influence. So the Soviets have used their expanding commercial presence as a wedge to increase their global political influence, which often has led to their military presence throughout the world.

Economics probably played the greatest factor in development of their Merchant Marine. They needed the hard currency to pay their debts and buy technology. Additionally, a large merchant fleet meant less dependence on foreign shipping to transport their commerce and thus helped their overall foreign trade balance. Today the Soviets have expanded to the point where they now have the capability to support 100% of their domestic waterborne traffic needs and about 75% of their foreign traffic requirements. Surely, Soviet maritime fleets provide a graphic, positive indicator to the Third World of the USSR's level of development.

Perhaps more importantly, the Soviets consider their maritime ability, already an important instrument of diplomacy and policy in peacetime, as a formidable force to defend the Motherland during wartime. According to Gorshkov, the capstone to their maritime growth is its contribution to Soviet world dominance:

The economic might and defensive strength of the Soviet Union ensures the security of all the countries of the Socialist community and is altering the fundamental form of the relationship of forces in the world arena in favor of revolutionary progress and overall peace. 74

More directly, Rear Admiral Miller observes:

Trade carried in Soviet-bloc merchant ships constitutes the leading edge of the USSR's new campaign for world domination—which is based, in fact, on a largely maritime strategy. That strategy, which emphasizes political and economic penetration while concealing Soviet covert (and sometimes overt) military activities in foreign lands, avoids direct confrontation with US naval and military strength. It is a strategy, in short, which takes maximal advantage of US political and economic vulnerabilities. 75

Soviet V/STOL aircraft carriers, deep-water landing craft, and auxiliary ships, offering logistical support and sustainability, give the Soviets the capability to project power outside their own coastal waters. Their Merchant Marine is indispensable in providing the logistical support for these forces. What is not clear, however, is what modifications the Soviets plan in order to provide their merchant ships with both an armed offensive/defensive capability during wartime. Since Soviet maritime assets are centrally controlled by their government and since top Soviet government officials currently write about arming their merchants, it is only practical to assume they plan to provide this capability to some of their merchant ships. They do not need to arm their entire merchant fleet. In contrast to the US, the Soviet Union is self-sufficient in raw materials. Therefore, she does not need the sea lanes open during wartime to ensure national economic survival. Soviet defense planners then can use most if not all their foreign trade merchant fleet to support their military forces.

But the US depends greatly on the transportation of many critical raw materials over the oceans. Nearly all of such essential materials as cobalt, manganese, chromite, rubber and tin comes from foreign countries. We depend on foreign shipping to transport these materials to the US. Because we place no restrictions on who carries these raw materials, Soviet merchant ships can also transport them. Thus, we can conceive of a situation in a time of crisis where the US would be refused shipping unless she bent to the will of the other countries. In a case such as this, Soviet power would be used to intimidate and coerce other shipping nations from helping the US.

According to various Soviet publications and official interviews, there is no planned growth for their Merchant Marine in the next national Five Year Plan (1986-1990). Supposedly, their main purpose will be to replace obsolete vessels with modernized and highly specialized ships. Additionally, they intend to incorporate more advanced repair and maintenance technology in the future. Evidently, then, they are increasing their capability to operate more efficiently and effectively. However, it must be kept in mind that any increase in their fleet's efficiency means as well a direct increase in their ability to support their military establishment. The inevitable conclusion is that the Soviet merchant fleet seems destined to exceed the US in carrying capacity (deadweight tonnage) and operating efficiency—if current trends continue.

In number of ships, the Soviet fleet rose from twenty-sixth place in the late 1950s, to twelfth place in 1962, to seventh place in 1964, and now to fifth place in 1983. Over that same period of time the US (merchant ships owned by US citizens but registered in a foreign country are not included) dropped from second to tenth place. From 1950 to

