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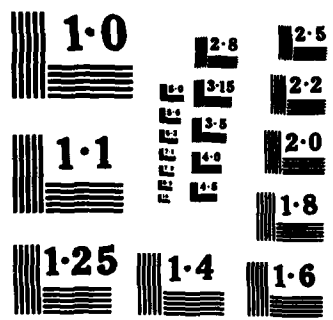
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PROFESSIONAL PAPER 413 / February 1984

NAVAL RESERVE FORCES THROUGHOUT THE WORLD

Aline O. Quester
Anne S. Sicilia

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Naval Planning and Management Division

CENTER FOR NAVAL ANALYSES

2000 North Beauregard Street, Alexandria, Virginia 22311

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NAVAL RESERVE FORCES THROUGHOUT THE WORLD

INTRODUCTION

There has been considerable interest recently in how the active/reserve force mix varies across countries. Senator John Warner's office published a set of numbers in early 1983 (see table 1) that generated considerable discussion in both the press and the Congress. It seemed, from these numbers, that the United States was out of step with the prevalent pattern. Our mix of actives to reserves looked considerably richer (and by implication considerably more expensive) than that of other countries. Where most NATO allies had force mixes richer in reserves and the Soviet Union had an active/reserve mix of 1 to 1.4, the United States' active/reserve ratio was 1 to 0.4.

Our initial reaction to these numbers was twofold. First, were the comparisons legitimate: were reserves defined sufficiently similarly across countries so that meaningful comparisons could be constructed? Second, what did Naval active/reserve force mixes look like? Were they similar to the overall patterns?

Comparisons of active and reserve force mixes across countries are complicated by definitional problems. While it is a straightforward task to define active-duty manpower, defining reserve manpower is

TABLE 1

COMPARISONS OF ACTIVE/RESERVE FORCE MIXES ACROSS COUNTRIES:
ALL SERVICESNATO (1982)

<u>Country</u>	<u>Ratio</u>	<u>Active Number</u>	<u>Reserve Number</u>
Belgium	1 to 1.5	93,500	141,500
Britain	1 to 0.9	327,600	281,700
Canada	1 to 0.3	31,200	153,400
France	1 to 4.9	492,900	457,000
West Germany . .	1 to 1.5	495,000	750,000
Greece	1 to 2.0	206,500	404,000
Italy	1 to 2.2	370,000	799,000
Luxembourg . . .	1 to n.a.	700	n.a.
Netherlands . . .	1 to 1.6	104,000	171,000
Norway	1 to 5.8	42,100	243,000
Portugal	1 to 1.4	66,400	90,000
Spain	1 to 3.1	347,000	1,085,000
Turkey	1 to 1.5	569,000	836,000
United States . .	1 to 0.4	2,116,800	899,600

Warsaw Pact (1982)

Bulgaria	1 to 5.4	148,000	795,000
Czechoslovakia .	1 to 1.7	196,500	325,000
East Germany . .	1 to 1.8	166,000	305,000
Hungary	1 to 1.3	106,000	143,000
Poland	1 to 1.9	317,000	605,000
Rumania	1 to 2.0	181,000	365,000
Soviet Union . .	1 to 1.4	3,705,000	5,000,000

Other European (1982)

Austria	1 to 18.8	49,400	930,000
Ireland	1 to 1.4	16,400	22,200
Finland	1 to 19.0	36,900	700,000
Sweden	1 to 11.4	64,500	735,500
Switzerland . . .	1 to 30.3	20,000	605,000
Yugoslavia . . .	1 to 2.0	250,500	500,000

The Library of Congress produced these numbers for Senator John Warner using reference [1].

considerably more complex. Even within a country, numerous definitions are possible. A narrow definition focuses upon individuals who actively participate in drills or exercises. Other definitions focus on reserves as pre-trained manpower; here the distinction between veterans and reservists is often blurred, with some countries counting all individuals who went through a short, compulsory period of military service as part of their reserve forces.

