

1996

Infrastructure, Installations, and the Future of the Navy

Dan Struble

Follow this and additional works at: <https://digital-commons.usnwc.edu/nwc-review>

Recommended Citation

Struble, Dan (1996) "Infrastructure, Installations, and the Future of the Navy," *Naval War College Review*: Vol. 49 : No. 3 , Article 7.
Available at: <https://digital-commons.usnwc.edu/nwc-review/vol49/iss3/7>

This Article is brought to you for free and open access by the Journals at U.S. Naval War College Digital Commons. It has been accepted for inclusion in Naval War College Review by an authorized editor of U.S. Naval War College Digital Commons. For more information, please contact repository.inquiries@usnwc.edu.

Infrastructure, Installations, and the Future of the Navy

Lieutenant Commaner Dan Struble, U.S. Naval Reserve

NOW THAT THE COLD WAR IS INDEED OVER, the Navy finds itself in a conflict that poses a real threat to its ability to influence events around the globe. It is a budget war, and the antagonists are not the usual suspects. The conflict is not between the Navy and elected officials—post-Cold War military budget reductions were widely accepted as inevitable. Nor is the conflict with its sister services—the Commission on Roles and Missions has likely settled (at least for a while) the question of who does what and, hence, what the budget-share percentages are, to within a narrow range.¹ This conflict is being waged *within* the Navy, and it centers around the distribution of Navy Department resources. Even here, however, we find the lines of battle drawn in unaccustomed ways. Today's conflict is not over whether the Navy should build more ships or more submarines or more aircraft; it is over whether it will have the resources to build enough of any of these to sustain a navy large enough to place weapons on target when and where needed.

The Navy is internally at odds over how to apportion resources between force structure (e.g., ships, submarines, and aircraft) and the infrastructure that supports those forces. This conflict goes to the root of long-standing organizational and administrative practices, and the lines of battle are not entirely clear. Navy leaders are agreed that infrastructure must be reduced more than force structure;² but cutting infrastructure has proven to be a far more stubborn problem than many expected, and it has certainly been more difficult than reducing force structure.

Lieutenant Commander Struble, a graduate of the U.S. Naval Academy, served onboard USS *Rentz* (FFG 46) before accepting a reserve commission. He earned a master's degree in comparative politics and a doctorate in American politics at the University of Southern California. Dr. Struble has served as a naval reservist at the U.S. Naval Postgraduate School, the Naval War College, and Command and Control Warfare Group Pacific, and is now a member of Naval Reserve Deputy Chief of Naval Operations (N4) Detachment 106.

Naval War College Review, Summer 1998, Vol. XLIX, No. 3

Infrastructure spending now consumes more resources than can be allowed if the Navy is to recapitalize effectively its combat assets for the future. Unless it can redirect spending to force structure, the Navy will continue to diminish in fighting power until it can no longer adequately influence events when and where necessary.³ While the Navy will certainly do what it can to increase its budget, there is little reason to expect appropriations to increase significantly in the foreseeable future. Current political debate suggests that, barring a major change in the perception of the threat to the United States, spending for defense is likely to remain stable or increase only very slightly. Although the Navy has not been singled out for additional reductions, no one should be led to believe that the service can sustain adequate force structure without continued reductions in infrastructure.

This article attempts to illustrate the nature and magnitude of the infrastructure problem facing the Navy; to describe briefly some of the current efforts to deal with the problem as they relate to installations (and the limitations of these efforts); and to convince Navy leaders at all levels that more must be done. This analysis collapses the many complexities of the Navy budget into three categories: investment in force structure recapitalization, support of forces, and infrastructure.⁴ The discussion assumes that the Navy will continue to fund support of forces, and focuses rather on the relative sizes of force structure and infrastructure.⁵

The Nature of the Problem

The fundamental issue is always resource allocation: How should the Navy allocate its limited resources to meet national security objectives? This perennial issue takes on particular significance when the budget is reduced. While most people agree with budget cuts in the abstract, the hard reality of reduced spending results in the painful process of letting go of platforms, people, and projects that are valuable.

To understand the nature of the problem, one needs to remember that the Navy must budget today to shape, gradually, the Navy of the future. Because it is a complex, capital-intensive organization, the Navy cannot be expanded or contracted quickly or even proportionally as the security threat and political climate change; ships, submarines, and aircraft require long lead-times to design, manufacture, man, maintain, and operate. While it is possible to decommission existing forces relatively rapidly, it takes many years to build even partial replacements. Take, for example, a hypothetical decision to build ten ships per year (a high number, these days) to offset in part a retirement rate of twelve ships per year.⁶ If the Navy started with 325 ships in 1996, it would "build down" to 295 ships by the year 2010. The mix of ships operating in 2010 would depend

on which types were represented by the 150 new ships (i.e., ten per year for fifteen years) and which 180 ships had been decommissioned during the same period. And force structure, again, is the "easy" part.