1983, the Soviets moved from eleventh to eighth place in deadweight tons of carrying capacity. In this category, the US also dropped from first to seventh. Over this period, the Soviets rose from owning 3.1% to 7% of the world's ships and carrying 1.6% to 3.3% of the world's deadweight tonnage. Compared with the US, the Soviets currently lead in five naval-related power projection capabilities: troop carriers 4.5:1; RO/RO 2.2:1; freighters 3.9:1; bulk carriers 8.6:1; ar. tankers 1.5:1. By contrast, the US leads only in one: SEABEE/LASH 13:1. Not only do the Soviets enjoy considerable advantage in numbers and types of merchant ships, but also her ships are designed for naval compatibility. As one maritime analyst puts it:

Where the US merchant marine ships suffer in comparison with the Soviet ships--particularly as potential naval auxiliaries--is in their specialized character, because they are designed to be as commercially competitive as possible. The result is... 'Our merchant marine is all wrong for [use as] a naval auxiliary.'77

What this all adds up to is that today the US depends increasingly on foreign shipping and its allies for merchant shipping support in crises, whereas the USSR for all practical purposes is self-sustaining. Additionally, the Soviets control to a great extent in peacetime and definitely in wartime their COMECON partners' merchant ships, over 800 ships. The US cannot plan with certainty upon receiving support from its allies. Furthermore, the US ship owners' practice of registering their ships under flags of convenience (such as Liberia, Panama, and Honduras) is in the long run hurting the US maritime capability. These ships (about 900) are of questionable availability if the US should need to requisition them. The point is that both the US and USSR depend on their merchant fleets to help sustain their military forces in pescetime

and wartime. The US Navy can fulfill its role as a global power factor only if it can successfully supply and maintain its widely scattered units. The USSR definitely has the greater ability to do this on short notice, with certainty, and with the necessary numbers and types of ships.

The strength of the USSR maritime system lies in their integrated approach to the problem of allocating their scarce maritime resources. The Politburo has the authority to fund, control, and dictate goals and missions. On the other hand, the US's greatest weakness is precisely in the area where the Soviets are strongest—in organization and integration with the military apparatus. One analyst minces no words concerning this US weakness:

By comparison, the West seems hopelessly disorganized. The example of the USA shows that there is hardly any harmonization of equipment between military and civilian fleets; in fact, rivalry between the various responsible authorities makes this almost impossible. The civilian Maritime Administration and the US Navy (whose separate ministry, the Department of the Navy, was absorbed into the Department of Defense in 1949) have spent years passing the buck to one another, when it comes to the responsibility for designing a credible strategy to counter the Soviet Union's maritime buildup.

It is obvious that the US must face up to this problem now and begin to develop an integrated maritime system, encompassing all aspects of the maritime industry. It might now be very propitious to establish a Department of Maritime Resources, equivalent to the Departments of Defense and Commerce. This department should work to better integrate our commercial and military requirements. Although radical, maybe it is time to think about totally subsidizing our Merchant Marine industry in order to assist US ship owners to build/convert more ships with a dual commercial/military capability. It also seems in our best interest to

entice back, possibly through tax breaks, to the US all those US owned ships operated under flags of convenience. This would not only strengthen our merchant ship capability, but it would also generate jobs and income in a very depressed industry. At the minimum, we should have a US Merchant Marine Reserve force to man and operate US owned flag of convenience merchant ships. This force should be funded by the government and be capable of mobilizing on short notice. A lot of give and take will be necessary to accomplish things like this. Rules, laws, and regulations will have to be reviewed, changed, or completely rewritten as necessary by all concerned -- government, owners, and unions. Strong leadership will be needed to insure reasonableness on everyone's part, especially on the part of Congress. Nothing is more vital to our interests than a strong maritime industry. We need a fresh look at the total problem (shipbuilding, merchant fleet, oceanographic fleet, and naval fleet) to tie it all together to protect our vital worldwide interests. The US must stop deluding itself: We cannot be assured that our allies will rush their maritime assistance to us in all possible crises. Most likely, if it's in their best interests to do so, they will; however, if they refuse us or delay in delivering assistance, we may find ourselves in serious trouble.

