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Soviet Naval Activities Outside Home Waters in 1985

A Research Paper

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A Research Paper

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> Secter SOV 86-10047C

October 1986

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Soviet Naval Activities Outside Home Waters in 1985

Summary

Information available as of 31 January 1986 was used in this report. Out-of-area activities in the calendar year 1985 were highlighted by the following operations that have implications for wartime:

- Antisubmarine warfare (ASW) operations off the US east and west coasts that involved a record number of Victor-class submarines in areas where the Soviets probably expect US ballistic missile submarines (SSBNs) to operate.
- Large-scale exercises in the Atlantic and the Pacific that featured the most elaborate depiction to date of US naval strategy—as the Soviets see it—and that continue a trend toward extending the area where the Soviet Navy plans to engage Western naval forces in wartime.
- Increased operation of naval aircraft from airfields in Libya and Syria to monitor Western naval forces.
- Continued development of the naval base at Cam Ranh Bay, and the South China Sea Squadron's first observed complex exercise, which emphasized anticarrier strike operations.

Despite these developments, the level of Soviet out-of-area naval operations, as measured by ship-day statistics—the presence of one ship away from home waters for one day—remained limited to about 10 percent of the Navy's available units as a daily average. The Soviet naval presence outside home waters in 1985 decreased about 5 percent from the record level achieved in 1984. Soviet naval presence increased slightly in the Mediterranean and South China Seas; remained about the same in the Caribbean Sea, West African waters, and the Atlantic Ocean; and declined in the Pacific and Indian Oceans.

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Measuring Soviet Naval Presence

A ship-day—the presence of one ship away from home waters for one day—is the traditional way to measure the Soviet naval presence outside home waters. Averaging ship-days, however, can be misleading if the following considerations are not taken into account:

- Yearly statistics count each Soviet unit equally, regardless of combat capability. In 1985, more than 40 percent of Soviet naval ship-days was represented by auxiliaries such as yard craft, repair ships, and submarine tenders, with another 12 percent represented by research vessels, and missile testing and space-support ships.
- The statistics do not necessarily reflect changes in operational practice that could affect war-fighting capabilities.
- The figures do not differentiate between days at sea and days in foreign ports or sheltered anchorages.
- Ships in transit for sea trials or interfleet transfer are counted, even though they may perform limited operational functions or none at all.
- The Soviet Navy must commit ships to maintenance before, after, and sometimes during overseas deployments to maintain out-of-area force levels. Thus, the ship-day count does not reflect the total time involved in supporting distant naval operations.

Soviet out-of-area deployments attract significant attention, yet on a daily average they involve under 10 percent of the Soviet Navy. In 1985 the Navy deployed a daily average of 21 surface combatants and 15 general purpose submarines—or about 5 percent of the combatant inventory and about 10 percent of the general purpose submarines.

Figure 1 Soviet Ship-Days in Distant Waters, 1976-85

Vessel type





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Soviet Naval Activities Outside Home Waters in 1985

Introduction

The Soviet naval presence outside home waters in 1985 decreased from the preceding year's record level of nearly 62,000 ship-days to about 59,000 ship-days (see figure 1). (We use the yearly tabulation of shipdays—the presence of one ship away from home waters for one day—to compare deployment levels with those of preceding years and to identify significant changes in deployment patterns.) Soviet naval presence increased slightly in the Mediterranean and South China Seas, remained about the same in the Caribbean Sea, West African waters, and the Atlantic Ocean, and declined in the Pacific and Indian Oceans (see figure 2).

Atlantic Ocean

Analysis of ship-days data indicates the overall Soviet naval presence in the open Atlantic for 1985 remained about the same as in recent years (see figure 3).

July by the first appearance ever in Baffin Bay of a Soviet naval vessel—a hydrographic research vessel that may have been investigating the area for potential use by Soviet submarines.

Submarine Operations Off

the US East Coast

A force of five Victor-class nuclear-powered attack submarines (SSNs), an intelligence collection ship (AGI), a hydrographic research ship (AGS), and four Bear F long-range antisubmarine warfare (ASW) aircraft (operating out of Cuba) deployed from their Northern Fleet bases in early June to an area generally northeast of Bermuda (see figure 4).