The Navy's priorities should be made clear through its financial decisions, but today it is having difficulty making its own budget reflect its stated preferences. While the service intends to make readiness and recapitalization of force structure its highest priorities, its leaders are finding that spending on other areas has stubbornly refused to yield. Given (as mentioned earlier) the requirement to support operating forces, the continuing costs of operating installations and facilities, and a relatively "hard" ceiling on the total available resources, fewer resources have been applied to recapitalization than is desirable.

The focus, then, turns to this slow-to-yield section of the budget pie, called infrastructure. While the Navy's future force structure, as the above example suggests, can be quickly inferred from budget decisions, the impact of budget decisions regarding infrastructure is less clear. Reduction in that area has not been conceived in discrete, identifiable units that can be easily programmed for elimination (aside from base closures, which, as will be seen, were insufficient by themselves and were certainly not easy).

Lack of clarity about infrastructure is due to the tremendously varied nature of its component parts, the

Abbreviations

Appropriations:

APN	Aviation Procurement, Navy
BRCA	Base Realign. & Closure
ERN	Env. Restoration, Navy
FHN	Family Housing, Navy
MCN	Mil. Construction, Navy
MPN	Mil. Personnel, Navy
OMN/OMNR	Ops. & Maint., Navy/Reserve
OPN	Other Procurement, Navy
RDTE	Res., Dev., Test & Evaluation
RPN	Reserve Mil. Personnel, Navy
SCN/WPN	Ship/Wpns. Proc., Navy

Resource Sponsors:

N1	Manpower and Personnel
N2	Intelligence
N4	Logistics
N6	Space and Elec. Warfare
N7	Naval Training
N80	Programming Div.
N82	Fiscal Management Div.
N85	Expeditionary Warfare Div.
N86	Surface Warfare Div.
N87	Submarine Warfare Div.
N88	Air Warfare Div.

Major Claimants:

AVCNO	Asst. Vice CNO
BUMED	Chief, Bur. of Naval Medicine
BUPERS	Chief, Bur. of Naval Personnel
CNET	Chief, Naval Educ. and Training
CNR	Chief of Naval Research
COA	Central Operating Authority
DHP	Defense Health Program
LANTFLT	CINC, U.S. Atlantic Fleet
METOCOM	Commander, Naval Meteorology and Oceanography Command
NAVAIR	Commander, Naval Air Sys. Command
NAVEUR	CINC, U.S. Naval Forces Europe
NAVFAC	Commander, Naval Fac. Eng. Command
NAVSEA	Commander, Naval Sea Sys. Command
NAVSUP	Commander, Naval Supply Sys. Command
NCTC	Commander, Naval Computers and Telecommunications Command
PACFLT	CINC, U.S. Pacific Fleet
RESFOR	Commander, Naval Reserve Forces
SECGRU	Commander, Naval Security Group
SPAWAR	Commander, Naval Space and Warfare Sys. Command
SPECWAR	Commander, Nav. Spec. War. Forces

Others:

BRAC	Base Realignment and Closure
CINC	Commander in Chief
CNO	Chief of Naval Operations
FY	Fiscal Year
HQ	Headquarters
JCS	Joint Chiefs of Staff
MILCON	Military Construction
NCIS	Naval Criminal Investigative Service
OCS	Officer Candidate School
ONR	Office of Naval Research
OPNAV	(Navy Staff)
OSD	Office of the Secretary of Defense
PCS	Permanent Change of Station
QOL	Quality of Life
ROTC	Reserve Officer Training Corps
SOC	Special Operations Command
SYSCOM	Systems Command
TOA	Total Obligation Authority
TY	Then Year
USNA	U.S. Naval Academy

complex relationship between infrastructure and readiness, and the dispersal of authority over spending in that sector. The Navy does not have a budget line item labeled "infrastructure," nor is there a unified command structure responsible for its functions. Infrastructure has evolved in response to the historical challenges of building and operating a modern navy, and each of its parts has been considered necessary to the effective employment of forces. The infrastructure is deeply anchored in naval organization, practice, and even ways of thinking.

Part of the problem is in determining what, in fact, infrastructure is. "Infrastructure" is the collective name for the complex and extensive support structure behind every battle group and amphibious ready group. The Defense Department defines it as "those functionally organized activities that furnish resources for the management of defense forces, facilities from which defense forces operate, centrally organized logistics, non-unit training, personnel support, and medical services." The complexity of the Navy's infrastructure is illustrated in figures 1 through 4, which display its components by function, appropriation, resource sponsor (i.e., the Navy Staff office paying for the component) and claimant (i.e., the commander who "owns" it).