To a great extent the US must be an independent maritime nation state. We must look at the weaknesses in the current system and move now toward correcting them. But any reforms should consider solving the whole puzzle, not just locating the various pieces. Secretary of the Navy, John F. Lehman sums up the problem aptly:

It is not enough that the United States achieve naval superiority alone; maritime superiority is also an absolute imperative. Mahan's instincts were correct: Shipping and trade are a nation's very lifeblood. The US merchant marine has atrophied to

an extent that should raise grave public concern. It is unlikely that US shipping-going it alone-is currently capable of supporting US requirements in peacetime, much less in war. Our maritime situation is nothing less than a calamity.

Despite shifts in global power during recent decades, the Cold War continues. Despite the emergence of Communist China and many new Third World nations, the dominant world powers are still the USSR and the US. Each has a maritime system—the US's in a state of disrepair and the USSR's growing in power. Clearly, FADM(SU) Gorshkov has been the chief architect of Russian maritime growth for some three decades. He has learned the lessons of history and applied them very effectively in their oppressive Communist system. Moreover, the Soviet Merchant Marine has undoubtedly become the "Fourth Arm" of the Soviet military establishment. It will have to be reckoned with now or later.

ENDNOTES

- 1. T. B. Guzhenko, "Plying Worlds Sea Lanes," <u>Soviet Military</u> <u>Review</u>, Nov. 1977, No. 11, p. 10.
- 2. Irwin M. Heine, "Seapower: Maritime," The Almanac of Seapower 1982 (Jan. 1984), p. 191.
- 3. Admiral S. G. Gorshkov, <u>The Sea Power of the State</u> (Annapolis: Naval Institute Press, 1979), p. 38.
- 4. Arleigh Burke, <u>Soviet Sea Power</u> (Washington: The Center for Strategic and International Studies, Georgetown University, 1969), p. 11.
- 5. Norman Friedman, "The Soviet Fleet in Transition," <u>U.S. Naval</u> <u>Institute Proceedings</u>, Vol. 109, May 1981, p. 153.
 - 6. Gorshkov, Sea Power, p. 14.
- 7. Jurgen Rohwer, "Admiral Gorshkov and the Influence of History Upon Sea Power," <u>U.S. Naval Institute Proceedings</u>, Vol. 107, May 1981, p. 153.
 - 8. Gorshkov, Sea Power, p. 14.
 - 9. <u>Ibid</u>., p. 67.
 - 10. <u>Ibid</u>.
- 11. Honorable John F. Lehman, Jr., "A Report by The Honorable John F. Lehman, Jr., Secretary of the Navy on the Posture of the U.S. Navy," <u>Department of the Navy Fiscal Year 1984 Report to the Congress</u>, February 1983, p. 3.
- 12. Admiral James L. Holloway, III, <u>CNO Report on the Posture of the U.S. Navy</u> (Washington: U.S. Government Printing Office, 1977), p. 38.
- 13. Norman Polmar, <u>Soviet Naval Power: Challenge for the 1970s</u> (New York: National Strategy Information Center, Inc., 1972), p. 1.
- 14. L. Edgar Prina, "Soviet Merchant Marine Takes a Great Leap Forward," <u>Sea Power</u>, Vol. 20, December 1977, p. 10.
 - 15. Heine, "Seapower: Maritime," p. 190.
- 16. Admiral S. G. Gorshkov, <u>Red Star Rising at Sea</u> (Annapolis: Naval Institute Press, 1974), p. 16.

- 17. a. Heine, "Seapower: Maritime," p. 195.
- b. Bruno and Klaus Bock, <u>Soviet Block Merchant Ships</u> (Annapolis: Naval Institute Press, 1981), pp. 41-46.
- c. U.S., Congress, Senate, Committee on the Judiciary, Russia's Burgeoning Maritime Strength, Staff Study (Washington: U.S. Government Printing Office, 1963), p. 6.
 - 18. Bock, Soviet Bloc Merchant Ships, p. 42.
- 19. U.S., Congress, Senate, Committee on Commerce, Soviet Oceans Development, Report (Washington: U.S. Government Printing Office, 1976), p. 66.
 - 20. <u>Ibid</u>.
 - 21. <u>Ibid</u>., p. 67.
 - 22. Ibid.
 - 23. Ibid.
 - 24. <u>Ibid.</u>, p. 68.
 - 25. Ibid.
 - 26. <u>Ibid</u>.
 - 27. Ibid.
 - 28. Ibid.
 - 29. Bock, Soviet Bloc Merchant Ships, p. 43.
- 30. U.S., Office of Naval Intelligence, <u>The Soviet Merchant</u> <u>Marine</u> (Washington: U.S. Government Printing Office, 1968), p. 1.
 - 31. Bock, Soviet Bloc Merchant Ships, p. 43.
 - 32. U.S., Congress, Russia's Burgeoning Maritime Strength, p. 6.
 - 33. <u>Ibid</u>.
 - 34. Ibid.
 - 35. U.S., Congress, Soviet Oceans Development, p. 69.
- 36. Nicholas George Shadrin, "Development of Soviet Maritime Power," (Unpublished Thesis, George Washington University, 1972), pp. 293-294.
 - 37. Ibid.
 - 38. <u>Ibid</u>.

