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Pickles from the Same Barrel.

**A POTENTIAL SHORTAGE OF MARINERS: ITS IMPACT ON STRATEGIC
SEALIFT AND COMBAT LOGISTICS FORCE OPERATIONS.**

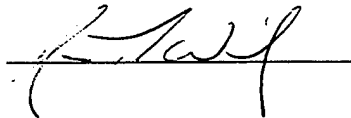
by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Maritime Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Abstract

A POTENTIAL SHORTAGE OF MARINERS: ITS IMPACT ON STRATEGIC SEALIFT AND COMBAT LOGISTICS FORCE OPERATIONS.

A declining US maritime flag fleet as well as new requirements for certifying and licensing merchant mariners will soon eliminate the pool of personnel needed for the "surge-manning" of the Fast Sealift Ships and the Ready Reserve Force ships. These shortages will be a critical factor in any future conflict requiring a need for significant strategic sealift. Additionally, should any conflict arise requiring the activation of large numbers of reserve Sealift ships, these (potential) manning shortages will spill over into ships of the Navy's Combat Logistics Force (CLF). The manpower needs for strategic mobility will be competing with the manpower needs for naval task group logistics.

During the Gulf War, the CLF ships operated by Military Sealift Command (MSC) had serious manning shortages. The cause of these shortages included the activation of reserve sealift shipping in support of the war. Moreover, after the Gulf War, MSC reduced manning on most of its CLF ships (similar to the shortages). Manning shortages on CLF ships will likely occur again in any future conflict. Compounding these shortages will be the crew reductions and an overall shortage of industry mariners.

Joint force planners must have a clear understanding of the relationships between the mariners who man surge sealift shipping and those who man CLF forces. The greater the demand for sealift assets, the more the effect is on the operational capability of supporting naval forces.

▪ **Introduction.**

The United States will soon be facing a serious shortage of qualified merchant marine officers and crews. The declining US flag merchant fleet as well as new licensing and certification requirements for mariners are rapidly shrinking the current pool of seagoing personnel. This shortage will affect strategic planning in the event of war or national emergency and be serious threat to national security. Throughout the history of this nation, the US Merchant Marine has served as a "Fourth Arm of Defense" for every major conflict. Strategic planning for future conflicts still assumes a call for America's merchant seamen to play a critical role. The question is: Will there be enough of them?

American military strategy relies on the projection of force (e.g. moving military personnel and equipment into theaters of operation) to counter threats to national security. Current US doctrine calls for being prepared to deploy all necessary equipment and personnel for two simultaneous Major Theaters of War (MTW). To fulfill this strategy, US military doctrine is heavily dependent on sealift assets. To meet the need for required sealift, military planners can call on three primary sources: The Afloat Prepositioning Force (APF), Military Sealift Command's Fast Sealift Ships (FSS), and the ships of the Maritime Administration's Ready Reserve Force (RRF). Necessary for these vessels are the merchant marine crews to operate them.

US Navy doctrine also relies on merchant seaman to operate the Navy's Combat Logistics Force (CLF) vessels. These ships work in direct support of US Navy Carrier Battle Groups, Amphibious Ready Groups, and Surface Action Groups. These CLF ships are what keep the Naval task forces at sea for prolonged periods. By method of Underway Replenishment (UNREP), CLF ships refuel, rearm, and re-provision warships of all types

while on station. Civilian mariners now operate the majority of US Navy CLF assets. These mariners, employed by the Navy's Military Sealift Command (MSC), are fully licensed and certificated US merchant seamen. They hold the same documents and qualifications as the crews needed by the sealift vessels.