Infrastructure is necessary to identify the threat, as well as to develop strategy and doctrine. It determines, designs, and procures force structure; it trains, maintains, and commands that force structure; and it even builds, trains, maintains, and commands itself (i.e., infrastructure necessarily begets more infrastructure). Infrastructure is essential—but is *all* of it necessary, or only some of it? How does one judge what must be retained and what can be done away with? Can the service organize itself more efficiently and save resources through the improvement of processes? These are the root questions facing the Navy. Their answers are too many and too complex to be imposed by fiat. Leaders at all levels of the Navy must take responsibility for arriving at workable solutions.

How Did the Navy Get Here? Defense budget cutbacks began before the Soviet Union disintegrated and accelerated rapidly shortly thereafter. The political pressure was irresistible, in view of the apparent evaporation of the security threat and the tremendous impetus to reduce federal expenditures generally. Figure 5 illustrates the magnitude and pace of budget reductions for the Department of the Navy.

The service was forced to make difficult choices during this period. For the reasons discussed below, force structure bore the brunt of the initial cuts; by 1997 the Navy will have reduced end-strength since 1988 by 34 percent, to 390,000 active duty sailors; ships and submarines by 41 percent, from 565 to 331; and aircraft by 23 percent. There now are three fewer deployable carrier battle groups, and the surviving battle groups and amphibious ready groups

Figure 1
Navy Infrastructure
FY1998: \$25.4 billion (TY)