- 39. <u>Ibid</u>.
- 40. <u>Ibid.</u>, p. 295.
- 41. U.S., Department of Commerce Maritime Administration, Expansion of the Soviet Merchant Marine Into the U.S. Maritime Trades (Washington: U.S. Government Printing Office., 1976), p. 64.
 - 42. Ibid.
 - 43. U.S., Congress, Soviet Oceans Development, p. 602.
- 44. U.S., Department of Commerce Maritime Administration,

 Maritime Key Statistics (Washington: U.S. Government Printing Office,
 1977), np.
 - 45. Heine, "Seapower: Maritime," pp. 191-205.
 - 46. a. "Seapower: Maritime," pp. 191-205.
- b. John L. Scherer, <u>USSR Facts & Figures Annual</u>, Vol. 7, 1983 (Gulf Breeze: Academic International Press, 1983), pp. 305-312.
 - 47. a. Heine, "Seapower: Maritime," p. 191.
- b. Konstantin A. Ivanov, ed., "Statistics Tell Us...," Soviet Shipping, April 1981, p. 12.
- c. U.S., Department of Commerce Maritime Administration, A Statistical Analysis of the World's Merchant Fleets. (Washington: U.S. Government Printing Office, 1976), p. 1-375.
 - 48. Block, Soviet Bloc Merchant Ships, p. 43.
 - 49. a. Heine, "Seapower: Maritime," p. 195.
- b. Konstantin A. Ivanov, ed., "Statistics Tell Us...,"

 <u>Soviet Shipping</u>, Volume 3, No. 3, July-September 1983, p. 12.
 - 50. Heine, "Seapower: Maritime," p. 205.
- 51. Alexander MacLeod, "Soviet Merchant Fleet Poses Threat to Western Shipping," The Christian Science Monitor, August 29, 1983, p. 3, col. 1.
- 52. Robert E. McKeown, Captain, USAR, "Their Merchant Fleet," U.S. Naval Institute Proceedings, Vol. 108, October 1982, p. 167.
- 53. Jorg Dedial, "The Threat of the Soviet Merchant Fleet," Swiss Review of World Affairs, Vol. XXX No. 10, January 1981, p. 11.
- 54. R. C. Ballou, "The Soviet Merchant Marine," <u>The Strategic Implications of Soviet Seapower by 1980(u)</u>, Vol. III, Appendix D, (Alexandria: Defense Technical Information Center, 1967), p. D-5.