A potential mariner shortage is currently the subject of considerable discussion in the national security arena, Department of Defense (DoD), and other defense establishments. However, these discussions consider only the "Strategic Sealift" aspect. Missing from these discussions is how manning shortages during a major activation of sealift shipping may spill over into the CLF manning arena. The thesis of this paper is to show that in time of conflict these two groups of mariners, those who will man the sealift ships and those currently manning the CLF ships, are *pickles from the same barrel*. Furthermore, any shortages in sealift manning will also create shortages in CLF manning. Solutions to this problem are outside the scope of this paper. The goal will be to show how both of these manning shortages will significantly affect conflict strategy as the need to sustain naval task forces and the need for strategic mobility both compete for the same pool of manpower resources. Historian Ronald Spector, in writing about WWII in the Pacific, has remarked, "Many of the debates about strategy within the councils of the Joint Chiefs of Staff and between the Americans and British were, in essence, debates about the allocation of resources."¹ The scarcest resource in any future major theater war may well be qualified merchant marine officers and crews.

▪ **A Future Shortage of Mariners.**

Will we have enough mariners during a future conflict or national emergency? DoD planners count on drawing from two sources. The first are those mariners employed by

unions and/or shipping companies who are on leave and available (and willing) to take part. The second are those mariners who are working in the periphery* of the maritime industry. These are former mariners who once sailed in the merchant marine and now work in some other related field; yet still maintain licenses and/or certifications. This arrangement worked during the Gulf War and many DoD planners are assuming it will work again. However, some significant changes have occurred in the maritime industry that will affect future planning.

The United States Merchant Marine is ebbing towards an all time low. Fewer ships under US flag means fewer qualified mariners available for wartime or other national emergencies. Today, fewer than 300 US flag merchant ships sail in international commerce; and the numbers continue to decline. Most American-owned shipping companies register their ships under foreign "Flags of Convenience" to reduce costs. Registering ships under foreign flags means escaping higher US taxes, higher labor costs of US crews, and the higher cost of stringent US safety regulations. The international term used to describe the total number of individuals required to crew a vessel or fleet of vessels is called the "establishment." The US establishment is currently three crews for two ships, or a ratio of 1.5 mariners for each billet.² Mariners not actively sailing are on shore leave, sick leave or other inactive status. During time of conflict, DoD planners hope to draw on those mariners in leave status (e.g. 50% of the overall number of billets). If the present downtrend of American flag shipping continues, the fewer ships under the US flag will mean fewer personnel available for surge sealift manning.

International changes in the licensing and certification of mariners has been occurring for the last several years. This program, called the International Convention on Standards of

* Periphery is the author's own expression.

Training, Certification and Watchkeeping for Seafarers (STCW), will significantly reduce, if not eliminate altogether, those mariners working in the periphery of the industry.* Before the implementation of STCW, renewal of one's merchant marine document was a simple matter of a little paperwork and paying a small fee. Many former mariners continued to maintain their seaman's documents long after changing employment to a maritime periphery (e.g. non-seagoing) profession. Most considered it a kind of cheap unemployment insurance (e.g. "...I can *always* go back to sea!"). Because of STCW, it will now become increasingly difficult, without time at sea and in approved courses, for seafarers to obtain or maintain both traditional merchant marine documents and the new STCW endorsements. The new endorsements will require approximately seven weeks of course work in addition to practical experience. Course fees, per diem, and loss of wages could easily exceed \$20,000 per mariner.³ Unless a person earns a livelihood from going to sea, it will no longer be suitable or practical to continue to maintain his/her merchant marine document or license. No longer can DoD count on a large pool of mariners to take time off from their "day-jobs" and make themselves available for surge sealift manning.

* "The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978, as amended, sets qualification standards for masters, officers and watch personnel on seagoing merchant ships. STCW was adopted in 1978 by conference at the International Maritime Organization (IMO) in London, and entered into force in 1984. The Convention was significantly amended in 1995. The 133 current state-parties to the Convention represent approximately 98 percent of the world's merchant vessel tonnage. The United States became a party in 1991. Over 90 percent of ships visiting U.S. waters are foreign-flag. Approximately 350 large U.S. merchant ships that routinely visit foreign ports, as well as thousands of smaller U.S. documented commercial vessels that operate on ocean or near-coastal voyages, are subject to STCW."

Quoted from: United States Coast Guard. "STCW Web Page"
<<http://www.uscg.mil/STCW/s-history.htm>>
February 4 01.