Indeed, this undefined and uneven metric for counting reservists was the chief motivation behind this paper. Published statistics primarily reflect country-specific definitions of reservists. The United States has many categories of reservists; many other countries have only one. It is perhaps natural to extract from the varied U.S. reservists the group that is the most "ready" and then compare these reservists with the reservists of other countries — natural, but we would argue, quite misleading.

We begin our analysis by outlining the structure of the U.S. Naval Reserve. Throughout we will emphasize that the appropriate reserve end-strength count depends upon the focus. Do we want to know how many inactive Naval personnel the President can mobilize — without new legislation — in time of national emergency? Do we want to assess the stock of pretrained Naval manpower. Or, more narrowly, do we want to focus only on reservists who drill regularly or who know their mobilization assignments?

After describing the U.S. Naval Reserve Force, we turn to the naval reserves of 20 other countries. Here our discussion are more tentative, primarily because our information is still incomplete concerning what constitutes a reserve affiliation in these countries. Finally, we devote more attention to a comparison between British and American naval organization where we find, perhaps surprisingly, comparable reserve/active force mixes.

THE U.S. NAVAL RESERVE

Organization

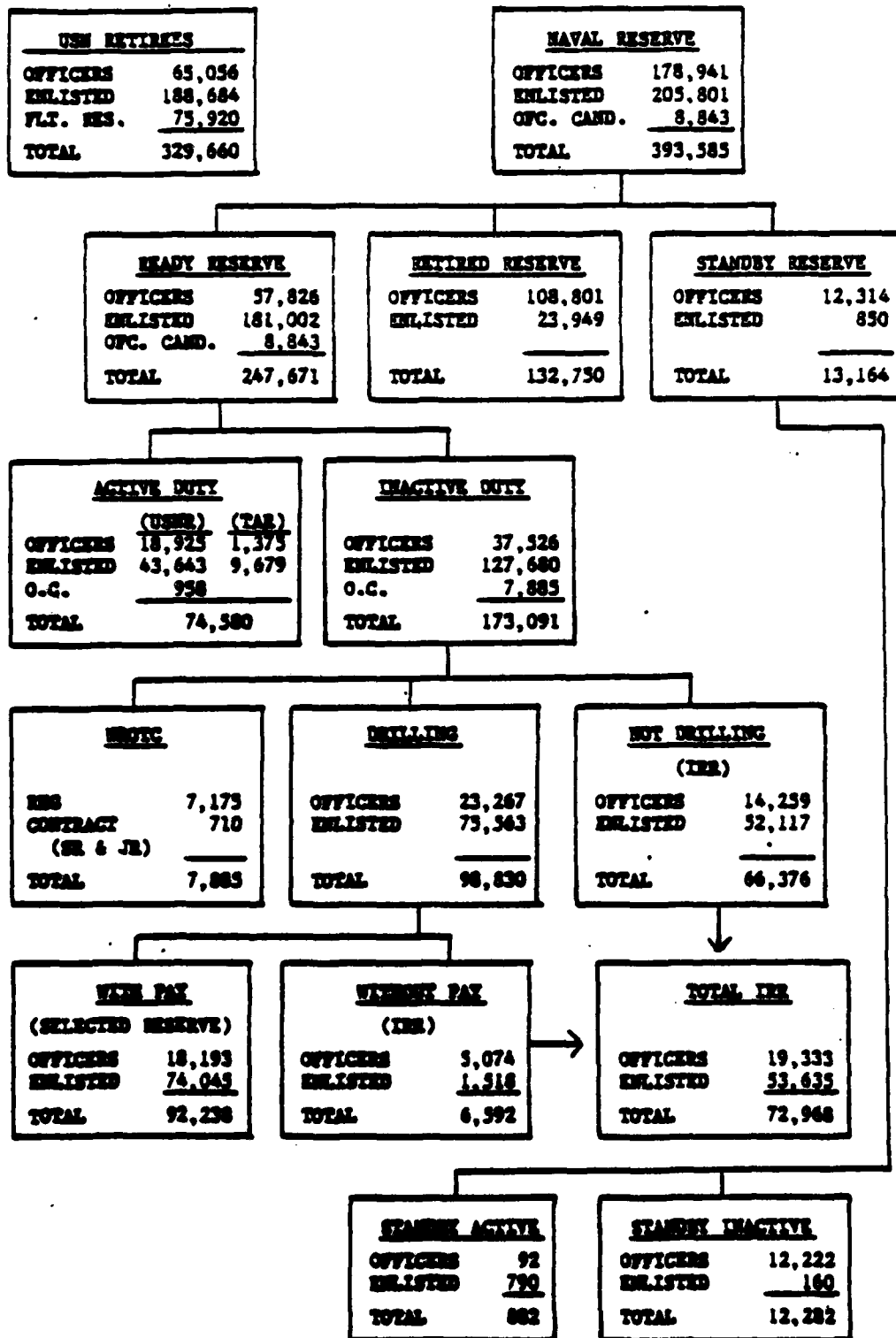
Table 2 shows the organization of the U.S. Naval Reserve and the strengths of its components. It has three main branches: the Ready Reserve* (Individual Ready Reserve (IRR) and Selected Reserve (SELRES)), the Retired Reserve, and the Standby Reserve. There were almost 400,000 Naval Reservists as of 31 May 1983. When the 300,000 USN Retired and Fleet Reservists are added to their number, we obtain what has been called the "Naval Reserve Resources." It totals over 700,000 individuals, a size greater than the active Navy. Pretrained naval manpower in the United States — "Naval Reserve Resources" plus veterans of the active Navy — is even greater, manpower in excess of 1.5 million individuals.