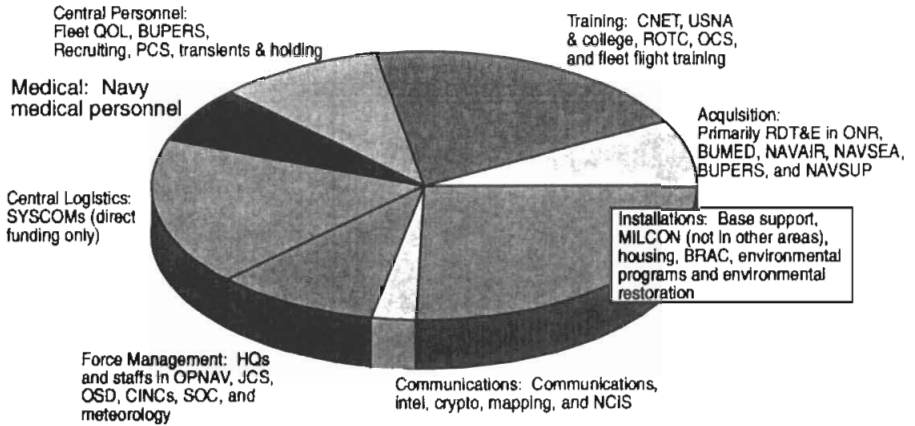


Figure 2
Infrastructure Funding
FY1998 Snapshot by Appropriation

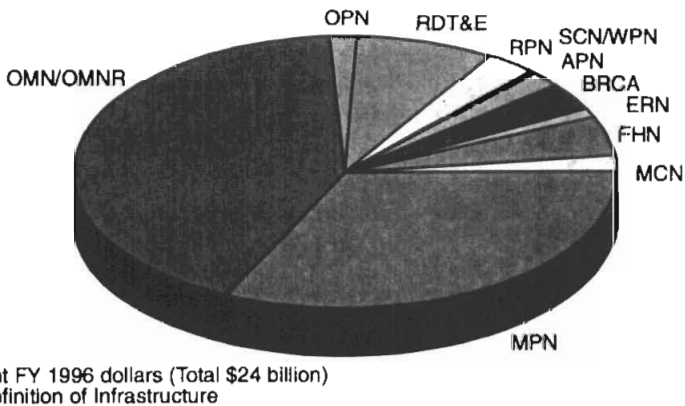


Figure 3
Infrastructure Funding
FY1998 Snapshot by Resource Sponsor

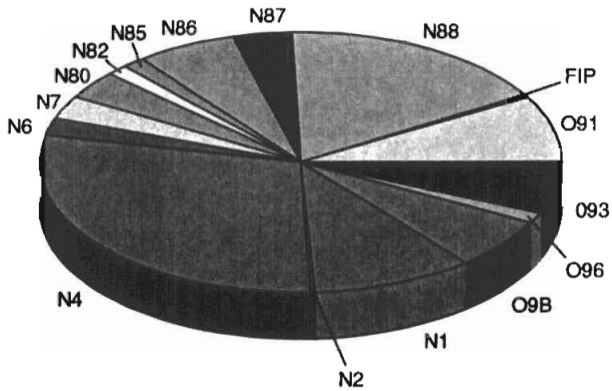


Figure 4
Claimant Infrastructure Funding:
FY1998 Snapshot by Claimant

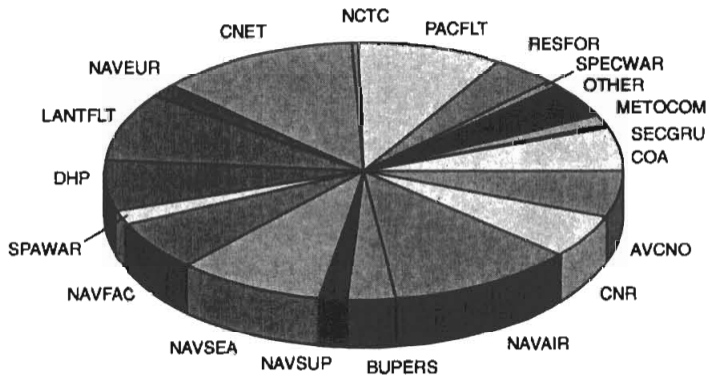
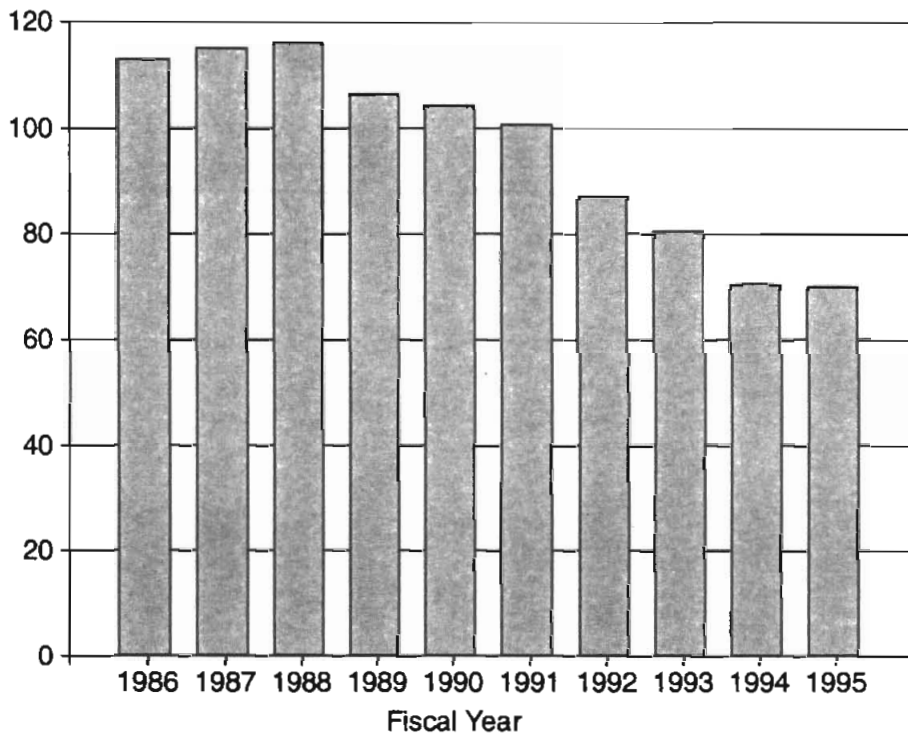


Figure 5
Navy Budget
(constant FY95 \$billions)



comprise far fewer combat assets than was typical for forces deploying during the Cold War.

Immediate and steep force structure reductions were required for two reasons: to stay within appropriation limitations, and to free up resources to build tomorrow's Navy (i.e., force structure recapitalization). The brunt of the budget-cutting ax fell on force structure—people, ships, and aircraft—because reductions there provided immediate savings and were the most feasible politically.

Infrastructure Reduction and BRAC. Navy policy, however, has been ultimately to cut infrastructure to a greater degree than force structure.⁷ The approach makes good sense: the service developed and sustained a facilities base capable of supporting the Cold War navy; now the fleet is considerably smaller. But infrastructure has not been reduced proportionally with force structure. Consequently, while in 1987 the infrastructure consumed approximately 30 percent of the Navy's total obligation authority (TOA), in 1997 infrastructure is programmed to consume approximately 40 percent. Figures 6 and 7 illustrate comparative budget-share allocations in 1987 and in 1997.

There are many reasons for this imbalance. Excess infrastructure is the more difficult to reduce, due to the politics of military spending, internecine Navy Department struggles, and the complex relationships between force structure, readiness, and infrastructure. The first two sources of difficulty are examined below as they pertain to installations (the third will arise in a later section).