▪ **The Impact of Manning Shortages on Strategic Sealift.**

General Tony Robertson, Commander in Chief, United States Transportation Command, stated the following, "Let there be no mistake...sealift is absolutely critical to this country's national security...and you can quote me on that!"⁴

During the Cold War, US national security strategy mandated large forward-deployed forces in or near regions with a high potential for crisis with most of the troops and materiel stationed on land.⁵ In today's more austere budget climate, the US military can no longer afford to keep large pre-positioned stocks of military hardware in every potential trouble spot. With the reduction in forward basing, the US must have the ability to move the continental-based forces around the world as needed. Airlift is not the answer. More than 95% of the dry cargo and 99 % of the liquid cargo needed to sustain land combat forces must go by sea.⁶

Should a crisis occur requiring sealift, the first ships to arrive on scene will most likely be those of MSC's Afloat Prepositioning Force (APF). The APF program provides operationally ready ships* to the military services and the Defense Logistics Agency. At the end of 1999, the APF consisted of 37 ships, with 35 operating at prepositioning sites in the Mediterranean, Diego Garcia in the Indian Ocean, and Guam in the western Pacific. The prepositioning Ships contain nearly everything needed for initial military operations -- from tanks and ammunition to food and fuel to spare parts and engine oil.⁷ In most scenarios, these vessels must be able to get under way within four hours of notification to sail.⁸

The ships of the fully crewed APF are only an emergency measure to "plug the leak" until follow-on forces can arrive. These 37 ships cannot possibly provide all the sealift

* A full crew is already aboard and the engineering plant is already operating.

necessary for any major conflict. “At the height of Desert Shield/Desert Storm, the US had 217 ships – 132 en route, 57 returning, and 28 loading or unloading – forming a virtual steel bridge across the Atlantic Ocean. That armada equated to approximately one ship every 50 miles from Savannah, Georgia, to the Persian Gulf.”⁹

Follow-on sealift requirements to any crises will come from the Fast Sealift Ships and Ready Reserve Force Ships. Unlike the APF ships, that are already fully manned and operational, these vessels will have to be “surged” into service. The primary group is MSC’s Fast Sealift Ships (FSS). These eight vessels, in reduced operating status with partial crews, are strategically located near US ports of embarkation. They must be capable of activation within 96 hours of notification. The next surge assets are the ships of the Maritime Administration’s Ready Reserve Force (RRF). These 96 vessels are strategically located near major US deployment seaports. The RRF ships are in four categories of readiness. Depending on their respective missions, these ships must be capable of sailing to ports of embarkation within 4, 5, 10, or 20 days of notification. Ships with a four-day embarkation requirement have 10-person crews, while the ships with five-day embarkation have nine-person crews. Ships with response times of 10 and 20 days have no permanently assigned crew aboard. The Maritime Administration contracts the maintenance for these vessels, and the contractors hire teams that service all the vessels under their contract. Upon activation of either the FSS and/or the RRF ships, *a full crew complement must also be hired.*¹⁰ Strategic sealift in excess of the APF ships requires an adequate number of qualified mariners available for the activation of these vessels.

▪ **Tie-in: Mariners for Strategic Sealift and CLF.**

What would be the impact on the maritime industry should a national emergency arise requiring a major surge of sealift coupled with a shortage of qualified mariners to activate surge shipping? Companies that contracted to operate the FSS ships and RRF ships could face defaulting on these contracts if they cannot find the appropriate numbers of qualified mariners to hire. As things get increasingly desperate, “headhunters” will be trying to locate anyone who might have the appropriate license or certification. They may offer lucrative signing bonuses and pay incentives to get mariners to come to work. The situation will become a simple case of supply and demand. Companies or organizations that employ mariners could find themselves being “raided” by those companies desperately needing mariners for surge sealift shipping.