* Additional information can be found in [2]. Naval Military Personnel Command's organizational chart includes the Active Duty USNR (74,580) in the Ready Reserve; this classification is somewhat unusual [3].

TABLE 2

U.S. NAVAL RESERVE RESOURCES OTHER THAN USN ACTIVE DUTY

(As of 31 May 1983)*



In the United States, however, analysts referencing naval reservists usually think about a smaller number of individuals, namely the 92,238 officers and enlisted personnel in the Selected Reserve. These individuals drill one weekend a month as well as participate in a 2-week active duty for training program (ACDUTRA) each summer. Most Navy SELRES drill units will mobilize as a unit, and most are augment units, planned to bring manning from peacetime to wartime levels.

Mobilization Categories

Table 3 provides mobilization information for the U.S. Naval Reserve. Selected Reservists are the easiest to recall: the President can call up to 100,000 of them without declaring war or a national emergency. (To call up the almost 900,000 Selected Reservists in all the services (a full mobilization of SELRES), however, is impossible without declaring a national emergency.)

The Standby and Retired Reserves require a congressional declaration of war or national emergency for involuntary mobilization. Other mobilization assets include retired U.S. Navy personnel. They are not officially part of the Naval Reserve, but, for mobilization purposes, are important. Unfortunately, there is apparently some conflict between the statutes concerning the mobilization status of retired active-duty personnel; see [4].

TABLE 3

MOBILIZATION STATUS BY NAVAL RESERVE CATEGORY

I. Ready Reserve

Up to one million members (all services) can be involuntarily recalled to active duty by the President in time of national emergency. They are required to serve no more than 24 consecutive months (Title 10 USC 673(a) as amended by PL 96-584).

A. Individual Ready Reserve: can be required to perform active duty for training for no more than 14 days annually.

B. Selected Reserve: individuals required to perform at least 48 paid drills and 12-14 days' active duty for training annually.

Up to 100,000 Selected Reservists (all services) can be called to active duty by the President for a period of more than 90 days without a prior declaration of war or national emergency (Section 673b, Title 10, U.S. Code). This procedure is a "recall"; legally, a recall is different from a mobilization.