- 55. Ivanov, "Statistics Tell Us...," <u>Soviet Shipping</u>, Vol. 3, No. 3, July-September 1983, p. 11.
 - 56. McKeown, "Their Merchant Fleet," p. 167.
- 57. V. Nikolaichuk, "Soviet Merchant Marine 1976-1985," <u>Soviet Shipping</u>, February 1981, p. 2.
 - 58. Gorshkov, Sea Power, p. 55.
- 59. George H. Miller, RADM, USN (Ret), "The New Soviet Maritime Strategy," Sea Power, Vol. 19, May 1976, p. 18.
- 60. Richard T. Ackley, <u>Soviet Maritime Power: An Appraisal of the Development</u>, <u>Capabilities</u>, <u>and International Influence of the Soviet Navy</u>, <u>Fishing Fleet</u>, <u>and Merchant Marine</u>, <u>Dissertation</u>, <u>University of Southern California</u> (Ann Arbor: <u>University Microfilms</u>, 1974), p. 2.
- 61. Casper W. Weinberger, <u>Soviet Military Power</u> (Washington: U.S. Government Printing Office, 1983), p. 60.
 - 62. <u>Ibid</u>.
 - 63. Jorg Dedial, "Threat of the Soviet Merchant Fleet," p. 10.
- 64. James John Tritten, CDR, USN, "Soviet Civil Fleet The Challenge," National Defense, December 1982, pp. 28-29.
- 65. Bill Paul, "Huge Expansion of the Russian Merchant Fleet Poses Economic and Military Problems for West," The Wall Street Journal, 22 July 1983, p. 38, col. 1.
 - 66. Dedial, "Threat of the Soviet Merchant Fleet," pp. 10-11.
 - 67. Tritten, "Soviet Civil Fleet," p. 29.
 - 68. <u>Ibid.</u>, pp. 27-28.
 - 69. <u>Ibid</u>.
- 70. Jacob W. Kipp, "Soviet Naval Writings on the Falkland Conflict," The Naval Intelligence Quarterly (u), NIQ Vol. V, No. 2, December 1983, p. 11.
 - 71. McKeown, "Their Merchant Fleet," p. 160.
 - 72. Kipp, "Soviet Naval Writings," p. 10.
 - 73. <u>Ibid</u>., p. 16.
- 74. Admiral S. G. Gorshkov, "Navies As A Weapon of the Aggressive Policy of the Imperialist States in Peacetime,"

 Morsky Sbornik, No. 12, 1972 (translated by Naval Intelligence Support Center, No. 3433, 4 May 1973), p. 4.

- 75. Miller, "The New Soviet Maritime Strategy," p. 17.
- 76. Albert Axebank, "Soviets Plan No Growth For Fleet Until 1990," The Journal of Commerce, 1 December 1983, p. 1, col. 2.
- 77. L. Edgar Prina, "Soviet Merchant Marine: A True Naval Auxiliary," <u>Sea Power</u>, Vol. 24, October 1981, p. 71.
 - 78. Dedial, "The Threat of the Soviet Merchant Fleet," p. 11.
- 79. John F. Lehman, Jr., "Rebirth of a U. S. Naval Strategy," Summer 1981, p. 14.

BIBLIOGRAPHY

- Ackley, CDR Richard T., USN (Ret). "The Soviet Merchant Fleet."

 <u>U.S. Naval Institute Proceedings</u>, Vol. 102: 27-37. February 1976.
- Ackley, Richard. "Soviet Maritime Power: An Appraisal of the Development, Capabilities, and International Influence of the Soviet Navy, Fishing Fleet, and Merchant Marine." PhD Dissertation, University of Southern California, 1973. Ann Arbor: University Microfilms.
- Ambrose, Andrew. "Arming Merchant Ships." <u>Naval Forces</u>, Vol. III, No. VI: 60-62. 1982.
- Anderson, Mark A. "Soviet Naval Replenishment Capabilities (u)." MS Thesis, Naval Postgraduate School, Monterey. Alexandria: Defense Technical Information Center, 1983. [Document classified SECRET].
- Averin, I. "International Shipping: Problems and Prospects." Soviet Shipping, Vol. 3, No. 3: 2-3. July-September 1983.
- Axebank, Albert. "Soviets Plan No Growth For Fleet Until 1990."

 The Journal of Commerce, New York, 1 December 1983.
- Axebank, Albert. "USSR Urges Global Plan On Shipping." The Journal of Commerce, New York, 10 November 1983.
- Baker, Warren P. "The Strategic Dimensions of Maritime Power." Sea Power, Vol. 23: 20, 22, 24, 26, 28. November 1980.
- Ballou, R.C. "The Soviet Merchant Marine." The Strategic Implications of Soviet Seapower By 1980 (u). Vol. III, Appendix D. Alexandria: Defense Technical Information Center, 1967. [Document classified SECRET].
- Barrie, Major Jeffrey E., USA. "The Soviet Merchant Marine . . . Major Factor in World Commerce." <u>Defense Transportation Journal</u>. Vol. 31: 36-39, 42-43, 58-59. June 1975.
- Basiuk, Victor. "The Functions of Logistics in Projection of Soviet Power Overseas, 1978-1985." Research Study for U.S. Navy.