One such organization is Military Sealift Command. Today MSC operates 26 of the US Navy’s 34 Combat Logistics Force (CLF) ships. Under MSC’s colors are seven ammunition ships (T-AE’s), thirteen fleet replenishment oilers (T-AO’s), and six combat stores ships (T-AFS’s).¹¹ These ships are crewed by over 3300 (civilian, US Government employed), Civil Service Mariners (CIVMARS).¹² These CIVMARS are fully licensed and/or certificated merchant mariners (and, by MSC policy, maintain all STCW requirements¹³). In addition to having the skills of regular merchant seaman (e.g. operating tankers and freighters), these CIVMARS are highly trained in the realm of Underway Replenishment (UNREP), ordnance handling, and shipboard helicopter operations (Vertical Replenishment or VERTREP). As an example, a deck officer who works in this field must be trained to operate his/her ship as an element of a Battle Group. This training includes

such “non-merchant marine” skills as: formation station keeping, emission control (EMCON), and torpedo evasion (nixie) maneuvers. There is no “civilian” or “commercial” equivalent to operating a CLF ship. It takes a great deal of time and training to bring a mariner over from the commercial sector to become proficient in CLF operations. It is much easier to go the other way; from operating a CLF ship to operating a surge sealift ship.* Additionally, MSC CIVMARS are under no legal binding to continue employment for any particular period and are free to resign at anytime and work for whomever they choose.

Unlike commercial companies who maintain an establishment of 1.5, MSC CIVMARS maintain an establishment of only 1.25 (25% less). Consequently, and because of the extra time needed to train in CLF operations, MSC relies on an entrenched cadre of mariners. Any significant attrition of mariners from CIVMAR employment would have an immediate effect on the manning levels of the CLF ships.

It would be reasonable to assume that companies anxious to hire mariners would look to raid the CIVMAR ranks. Depending on how desperate these companies get, and how lucrative they can make their offers, some CIVMARS might consider private employment. It is unlikely that Government bureaucracy could react fast enough with its own counter-bonuses or other incentives to fend off this type of manpower raiding. Who has not thought, at one time or another, that the grass might be greener somewhere else?

▪ **Manpower Shortages on MSC's CLF Ships During the Persian Gulf War.**

Lessons from the Gulf War are an example of how the dependence of surge sealift can squeeze the need for mariners across all of the military's requirements. During Desert Shield/Storm, MSC operated nine CIVMAR crewed CLF vessels in the Persian Gulf. Included were five replenishment oilers (T-AO's), one combat stores ship (T-AFS), one

* Author's own opinion.

ammunition ship (T-AE), and two hospital ships (T-AH's). Each of these ships had significant personnel vacancies throughout the course of the conflict (See Chart 1). On average, each ship experienced between 10% to 20% crew shortages.* These high numbers of vacancies are directly attributable to the demand of mariners for surge sealift.

CIVMAR CLF Ships Vacancies - Gulf War			
(Best Recollections by the Masters who had Command)			
Ship	Master(s)	Period Aboard	% Vacancies (Approximate)
USNS Passumpsic	R.J. Bellfi	1/91 – 2/91	20% ¹⁴
	Brad Smith	2/91 – 4/91	10% to 15% ¹⁵
USNS Ponchatoula	Peter Brent	1/91 – 4/91	10% ¹⁶
USNS Hassayampa	Bert Holt	8/90 – 10/90	14% ¹⁷
	Robert Wiley	10/90 – 12/90	13% to 17% [†]
	Bert Holt	1/91 – 3/91	14% ¹⁸
USNS W.S. Diehl	Bill Baldwin	9/90 – 4/91	10% ¹⁹
USNS A.J. Higgins	Chuck Becker	8/90 – 10/90	10% to 12% ²⁰
	Mark Wilson	11/90 – 3/91	Not Applicable [‡] ²¹
USNS Spica	Leroy Gill	10/90 – 1/91	14% to 17% ²²
	Robert Wiley	1/91 – 2/91	17% to 21% [§]
	Leroy Gill	3/91 – 4/91	14% to 17% ²³
USNS Kilauea	Russ Driver	1/91 – 4/91	16% to 17% ²⁴
USNS Mercy	Dan O'Brian	8/90 – 3/91	10% ²⁵

Table 1

* These were by far the highest number of shipboard vacancies I have ever experienced in my 20-year career with MSC.

[†] Author's recollection.