Consider first the politics of military spending. Historically, it has been difficult to close military facilities, primarily because of their economic importance to local communities. Where it has been attempted, members of Congress often would support each other's efforts to prevent closure of facilities in their respective districts ("horse trading"); as a result, relatively few facilities were ever actually closed in any of them. In fact, there was an incentive to open more, broadly dispersed facilities.⁸

The Base Realignment and Closure Commission (BRAC) was conceived to cut this gordian knot. Its multistage mission was to produce lists of bases to be closed; Congress and the president could accept or reject these packages *in toto*, but they could not amend particular recommendations, a plan that provided elected officials "political cover." Many hoped this process would finally allow elimination of superfluous facilities and the efficient reorganization of the nation's military infrastructure. The dramatic savings envisioned by BRAC advocates would be used to reduce defense appropriations and free up resources for recapitalization.

Unfortunately, BRAC has not provided the predicted windfall. The process has now concluded, after four rounds, and more than a hundred naval bases and

Figure 6
Infrastructure vs. Total Navy Budget
FY1987

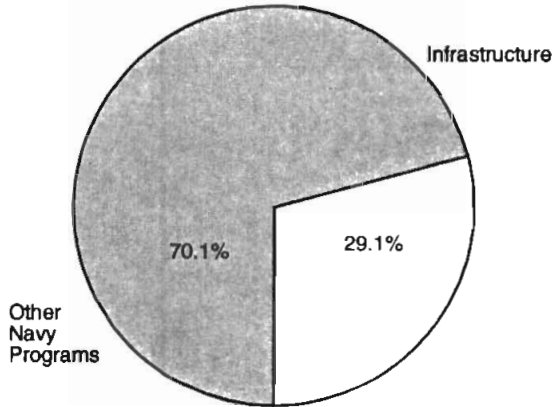
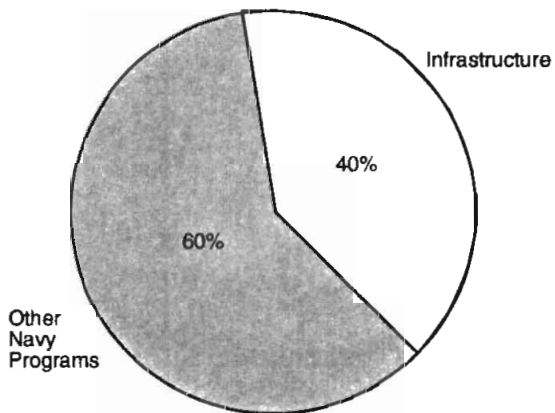


Figure 7
Infrastructure vs. Total Navy Budget
FY1997



activities have been closed or are in the process of inactivation, but the savings have been less than was looked for. Expectations were disappointed because of unexpected costs and because many expenditures were simply shifted from one place to another rather than being eliminated. As was foreseen the immediate effect of closing a base is an increase in outlay: facilities need to be closed, people and functions (some of them) need to be relocated. Perhaps the greatest expense, however, and one that was not fully anticipated, has been environmental cleanup. All in all, the Navy will be paying for years to come to close bases designated in the four BRAC rounds.

Notwithstanding BRAC's failure to satisfy expectations, closing bases does save money; current projections suggest it will save \$2.4 billion annually, some from reductions in base operating expenditures, the rest in personnel accounts. But \$2.4 billion does not come close to offsetting the budget reductions borne by the Navy since 1988. Indications are that BRAC's limitations have not gone unnoticed by the political leadership. Senator John McCain, Republican of Arizona, and Senator Robert Dole's lead campaign advisor on defense matters and a former naval officer, noted recently that installations will need to be further reduced to free up resources for force modernization: "I think what you are going to see next January [1997] is either Dole or [President] Clinton coming [to the Congress] and saying we are going to have another base closing. . . . Neither will say so at this time—and understandably so—but the realities are, we are going to have to close more bases."⁹ Clearly, national politics will continue to influence the Navy's ability to restore the proper spending balance between infrastructure and force structure.

Intra-Navy politics are also making it difficult to reduce spending on installations. The use of "politics" here is not pejorative, and it does not refer to personality-centered squabbles over who is advanced or who gets top positions. "Politics" here simply denotes the intradepartmental struggle to define how resources are to be allocated and controlled.

Control of resources (personnel, budget, etc.) is the currency of power. The Navy is not unique in this respect. Large organizations invariably struggle internally over the distribution and control of resources. No matter how committed individual leaders are to the good of the organization, people do not generally give up power willingly. This reluctance is understandable: power is necessary to get the job done. So long as Navy leaders consider controlling installations necessary to mission accomplishment, they will be loathe to give up that control.

Traditionally, the Navy has delegated control of installations according to their use. However, the effort to reduce infrastructure spending has spurred consideration of new ways of organizing that minimize redundant staffing and

rationalize management of installation assets. Predictably, this effort has met with some resistance.