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Figure 3 Soviet Ship-Days in the Atlantic Ocean, 1976-85*



Soviet writings acknowledge the enormous firepower present in even a single Western SSBN and recognize the desirability of attacking such units before they fire their missiles.

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Despite the high priority that the Soviets give this mission, the acoustic disadvantages of their submarines still limit their capability to carry it out.



with the results.' We believe, therefore, that it is unlikely that regular anti-SSBN patrols off the US coasts will be resumed until such time as qualitative improvements in Soviet SSNs alter the Soviets' perceptions of their chances for success. We are not certain whether the Soviets intend additional trials of anti-SSBN operations by groups of submarines.

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Although the Soviets continue to patrol Yankee- and Delta-class SSBNs close to the US coasts,

1 nus is que in part to a reduction in the number of available Northern Fleet Yankee-class SSBNs, which the Soviets continued to dismantle in compliance with arms control requirements. There was no significant change in the overall Northern Fleet SSBN presence in terms of ship-days for 1985.

Hydrographic Ship Investigations in Baffin Bay The same Soviet hydrographic ship that participated in the June ASW operations off the US east coast

Joperating in Baffin Bay in July.

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The Soviets may have been investigating the Baffin Bay area for use by submarines. The Bay and its adjoining straits, which are ice-covered part of the

Joffer a number of potential strategic uses for Soviet submarines, including use as an SSBN or cruise missile patrol area. This is the first known operation by the Soviet Navy in Baffin Bay.

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Major Western Fleets Exercise A large exercise conducted in the North Atlantic Ocean and Norwegian Sea

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Figure 5 Soviet Hydrographic Ship Operations in Baffin Bay, July 1985



Phase two emphasized antisurface warfare:	כ
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This exercise probably was designed as a test of the Northern Fleet's ability to handle a multiple carrier battle group threat.

Caribbean Sea

There were no significant changes in Soviet naval presence levels and no unusual operations in the Caribbean in 1985 (see figure 7). Two Soviet naval task groups deployed to Cuba, marking the 24th and 25th such deployments.

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West African Waters

The Soviet Navy maintained its small West African patrol in 1985 at about the same level as in 1984—one minor surface combatant, one minesweeper, and an occasional diesel-powered general purpose submarine

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Figure 6

Soviet Navad Exercise in the North Atlantic and Norwegian Sea, 6, 18 July 1985.

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Figure 7 Soviet Ship-Days in the Caribbean Sea, 1976-85



Figure 8

1976-85

Soviet Ship-Days Off West Africa,

(see figure 8). This patrol was created in 1971 in response to the seizure of Soviet fishing vessels by the Ghanaian Navy for violations of fishing regulations. In October 1985, Moroccan patrol boats detained a Soviet fish factory ship for fishing without a license. This was the first such incident since a Moroccan seizure in 1981.

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The wartime utility of a typical West African patrol's combatants would be limited by its small size and lack of adequate logistic support and ordnance reloads. Bear D reconnaissance aircraft deployed to Luanda in wartime would be unable to reach the major cross-Atlantic sea lanes used by US forces and shipping.

Mediterranean Sea

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The Soviet naval presence in the Mediterranean in 1985 increased slightly over the 1984 level (see figure 9)

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Figure 9 Soviet Ship-Days in the Mediterranean Sea, 1976-85

Vessel type Hydrographic Auxiliary Amphibious Thousands of days 12 8 4 0 1976 80 8

About two-thirds of a Soviet ship's time is spent at anchor.

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The Soviets increased their use of Libya and Syria for the forward deployment of naval aircraft, thereby improving their capability to monitor the eastern and central Mediterranean.