[‡] USNS A.J. Higgins struck an uncharted reef and was dry-docked during most of this period. A significant number of the crew went to fill vacancies during this time aboard other ships in the Persian Gulf.

[§] Author's recollection.

Although exact numbers are not available, MSC did lose some mariners during the Gulf War to resignations. Commercial companies did try, and had some success directly raiding CIVMAR manpower.* In addition to resignations, ships can also incur losses due to sickness, injury, retirement, or even dismissal. Normally, as these losses occur, replacement mariners immediately fly out to fill the vacant billet. These replacement mariners come from the reserve pool of the establishment. Mariners who have rotated off a ship to shore leave, sick leave, and/or necessary training are what comprise the reserve pool. During the Gulf War, the activation of the hospital ships drained the majority of available CIVMARS in the reserve pool. MSC was unable to replace any losses because its pool of reserve mariners had dried up. As these gradual losses kept compiling, the number of vacancies continued to increase. High vacancies continued throughout the conflict even though, for all practical purposes, regular shore leave for CIVMARS was suspended.²⁶

Manning of the hospital ships is similar to the Ready Reserve Force ships except that these ships will operate with CIVMAR crews instead of commercial contract crews. Sitting in a reduced operating status with a caretaker crew of nine aboard, they must be ready to activate within five days of notice with a crew of over eighty.²⁷ The activation crews for these ships are not included in the regular CIVMAR establishment. When called upon to activate, all crewmembers come directly out of those mariners in the reserve pool.

Compounding the problem of the hospital ships, MSC was not able to add any additional mariners to replace those lost from the CIVMAR ranks. Recruiters from MSC were unable to hire mariners throughout the Gulf War because the commercial companies and unions had already scooped up most all the available mariners for the surge sealift ships.

* Authors Note: During Desert Shield, I was personally contacted by one of the maritime officers' unions and asked if I was interested in resigning from MSC and go to work for a commercial company. I declined the offer.

▪ **The Impact of Manning Shortages on CLF.**

As bad as the vacancies were on MSC CLF ships during the Gulf War, they never became critical enough to seriously affect or degrade overall ship's operations. However, since the Gulf War, the manning of MSC's CLF ships as well as the Navy's CLF program in general has undergone significant changes. No longer will CLF ships be able to operate with significant vacancies without degradation to operational capabilities. Furthermore, the US Navy has transitioned the majority of its CLF ships to CIVMAR operations. It is unlikely that fleet logistics will be able to operate unimpeded should a requirement for surge sealift induce CLF manning vacancies similar to those during the Gulf War.

After the Gulf War, MSC reduced the manning on two of its three types of CLF ship (See Chart 2).²⁸ This action was in accordance with MSC's requirement to conduct periodic job-analysis surveys of MSC marine positions and those in private industry to determine whether position titles, content, rank and shipboard departments are consistent with prevailing maritime practice.* Unlike naval vessels, civilian maritime doctrine is to utilize the absolute minimum number of crew necessary to operate a ship. Ships operated by US Navy sailors take their manpower redundancy with them. There is very little redundancy aboard a CIVMAR manned vessel. MSC CLF ships operate with about a third the crew of a comparable navy manned ship. What little manpower redundancy the MSC CLF ships had during the Gulf War is no longer there.

* This was actually in response to the threats from commercial companies looking to take over operation of the CLF ships under the Circular A-76 program. Also implied was the reasoning that the ships could operate in wartime with these fewer positions.

Crew Reductions to CIVMAR CLF Ships post Gulf War				
Vessel Type	Vessel Class	1990 to 1991 CIVMAR Size	Present CIVMAR Size	Percent Reduction
Fleet Oiler (T-AO)	Kaiser Class	96	81	16%
Stores Ship (T-AFS)	Sirius Class	125	106	15%
Ammo Ship (T-AE)	Kilauea Class	125	125	0%

Table 2

In a future conflict, the potential for MSC CLF manning shortages could happen again. Moreover, these future shortages may be exacerbated by the future *critical* shortage of mariners needed to man surge sealift requirements – both from raiding of manpower and the inability to hire replacements. Compounding the problem of potentially large numbers of vacancies are the manning reductions made to the CLF ships. It is highly probable that in a future conflict (similar to Desert Shield/Storm) CIVMAR manning shortages will be serious enough to degrade the mission capabilities of the CLF forces.