“Base Operating Support” Consolidation

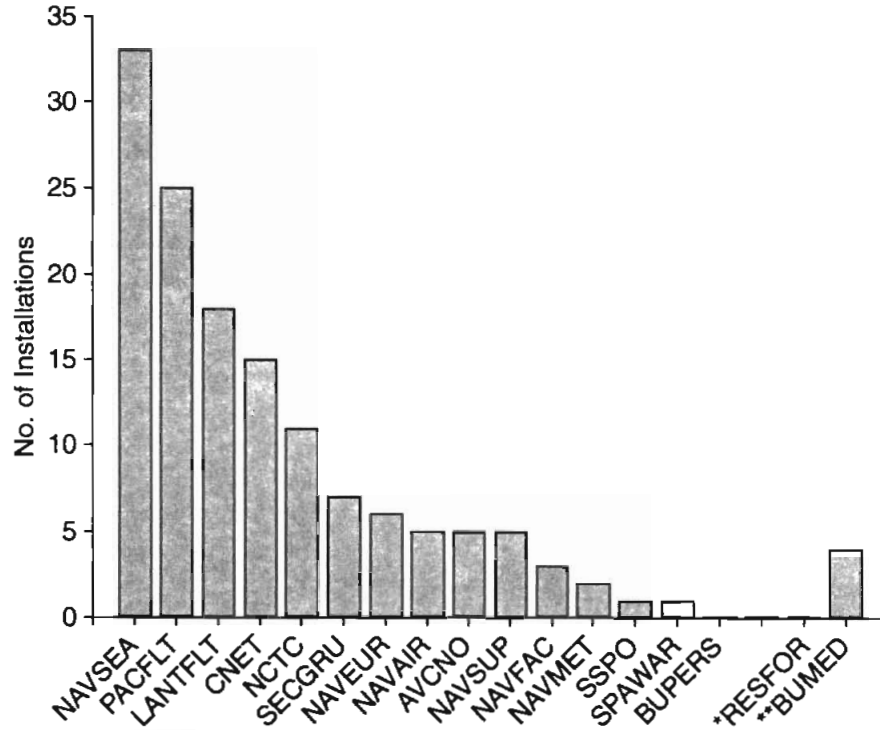
Revamping the control of installations has begun, at the level of the staff of the Chief of Naval Operations (CNO)—that is, the Navy Staff, or OpNav. In 1994 a new office was established to be the coordinating authority and advocate for shore installations: the Shore Installation Management Division (N46), under the Deputy CNO (Logistics), is the single point of contact between the CNO's staff and the resource sponsor for most base operating support dollars.¹⁰ It is leading several new initiatives designed to wring savings from installation accounts while preserving a high level of fleet support. Several of these initiatives, and some of the difficulties associated with them, are discussed below.

Consolidation of Echelon II Installations. “Echelon I” control of installations has been collected under N4, but the infrastructure at Echelon II (of the seven defined command levels) is divided among several major claimants. Figure 8 lists these installation “owners” and the relative size of their “holdings.” Because each of these commanders requires personnel to implement the responsibilities of installation management, savings can be found if ownership can be consolidated under fewer claimants.

Perhaps more important, however, is the opportunity to achieve savings through increased standardization, regionalization, and economies of scale. Whether it will be politically feasible to consolidate at this level, and if so, how, is not yet clear. The Commander, Naval Computers and Telecommunications Command, has agreed to be the test case; in 1997, COMNAVTELCOM's installations will be transferred to the commander in chiefs of the Pacific Fleet, Atlantic Fleet, and U.S. Naval Forces Europe. All other major claimants, however, continue at this writing to affirm the importance of base ownership to the effective accomplishment of their missions.

Regionalization. The next level of necessary consolidation is the local one. High-concentration areas like Norfolk, Virginia; Jacksonville, Florida; San Diego, California; and Hawaii are being asked to share resources. Each of these has many installations, with separate staffs, performing similar functions. Ideally, each area will one day be a fleet “complex,” with a single staff responsible for providing fleet support. The Jacksonville region, the first test site, is studying regionalization and consolidation options. San Diego recently began the process as well.

Figure 8
Major Claimant Base Ownership



*RESFOR owns almost 200 reserve centers

**BUMED funded by OSD

Regionalization, however, is much more contentious than the above implies. There are several bases in each area, under different claimants. Each installation commonly has a multitude of "tenant" activities, which report to someone other than the local base commander. This tangled web of reporting relationships and therefore of funding accounts makes it possible for tenant organizations effectively to resist relinquishing the assets currently under their control.