US carrier pilots identified two of the Badgers as photoreconnaissance models, and the third probably was used as a communications relay platform. If Syria or Libya were to continue to permit Soviet access to their airfields during the period of tensions preceding a NATO-Warsaw Pact war, the Soviet Navy would have a particularly valuable, although exposed, asset. Reconnaissance flights from these bases could help track Western naval forces for an initial strike. If Western aircraft chose to deny the Soviets use of the air, however, there is little they could do to continue operations because they would lack adequate fighter cover

Indian Ocean

In 1985 the size of the Indian Ocean squadron decreased about 13.5 percent, bringing it down to a level comparable to that in the late 1970s before the Soviet and Western naval reinforcement of the region (see figure 10). The change in size reflects only minor differences in the composition of the squadron from the previous year, however. The presence of general purpose submarines increased slightly from two to an average of two or three, although the Soviets maintained the daily presence typical in 1984 of a single nuclear-powered, guided-missile unit and a diesel torpedo attack unit. The average number of surface combatants present declined from three ships to two. The presence of auxiliaries and amphibious and mine warfare units changed very little. The reduction in the number of research ships-from four or five on the average to two or three-accounts for much of the overall decline in the size of the squadron.

The squadron's unusually low level of activity continued in 1985, except for

Squadron units made show-the-flag and replenishment port calls in several littoral nations, most notably in Seychellès, where visits in support of the Rene regime have become almost routine. (

The Soviets' efforts to expand their naval access to Indian Ocean nations continued in 1985 but without any significant known success. In early 1985, the first and only visit of the Soviet May ASW aircraft to Mozambique occurred.

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Figure 10 Soviet Ship-Days in the



Figure 11

Two May aircraft remained on continuous deployment at Al Anad Airfield in South Yemen, as in the past. The Soviets have not sent Mays back to Johannes IV Airfield in Ethiopia, where two Mays were present before the rebel attack in May 1984 that damaged or destroyed both aircraft. Another successful rebel attack against the airfield occurred in 1985, destroying a number of Ethiopian aircraft. Renewal of Soviet May operations from Johannes IV thus seems even more unlikely in the near future.

Pacific Ocean

Soviet out-of-area ship-days in the open Pacific decreased 13 percent in 1985. The presence of general purpose submarines-which had risen substantially in 1984-fell by almost 20 percent. The drop reflected

fewer submarine transits to and from Cam Ranh Bay, Vietnam. A decline in the average presence of research ships in the Pacific, from five units down to three or four units, also helped lower the Pacific total (see figure 11; statistics on the Pacific ship-days have been calculated for only 1983-85).

A large-scale Soviet Pacific Fleet exercise in April 1985 contained an unusually high amount of out-ofarea activity.

Special Analysis: Wartime Operations of the Soviet Navy in the South China Sea

Initial Forces and Capabilities

The Soviets' naval operations in the South China Sea from late 1979 to 1983 grew from small naval task groups making occasional port calls and the periodic deployment of a pair of Bear aircraft to the continuous presence of two or three submarines, several surface combatants, a number of auxiliaries, and a pair each of Bear D and Bear F aircraft. Some support facilities were obtained at Cam Ranh Bay during this period, but auxiliaries provided most of the services at the port while naval transport aircraft provided the support for the Bears at the airfield.

Exercise activity by Soviet naval forces in the South China Sea during this period was rudimentary and one dimensional.

As in other Soviet naval formations deployed outside Soviet homewaters, activity was limited by Western standards: exercises occurred only periodically, training was low key, and operational naval patrols and air missions in the South China Sea region generally followed established patterns.

This force was adequate, however, to undertake some of the missions that the Soviets would assign to out-ofarea forces during the transition to and early phases of a US-Soviet war. The most important of these, and one common to out-of-area units, would be the acquisition of up-to-date intelligence and targeting data on major US and allied naval forces, such as aircraft carriers and platforms equipped with cruise missiles potential nuclear threats to the Soviet homeland.