Mentioned again is that MSC CIVMARS now operate the majority of Navy CLF replenishment vessels.* In 1990, only 21 of the US Navy's 56 CLF ships were under CIVMAR operation.²⁹ Today, US Navy personnel man only the eight fast combat store ships (AOE's).† The difference between any future conflict and the recent Gulf War is that the US Navy is now almost entirely dependent on CIVMAR operated CLF ships.

The ability of US Naval forces to project power far away from any logistics base is due to its fleet of CLF Underway Replenishment ships. If vacancies aboard CLF ships ever became endemic enough to degrade the mission capabilities, the result would directly affect naval task group or carrier battle group operations. A Fleet Oiler (T-AO), normally expected to operate five replenishment stations, might only be able to operate three or four stations. A

* From page 7, MSC operates 26 of the US Navy's 34 CLF ships.

† Four of the AOE-6 class ships will commence transferring to MSC this year.

Combat Stores Ship (T-AFS) that might normally require two days for staging cargo for a carrier group re-provisioning might require four or five days. These diminished capabilities also result in an increase in the *time* needed to carry out replenishments.

Critical to sustained naval combat operations is minimizing the *time* necessary to conduct replenishment operations. The more time naval forces take to replenish, the less time they can be on station and in the fight. Furthermore, naval units are at their most vulnerable condition when they are replenishing. In the words of Admiral Arleigh Burke,

"... Of course, the massive underway replenishment operations occurred when the fast Carrier Task Force got into full operations in the last year of the war [WWII]. I was chief of Staff to Admiral Mitscher, Task Force 58, during that time. We fought nearly every day and we used lots of fuel, ammo, and all other expendable material, including food. All time spent in replenishing was time lost in combat. Sometimes it was most important that the carriers being replenished should get back into their combat area as soon as they possibly could. This is when I had impressed on me the value of time. No commander can ever tell what a few minutes may mean in the future..."³⁰

▪ **Counterarguments.**

One significant change that has occurred in MSC CIVMAR manning has been the establishment of the Afloat Personnel Management Center (APMC). During the Gulf War, two separate area commands -- Military Sealift Command, Pacific and Military Sealift Command, Atlantic -- employed the CIVMARS. In 1997, MSC centralized the employment of CIVMARS under the APMC. In theory, it should now be easier and more efficient to "crossdeck" CIVMARS from ships operating in a non-active theater to those ships in an active theater. However, this premise would only apply in the event of a single MTW scenario. Furthermore, this argument does not address the problem of the low reserve of CIVMARS should the hospital ships be activated. Additionally not addresses is the lack of redundancy aboard neither CIVMAR CLF vessels, nor the potential for employment raiding

by commercial companies. All these factors continue to apply to the APMC just as they did regarding the two MSC area commands during the Gulf War.

Some would argue that a possible solution to this problem would be to operate the CLF ships by commercial contractors and do away with CIVMARS altogether. This argument has some merit because commercial maritime companies maintain higher establishments than government CIVMAR operations do and could absorb attrition much easier. Furthermore, commercial companies would react faster than the government to respond with pay incentives to keep employees from quitting to go work for the companies looking for surge sealift mariners. However, this argument must also consider that most mariners, in general, tend to work not for specific shipping companies, but for maritime unions. A significant number of CIVMARS are career government employees who would be unlikely to sacrifice 20 years of government service (and a government pension) to ship out for a few months of lucrative commercial pay. A mariner shipping out of a union hiring hall has no such incentive. Additionally, while commercial companies do tend to keep a higher establishment, they also tend to operate with a smaller crew size. Therefore, any crew vacancies would begin to affect operations even sooner.