 Alexandria: Defense Documentation Center, January, 1979. [Document classified SECRET].
- Bieber, George R. "Soviet Merchant Fleet Capabilities For Specialized Support to the Projection of Military Presence and Power." Soviet Projection of Military Presence and Power (u). Vol. III. Washington: Net Assessment, Office of SECDEF, 1979. [Document classified SECRET].

- Bock, Bruno, and Klaus Bock. <u>Soviet Bloc Merchant Ships</u>. Annapolis: Naval Institute Press, 1981.
- Borisov, A. "Education and Training of Maritime Personnel." <u>Soviet Shipping</u>, Vol. 1, No. 3: 22-25. July-September 1981.
- Burke, Arleigh, and others. <u>Soviet Sea Power</u>. Washington: The Center for Strategic and International Studies, 1969.
- Clark, Captain J.W. "The Soviet Merchant Fleet Wins by Losing." <u>U.S.</u>
 <u>Naval Institute Proceedings</u>, Vol. 107: 70-74. December 1981.
- Dedial, Jorg. "The Threat of the Soviet Merchant Fleet." Swiss Review of World Affairs, Vol. XXX, No. 10: 10-13. January 1981.
- Fairhall, David. Russian Sea Power. Boston: Gambit Inc., 1971.
- Fullerton, John. "The Strategic Power of Soviet Shipping." <u>Defense</u> and Foreign Affairs Digest, No. 6: 30-31, 33, 39. June 1978.
- Gorshkov, Admiral S. G. <u>The Sea Power of the State</u>. Annapolis: Naval Institute Press, 1979.
- Guzhenko, T. B., interview. "Plying World Sea Lanes." <u>Soviet Military</u> <u>Review</u>, No. 11: 9-11, 57. November 1977.
- Guzhenko, T. "International Shipping: Problems and Facts." <u>Soviet Shipping</u>, Vol. 1, No. 1: 4-8. January-March 1981.
- Hanks, Robert J. "Maritime Doctrines and Capabilities: The United States and the Soviet Union" <u>Annals of the American Academy of Political and Social Science</u>, Vol. 457: 121-130. September 981.
- Hansen, James H. "Soviet Projection Forces Their Status and Outlook."

 <u>Armed Forces Journal International</u>, Vol. 119, No. 2: 76, 78, 80-82.

 October 1981.
- Heine, Irwin M. "Seapower: Maritime." The Almanac of Sea Power 1983.
 Arlington: Navy League of the U.S., 1984.
- Hendrickson, LT COL G. D. "Commercial Ships in the Amphibious Assault."

 <u>Marine Corps Gazette</u>, Vol. 68, No. 3: 46-51. March 1984.
- Hessman, James D. "The Fourth Arm of Defense." <u>Sea Power</u>, Vol. 25: 32-34. May 1982.
- Holloway, Admiral James L., III, USN (Ret). "The U.S. Merchant Marine Essential Component of Military Requirements." <u>Proceedings American Marine Conference</u>, 47: 8-9. October 1981.
- Ivanov, Konstantin A., ed. "Statistics Tell Us...." Soviet Shipping, Vol. 1, No. 4: 10-12. October-December 1981.
- Ivanov, Konstantin A., ed. "Statistics Tell Us...." Soviet Shipping, Vol. 2, No. 1: 13-15. January-March 1982.

- Ivanov, Konstantin A., ed. "Statistics Tell Us. . . ." <u>Soviet</u> <u>Shipping</u>, Vol. 2, No. 4: 16-18. October-December 1982.
- Ivanov, Konstantin A., ed. "Statistics Tell Us. . . ." <u>Soviet</u> <u>Shipping</u>, Vol. 3, No. 1: 17-19. January-March 1983.
- Ivanov, Konstantin A., ed. "Statistics Tell Us. . . . " <u>Soviet</u> <u>Shipping</u>, Vol. 3, No. 3: 11-12. July-September 1983.
- Ivanov, Konstantin A., ed. "Statistics Tell Us. . . ." <u>Soviet</u> <u>Shipping</u>, Vol 3, No. 2: 13-15. April-June 1983.