Another mission that would be assigned to out-of-area forces probably would be attacks on allied naval or merchant shipping. Soviet exercises have demonstrated planning for attacks against Western forces sometimes in conjunction with long-range strike aircraft from the Soviet Union—by the Soviet naval squadrons in the Mediterranean Sea and the Indian Ocean. The South China Sea force in the early 1980s

South China Sea

Improvements to and expansion of the facilities at Cam Ranh Bay in 1985, along with recent developments in the command and control of naval forces based there,

that the South China Sea force has become a squadron formation. These developments also indicate that the Soviets believe the squadron at Cam Ranh Bay has a viable regional role in conducting wartime operations against US and Western naval forces. Because of the significance of the squadron's capability, we examine its growth over the last seven years in the following section

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did not have the benefit of strike aircraft, however, and probably would have been capable of limited interdiction of sea lines of communication (SLOC) only in the absence of significant Western assets. The lack of adequate support facilities for wartime use in all distant area formations, including Cam Ranh before the buildup, further limited the viability of this force for combat with Western forces and its ability to sustain a campaign against Western SLOCs beyond a short period. (

A second general mission for out-of-area formations almost certainly would be to delay and divert Western naval and air forces from higher priority missions nearer the Soviet Union. The force present at Cam Ranh in the early 1980s, though small, might have been sufficient to divert significant Western forces, such as one or more aircraft carrier battle groups or US Air Force formations.

Current Forces and Capabilities

During 1985 the South China Sea naval squadron's size differed little from that of 1984 (see figure 12). The composition of this force generally matched that seen in the second half of 1984, one major and six minor combatants, about 12 or more auxiliary ships, plus small numbers of mine warfare, amphibious, and hydrographic research ships. The average number of general purpose submarines present dropped in 1985, however, down from an average of four to only three.

The composition of the naval aircraft at Cam Ranh remained the same as in the preceding year. Sixteen Badger bomber and support aircraft—which arrived in 1983 and 1984—were present as were four Bear F ASW and four Bear D reconnaissance aircraft. Fourteen Flogger fighters also remained posted there.

Construction and renovation continued at Cam Ranh in support of the airfield and the port **()** including construction of an earthen causeway for a new Soviet floating pier. This pier will be the seventh pier at Cam Ranh and the fifth pier the Soviets have built. When complete, the pier will help alleviate the crowding the port facility has experienced in the last few years.

Figure 12 Soviet Ship-Days in the South China Sea, 1983-85*



Thousands of days





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Current Trends in Exercises In 1985 the South China Sea squadron staged its first observed complex exercise as an integrated unit, emphasizing anticarrier operations.

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Figure 14 Soviet Anticarrier Exercise in the South China Sea, February 1985

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The presence of the Midway battle group gave the South China Sea squadron the opportunity to simulate anticarrier warfare—one of the primary wartime missions of Soviet naval forces—against a real target. According to Soviet doctrine and exercises, however, a significantly larger force—including two or more regiments of missile-equipped aircraft, submarines, and surface-launched antiship cruise missiles—would be required for a successful attack on a Western carrier battle group.

Significance

We believe that the Soviets regard most units deployed to distant waters in wartime to be expendable, particularly in exchange for the delay, diversion, or destruction of Western carriers or other nuclearcapable units far from the Soviet homeland and the operating areas of SSBNs. If such Western units were not in the region at the onset of hostilities, we believe that the squadron would still remain in the South China Sea. If Cam Ranh were operational, the force could undertake some limited offensive operations, not only for the damage they might cause, but to increase the possible diversion of Western forces to the region, for example, by attacking US bases in the Philippines and SLOC interdiction.

Attacking US Bases in the Philippines. The Badger squadron could attempt a raid or series of raids, depending on the rate of casualties, against the US bases using bombs against land targets, antiship missiles against ships at Subic Bay, or mines against Subic, other ports, and Philippine waters. The Badgers would be beyond the range of fighter escort by the Floggers at Cam Ranh. SLOC Interdiction. The Badgers could mount anti-SLOC strikes against shipping in the region. The Badgers and the Bear F ASW aircraft, as well as submarines and surface units at Cam Ranh, could undertake minelaying—both in defense of Cam Ranh and against sea lanes and straits. General purpose submarines in the region could also be used in an anti-SLOC role, although the sustainability of such a campaign depends on the continued existence of support auxiliaries at Cam Ranh for replenishment and ordnance resupply. (

Alternatively, without the presence of a carrier or other priority targets, the Soviets could elect a more passive strategy, dispersing their own forces to alternate airfields, ports, anchorages, or operating areas. Limited anti-SLOC missions could be a part of this strategy, via mining or submarine attack. The Soviets would hope to tie down Western forces that might already be in the area, such as ASW aircraft and nuclear attack submarines, and potential reinforcements to the area—tactical air formations or aircraft carriers for example—for a not inconsiderable amount of time.