Commanders at the base and tenant level have good reason to want to maintain control of resources. For years their budgets have been steadily reduced, with little concomitant lessening of missions. These commanders, despite best efforts, have been unable to identify infrastructure cuts sufficient to match budget reductions. Accordingly, Navy financial managers have been obliged to resort to arbitrary "budget wedges" that gradually reduce the funds allocated to these activities. Such commands face, therefore, an increasing financial squeeze and, in turn, backlogs of unfunded requirements. The notion of controlling fewer assets holds out to them little promise of reducing their present resource shortfalls. From their viewpoint, regionalization does nothing to reduce the demands on the essential services these commanders provide while eliminating their ability to meet those demands. Ironically, then, the very pressures that make regionalization necessary from a "macro" point of view make it unattractive and difficult to achieve on the "micro" level.

Tenant Reviews. The BRAC experience frequently resulted in tenant facilities moving from a base being closed to one nearby that was remaining open. The purpose of tenant reviews is to assure that services that are redundant, overlapping, or in excess of the fleet needs are in fact reduced or eliminated.

Like regionalization, tenant reviews are problematic. The Navy is asking people (through "process action teams") to devise modes and procedures that will save money; in many cases, this amounts to asking people how many of their jobs can be eliminated. Further, commanders who rely on the services these tenants provide are likely to believe both that these services should continue and that they, the commanders, should control their work priorities. Efforts to review tenants, nonetheless, are proceeding, albeit with predictable difficulties.

Clearly, the politics of military spending and of Navy Department organization influence the service's ability to reduce infrastructure expenditures. Let us next consider the complex relationship between infrastructure and combat capability as it affects initiatives now in progress in the area of installation management.

Outsourcing and Privatization. There is a widespread belief that the Navy can achieve considerable savings through increased reliance on private contractors.

The National Performance Review, Defense Performance Review, and the Commission on Roles and Missions all encouraged the Navy (and federal leaders generally) to pursue privatization aggressively.

“Outsourcing” and “privatization” are terms often used interchangeably, but in fact they denote two different things. *Outsourcing* occurs when the Navy, contracting with a private company to provide a service heretofore “owned and operated” by the Navy, retains both ownership of the facilities involved and a significant degree of participation and control. Contracting out facilities maintenance is an example of outsourcing. *Privatization*, on the other hand, refers to divesting Navy ownership of certain assets in exchange for a contractual commitment to provide a service. The Navy’s involvement is reduced to monitoring the quality of performance. One example of privatization might be a partnership whereby a private developer provides houses for rent and the Navy no longer owns or operates family housing in that locality.

The Navy has taken to heart recommendations to use the private sector. Outsourcing has been effected in many areas, with some success; indications are that the Navy will average approximately 20 percent savings by doing so. There are hopes that privatization may be at least as successful. The process, however, is tedious. Further, current laws and regulations exclude the private sector from some functions (e.g., base fire services). Inevitably, any such effort comes down to a case-by-case review. Efforts to outsource and privatize are proceeding.

The implications of efforts to outsource and privatize are not yet all clear. How effective will services provided by private contractors be in time of war, civil unrest related to war, or other emergency circumstances? Will Navy leaders retain the control and flexibility that they have grown accustomed to? What will happen to morale and retention as the loss of shore billets forces increased sea-to-shore duty rotation rates?

Better Business Practices. The present drive to incorporate proven business practices in Navy decision making is not easy to summarize. In some cases it is a question of what type of individual is best prepared to do a job. The Navy has accepted that line officers (essentially warfare specialists) are not best suited to make decisions in certain areas; some such billets are being reviewed to determine if civilian staffing might be more appropriate. In other instances it means equipping Navy decision makers with the appropriate business tools, e.g., performance standards and measures and state-of-the-art market technology. In still others, it is a case of reviewing specifications to see if commercially available products can satisfy requirements at substantially reduced costs.

A full analysis of the impact of better business practice from the perspective either of savings or combat capability and readiness is beyond the scope of this article. Suffice it to say that process improvement, with its associated productivity

gains, can hardly be a bad thing for the Navy. However, areas of contention will surface as billets are eliminated or traditionally military functions are transferred to civilians.

Consider, for example, the uproar that might result if base commanding officers were eliminated in favor of civilians with city manager experience. Such a move would eliminate major command billets and raise questions of the civilian manager's ability to respond to combat readiness needs. More mundane, but potentially limiting, concerns would include good order and discipline when a base is run by a "manager," not a military commander with non-judicial punishment or court-martial authority over military personnel.

Implementing "better business practices," then, will not always be simple, or without implications for readiness. Efforts to arrive at and install new processes and procedures are now requiring significant resources. This investment will certainly bear fruit—but how much, how soon, and at what cost (both in terms of outlay and readiness) remain to be seen.