- Ivanov, Konstantin A., ed. "Steady Development of the Soviet Merchant Marine." Soviet Shipping, Vol. 1, No. 3: 18-19. July-September 1981.
- Kassing, David. "Changes in Soviet Naval Forces." Professional Paper No. 183. Arlington: Center for Naval Analysis, 1976.
- Kipp, Jacob W. "Soviet Naval Writings on the Falklands Conflict." The Naval Intelligence Quarterly (u). Vol. V, No. 2: 10-17.

 December 1983. [Document classified SECRET].
- Lehman, John F., Jr. "A Report by The Honorable John F. Lehman Jr. Secretary of the Navy on the Posture of the U.S. Navy." <u>Department of the Navy Fiscal Year 1984 Report to the Congress</u>. pp. 3-13. February 1983.
- McKeown, Captain Robert E., U.S. Army Reserve. "Their Merchant Fleet."

 <u>U.S. Naval Institute Proceedings</u>, Vol. 108: 160-167. October 1982.
- Miller, RADM George H., USN (Ret). "The New Soviet Maritime Strategy and the Lack of an Effective U.S. Counter-Strategy." Sea Power, Vol. 19: 17-20. May 1976.
- Mironov, A. "The Maritime Fleet In the Year 2001." <u>Vodnyy Transport</u>. No. 117: 3-13. September 1974. Translated by Foreign Technology Division, U. S. Air Force. Alexandria: Defense Technical Information Center, 1977.
- Nikolaichuk, V. "Soviet Merchant Marine in 1976-1985." <u>Soviet Shipping</u>, Vol. 1, No. 2: 2-4. April-June 1981.
- Nitze, Paul H., Leonard Sullivan, Jr., and Atlantic Council Working Group. Security The Seas. Boulder: Westview Press, 1979.
- Panarale, Louis. "Impressive Buildup of Soviet Shipping." <u>SEALIFT</u>, Vol. XXVIII, No. 8: 10-14. August 1978.
- Pandolfe, Frank C. "Soviet Seapower in Light of Mahan's Principles."

 <u>U.S. Naval Institute Proceedings</u>, Vol. 106: 44-46. August 1980.
- Paul, Bill. "Huge Expansion of the Russian Merchant Fleet Poses Economic and Military Problems for West." The Wall Street Journal, New York. 22 July 1983.

- Poirier, Lucien. "USSR: A Merchant Marine in the Service of the Navy."

 <u>La Nouvelle Revue Maritime</u>. No. 367: 87-95. February 1982.

 Translated by Naval Intelligence Service, U.S. Navy. Alexandria:

 Defense Technical Information Center, 1982.
- Polmar, Norman. "Containerized Weapons . . . and Merchant Warships."

 <u>U.S. Naval Institute Proceedings</u>, Vol. 104: 133-136. March 1978.
- Polmar, Norman. <u>Guide To The Soviet Navy</u>. Annapolis: Naval Institute Press, 1983.
- Polmar, Norman, and others. <u>Soviet Naval Developments</u>. Annapolis: The Nautical and Aviation Publishing Company of America, 1981.
- Polmar, Norman. <u>Soviet Naval Power: Challenge for the 1970s</u>. New York: Crane, Russak & Company, Inc.
- Prina, L. Edgar. "Atlantic Council Cities 'Strategic Challenge' Posed by Soviet Merchant Marine." <u>Sea Power</u>, Vol. 22: 47-51. October 1979.
- Prina, L. Edgar. "Soviet Merchant Marine: A True Naval Auxiliary." Sea Power, Vol. 24: 71-74. October 1981.
- Prina, L. Edgar. "Soviet Merchant Marine Takes A Great Leap Forward."