An additional argument is to continue some of the AOE's under US Navy manning and not relinquish them to CIVMAR operation. This would provide at least a stop-gap solution to this potential problem by ensuring at least a few of the CLF assets would be fully manned and fully operational. While this option appears attractive, it is weighed against the potential cost savings associated with CIVMAR operation of T-AOE's. In these days of ever tightening military budgets, the benefits of keeping any of the AOE's navy manned might not be worth the costs.

▪ **Conclusion.**

The current trends in the US Maritime Industry will be a critical weakness for any future conflict. The declining US flag fleet and the new STCW requirements are eroding the pool of qualified mariners needed for "surge-manning" of the Fast Sealift Ships and the Ready Reserve Force. The purpose of this paper is not to illustrate in detail the causes of these manning shortages or to offer solutions. This paper's goal is to highlight the potential impact of shortages across a broader spectrum of DoD needs for mariners. More specifically, a surge-manning crisis could spill over into the CLF arena and potentially affect naval task group operations.

During the Gulf War, the CLF ships operated by Military Sealift Command had serious manning shortages – directly related to surge sealift requirements. Moreover, after the Gulf War, MSC reduced the manning on many of these CLF ships. In a future conflict, manning shortages on the CLF ships will likely occur again; and will be in addition the crew reductions! Furthermore, the requirements to man the sealift ships, compounded by the STCW requirements and critical lack of mariners, will exacerbate the problem. As this problem manifests, crew vacancies aboard CLF ships will affect the naval task forces ability to replenish at sea.

A Theater CinC or Joint Force Commander needs a clear understanding of the relationships between the mariners who man surge sealift shipping and those who man CLF forces. Planners need to anticipate the effects of mariner shortages (sealift and CLF) as they apply the Operational Factors of **Space, Time, and Force**.

The US response to any future conflict will most likely unfold very similar to the many crisis responses since the end of WWII. The first reaction is always to move a Carrier

Battle Group and a Marine Amphibious Ready Group into the theater of operations. Air Force fighter units and Army light infantry (such as elements of the 82nd Airborne) will fly into the region. Ships of the Afloat Prepositioning Force will arrive bringing a limited compliment of supplies and heavy equipment. This equipment will marry up with the flown in troops. These initial forces will probably be inadequate for any major or sustained operation. Unlike Saddam Hussein, our next opponent may not allow us a six-month period to build up our forces. US troops and aircraft could be engaged in combat soon after arriving in theater.

Operational Factor, **Space**: With the end of the cold war, the US at present has little or no forward basing and the long distance to any theater of operations becomes an issue. Urgently needed are reinforcements of heavy equipment and material from the US; and the only mode of travel is strategic sealift.

Operational Factor, **Time**: How long can the initial forces keep the enemy in check until the follow-on forces arrive? A critical shortage of mariners might delay the activation of surge sealift shipping and this could delay the reinforcements. Meanwhile, the forces already engaged are in jeopardy of losing their lodgment or sustainment. As these delays become critical, the pressure increases to get the surge sealift forces activated, "... by whatever means necessary!"*

Operational Factor, **Force**: As the sealift ships activate, critical manning shortages will begin to emerge aboard the CLF ships who are supporting the Naval forces. These Naval forces, helping to hold the enemy in check, will begin to lose effectiveness. Underway replenishment operations will become arduous and lengthen in duration. Operational fires

* A hypothetical CinC speaking.

from carrier air will diminish and operational maneuvers and movement from Marine amphibious forces will be uncertain.

The above scenario illustrates the potential effects of how the present and future shortage of qualified mariners can influence strategic planning. The problem of how to man surge sealift forces needs a more realistic solution. Until this happens, Joint Task Force commanders must anticipate and prepare for problems in strategic sealift and the impact of these problems in CLF force capabilities.

NOTES

¹ Ronald Spector, The Eagle Against the Sun (New York: Vintage Books, 1995), xiii.

² David Harris and Richard Stewart, "US Surge Sealift Capabilities: A Question of Sufficiency" PARAMETERS, US Army War College Quarterly – Spring 1998 <<http://carlisle-www.army.mil/usawc/Parameters/98spring/harris.htm>> [08 December 00]

³ Ibid.

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