Infrastructure is vital to combat capability. Today's U.S. Navy is fundamentally different from its Cold War self and, to a degree, its potential adversaries. It is more technically sophisticated, better equipped, better trained, and more professionally manned than any navy in history. This has been made possible in large part by extensive investment in infrastructure over the last half-century. But infrastructure is difficult to reduce by proportions. While one can decommission 40 percent of the Navy's ships, if (for example) one still wants to communicate with the remaining 60 percent, one may not be able to cut 40 percent of the communications stations as well. The Navy is discovering a host of complex infrastructure functions that are not easily reduced, even as the budgetary imperative for such cuts has become more glaring.

Infrastructure-reduction initiatives are going on in every area of the Navy. The efforts currently in progress have made it quite clear that the changes necessary are politically difficult; they interfere with long-standing patterns of control within the Navy, and they have the potential to affect combat capability and readiness. That potential is a strong incentive for commanders below the first echelon to argue in favor of the status quo. Yet if subordinate commanders focus only on the immediate, and very real, costs associated with change, the Navy faces a bleak future.

Winning the internal budget war, then, may be the greatest challenge of this decade. The battles of this war cannot be won solely by a determined Chief of Naval Operations and Navy Staff. Commanders at every level are being

encouraged to view their situation as it relates to the overall budget picture and to work with the CNO to find effective solutions for resource limitations.

In order to reduce infrastructure effectively, the Navy may need to look closely at some of the functions it has traditionally performed and decide to eliminate those that contribute only marginally to mission readiness. The OpNav N46 initiatives may go a long way toward reducing the cost of operating installations, and comparable efforts now underway may reduce other infrastructure needs. But the Navy's recapitalization requirements for the future require more than trimming around the edges.

Notes

1. This is not to suggest that the Navy should cease requesting higher Navy appropriations, either in the form of larger defense budgets or one that favors the Navy to a greater extent. Neither does it mean that there are no continuing disagreements at the political level over the appropriate level of funding for defense.

2. The Secretary of the Navy, John H. Dalton, included "shed[ding] infrastructure and lower[ing] costs in a post-BRAC regime" as one of his top ten priorities. (Secretary of the Navy, "Secretariat Priorities for the Future," memorandum, 3 August 1995, p. 5). The report of the Commission on Roles and Missions of the Armed Forces, May 1995, discussed the importance of cutting infrastructure several times, esp. pp. vii, ES3, ES6, 1-9, and 3-14. Admiral J.M. Boorda, Chief of Naval Operations, made the following assertion regarding infrastructure and its relationship to force structure: "Properly sizing the Naval Service's support establishment and balancing its size and cost compared to that of operating forces is imperative. We must constantly search for new, innovative, and less expensive methods to achieve results. We are committed to reducing infrastructure in greater proportion than force structure, while maintaining readiness. These savings, coupled with early right-sizing, will be used to ensure recapitalization of the Naval Service" (*Force 2001: A Program Guide to the U.S. Navy* [Washington: 1995], p. 24).

3. The following assumptions apply: the economy, as measured by the gross domestic product (GDP), will grow at historically sustainable levels; the federal budget will consume a stable or lessening percentage of GDP, while defense will be allotted a stable or lessening percentage of the federal budget; the Navy will receive a stable percentage of the defense budget; the Navy will continue to invest in expensive, technologically advanced equipment that maximizes capability at the expense of quantity; and advanced naval forces will retain the potential to influence events if they can respond to crises in reasonable time and in reasonable numbers.

4. These categories have been defined by the Comptroller of the Navy.

5. The Chief of Naval Operations has noted, "From the beginning of the reshaping process, we recognized the danger of 'hollow forces' and the importance of maintaining readiness and warfighting muscle" (*Force 2001*, p. 116). Clearly, support-of-forces expenditures is related to force structure size and sophistication.

6. Shipbuilding and decommissioning rates are elastic only within reasonable limits. Building rates are subject to political and industrial-base limitations and lead times. Decommissionings can be accelerated by laying-up ships with useful service remaining, but, because ships have limited life-spans, choosing to decelerate the decommissioning rate affects operational readiness and maintenance costs.

7. *Force 2001*, p. 24.

8. In the 1980s the Navy, under Secretary John Lehman's leadership, forcefully advocated the "strategic basing" concept. The strategic rationale was to disperse the number of potential targets and thereby increase the survivability of the force. There was also, no doubt, the understanding that dispersion broadened the Navy's political base.

9. *Baltimore Sun*, 31 March 1996, p. 4A.

10. Formerly, base operating support was directed to installations via the warfare sponsors under N8—the Deputy CNO (Resources, Warfare Requirements, and Assessments)—or via various systems commands.