We believe that in any likely scenario at the onset of a US-Soviet war the Soviets would probably have more to gain by leaving the squadron in the South China Sea than by attempting to pull it back to the main Pacific Fleet wartime operation areas before or during hostilities. The squadron is only a fraction of the force available to the Pacific theater in wartime and consists mainly of older, less capable platforms. The relative perception of the capability of the force, however, is magnified by its deployment to the South China Sea. This is especially the case because the future of US bases in the region may be in doubt.

Future Developments

The command and control, communications, intelligence, and logistic facilities at Cam Ranh Bay are taking on a more permanent nature, suggesting the Soviets intend to make a long-term commitment to maintaining a naval presence in the region.

We believe that the gradual improvement of forces and support structure at Cam Ranh will continue. Most of the deployed forces, however, probably will continue to be older units or small numbers of newer, more capable types as modernization of the Pacific Fleet goes forward.

Aviation. The Soviets apparently view the current strength of the Badger unit at Cam Ranh to be adequate (see figure 15). The airfield could accommodate twice the number of Badgers deployed, and a number of Badgers are in storage in the Pacific Fleet. Although it is unlikely, future reinforcement, perhaps during a period of rising tensions preceding war, cannot be ruled out. Occasional staging of Pacific Fleet Backfire aircraft to Cam Ranh, as a temporary show of force as an example, is possible. It is unlikely that Backfires would be permanently stationed at Cam Ranh or be present there in wartime because they have higher priority missions. Constraints of numbers and missions make increasing the Bear D and F component at Cam Ranh unlikely also. '

Air Defense. Increasing the number of fighter aircraft at Cam Ranh is a possibility. If the Soviets wish to upgrade the air defense of the base further, however, they might introduce Soviet surface-to-air missile units or equip the present Vietnamese air defense forces in the region with more modern systems.

Surface Combatants. The current pattern of assigning relatively small combatants to the squadron, such as Grisha and Petya light frigates and Nanuchka missile combatants, will probably continue. This reduces the need for larger surface combatants to deploy to Cam Ranh and may help to reduce the congestion in the port area. (

General Purpose Submarines. The number of submarines at Cam Ranh has fluctuated between three and six in recent years, although on average only three submarines were present in 1985. We expect the current level of deployment of three to continue, both because the Soviets apparently view it as adequate and because our projected force estimates of the Soviet Pacific Fleet indicate the lack of extra submarines. The mix of antiship cruise missile submarines and torpedo attack diesel-powered submarines will also probably continue because of their availability and the flexibility they offer the Soviets for the various missions they may undertake in the region.

We do not believe that any or all of these possible developments would seriously alter the wartime capability or missions of the South China Sea squadron. The anticarrier warfare and anti-SLOC roles of the force would benefit from additional strike aircraft or submarines. The defense of Cam Ranh itself might improve substantially with deployment of more Soviet air defense units or equipment.

The expansion of logistic and support infrastructure at Cam Ranh will probably at least marginally increase the capability of the squadron. A major shift from floating auxiliary support to onshore support at the port would create more space for combatants and other nonsupport ships. This seems an unlikely investment for the Soviets to make, although the presence of auxiliary ships seems to be gradually declining as the buildup continues. Construction of extensive munitions storage facilities for the air unit at Cam Ranh would permit a greater number and variety of types of ordnance to be available, such as iron bombs, aerial mines, and chemical weapons, as well as antiship missiles.

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Figure 15 Soviet Naval Air Coverage From Vietnam



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Appendix A

Overseas Facilities and Anchorages Used by Soviet Naval Forces

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Overseas Facilities and Anchorages Used by Soviet Naval Forces



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Appendix B

Deployment Areas and 1985 Ship-Days of Soviet Naval Forces Outside Home Waters Secret

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Deployment Areas and 1985 Ship-Days of Soviet Naval Forces Outside Home Waters