 <u>Sea Power</u>, Vol. 20: 9-12. December 1977.
- Sager, Karl-Heinz. NATO Merchant Fleets Current Trends and Their Implications on Defense. Presentation given to NATO Commanders. Norfolk, VA., November 1981.
- Sager, Karl-Heinz. "Soviet Merchant Fleet: Competition, Order, or Chaos." <u>Defense Transportation Journal</u>, Vol. 33: 5-8, 10. April 1977.
- Schere, John L., ed. <u>USSR Facts and Figures Annual Vol 7, 1983</u>. Gulf Breeze: Academic International Press, 1983.
- Schroeder, Henry J., Jr. "Executive Summary." Soviet Projections of Military Presence and Power (u). Vol. I. Washington:
 Net Assessment, Office of SECDEF, 1979. [Document classified SECRET].
- Shadrin, Nicholas George. "Development of Soviet Maritime Power.": Unpublished Thesis, George Washington University. Washington: GWU, 1972.
- Smalley, C. "The Soviet Merchant Fleet's Role in the USSR's Global Strategy." Asian Defence Journal, pp. 84-86. August 1983.
- Swayne, Sir Ronald, and others. "The Challenge of Soviet Shipping," ed. Curtis Cate. New York: National Strategy Information Center Inc., 1979.

- The World Almanac and Book of Facts 1984. New York: Newspaper Enterprise Association, Inc., 1984. p. 143.
- Tikhonov, V. "CMEA and Marine Transport." <u>Soviet Shipping</u>, Vol. 2, No. 2: 2-5. April-June 1982.
- Tower, Dennis Ray. "The Soviet Merchant Fleet: An Investigation of Some Western Views." MS Thesis, Naval Postgraduate School, Moneterey. Alexandria: Defense Technical Information Center, 1980.
- Tritten, CDR James John, USN. "Soviet Civil Fleet-The Challenge."

 <u>National Defense</u>, Vol. 67: 26-30. December 1982.
- Tritten, J. J. "A Balanced Fleet The Soviet View." Naval Forces, Vol. III, No. IV: 1982.
- U.S. Congress. Senate. Committee on Commerce. <u>Soviet Oceans</u>

 <u>Development</u>. Report. Washington: U.S. Government Printing Office,
 1976.
- U.S. Congress. Senate. Committee on the Judiciary. <u>Russia's</u>
 <u>Burgeoning Maritime Strength</u>. Staff Study. Washington: U.S.
 Government Printing Office, 1963.
- U.S. Department of Commerce. Maritime Administration. A Statistical Analysis of the World's Merchant Fleets. Washington: U.S. Government Printing Office, 1976.
- U.S. Department of Commerce. Maritime Administration. Expansion of the Soviet Merchant Marine Into the U.S. Maritime Trades. Washington: U.S. Government Printing Office, 1976.
- U.S. Department of Commerce. Maritime Administration. Maritime Industry Key Statistics. Washington: U.S. Government Printing Office, 1977.
- U.S. Department of Commerce. Maritime Administration. Merchant Fleets of the World. Washington: U.S. Government Printing Office, 1965, 1967, 1969, 1972, 1976.
- U.S. Department of Commerce, Maritime Administration. <u>The Soviet Merchant Marine</u>, [by Irwin M. Heine and Muriel W. Coe]. [Washington: U.S. Government Printing Office, 1967].
- U.S. Office of Naval Intelligence. The Soviet Merchant Marine.
 Report. Washington: U.S. Government Printing Office, 1968.
- Weinberger, Casper W., and others. <u>Soviet Military Powers</u>, U.S., Department of Defense Publication, Second Edition. Washington: U.S. Government Printing Office, 1983.
- Wetten, Desmond. "Wartime Adaption of Merchant Ships." Sea Power, Vol 26: 37-39, 41-41, 44, 47. June 1983.

- Wolfe, Thomas W. "The Soviet Quest For More Globally Mobile Military Power." Rand Corporation Research for the U.S. Air Force, December 1967. Alexandria: Defense Technical Information Center, 1968.
- Zvonkin, D. "Shipping Cooperation Within CMEA." Soviet Shipping, Vol 2, No. 4: 35-37. October-December 1982.

END

FILMED

2-85

DTIC