II. Standby Reserve
and

III. Retired Reserve

Can be involuntarily called to active duty when Congress declares a time of war or national emergency (Title 10, U.S. Code, Section 672(a), 674, and 675.

IV. Fleet Reserve

Fleet Reservists are enlisted personnel (Navy and Marines) who retire with more than 20 years but less than 30 years of active-duty service. They may be involuntarily recalled to active duty in time of war or national emergency declared by Congress or in time of national emergency declared by the President only. It is not clear whether this historical mobilization distinction (the President can call up the Fleet Reserve but it takes Congress to call up USN, retired) is still valid because of provisions in Title 10, USC, 688(a); (see below).

V. Officers, USN Retired

VI. Enlisted, USN Retired

Title 10, USC, 688(a) allows a Service Secretary to call up retired personnel; this section of the Code appears to conflict with section 675 and 672(a), also from Title 10, which requires a congressional declaration of war before retired active-duty personnel can be mobilized.

Fleet Reservists, enlisted "retired" personnel with less than 30 years of service, can be mobilized involuntarily if the President declares a national emergency and thus their mobilization category is similar to that of the Ready Reserves. USN, retired (both officers and enlisted but not Fleet Reservists) appear to require a congressional declaration of war before mobilization, although, as suggested earlier, there is some confusion on this point.

FORCE MIX

Surprisingly, the information necessary for active/reserve naval force comparisons is not readily available in published sources. In fact, the unclassified literature lacks even a current discussion of procurement methods and terms of service for naval personnel in even the world's largest navies.*

To remedy this information gap, we sent a questionnaire to naval attaches in the Washington embassies of the world's 20 largest navies. An example of the information corroboration for Great Britain is reproduced as appendix A. The information we gathered from this questionnaire, as well as published information, is included in table 4.

* For a general discussion of military manpower procurement, see [5].

TABLE 4

CROSS COUNTRY COMPARISONS: ACTIVES AND RESERVES
FOR THE 20 LARGEST NAVIES

Rank	Country	Population (millions)	Volunteer procurement	Initial contract		Active naval manpower (thousands)	Reserve manpower (thousands)	R A R
				Active	Reserve			
1	United States	234.5	Yes	3-6 yrs.	2-6 yrs.	540*	100*	
2	U.S.S.R.	271.8	No	2-3 yrs.	To age 50	400-500	?*	
3	China (PRC)	1008.2	Yes	?	?	180	350*	
4	United Kingdom	55.9	Yes	9 yrs.	3-5 yrs.	65	31	
5	France	54.3	No*	1 yr.	3.5 yrs.	68	64	
6	China (Taiwan)	18.5	No	2 yrs.	On call	38	80	
7	Spain	38.3	No*	15-18 mos.	To age 38	37*	328*	
8	India	723.5	Yes	10-15 yrs.	—	46	—	
9	Brazil	127.7	No*	9 yrs. vol. 1 yr. con.	—	44	—	
10	Turkey	47.0	No	20 mos.	?	45*	70	
11	Japan	119.4	Yes	3 yrs.	?	45	0.6	
12	Italy	57.4	No	18 mos.	On call	42	220	
13	Korea (S)	39.4	No*	3 yrs.	By rank	49	280*	
14	Indonesia	160.0	No	?	—	25-40	*	
15	Argentina	29.0	No	14 mos.	—	33	—	
16	Germany (W)	61.7	No*	15 mos.	?	36	36*	
17	Korea (N)	18.6	No	5 yrs.	?	30-33*	15-40*	
18	Thailand	49.7	No	2 yrs.	—	20-32*	—	
19	Chile	11.6	No*	10 yrs.	To age 45	26	65	
20	Poland	36.5	No	3 yrs.	—	22.5	—	

Notes for Table 4: Population information is from the Military Balance 1983-4 [6]. Unless otherwise noted, other information was provided by the respective embassies in response to our questionnaire. If reference [7] or [6] provides different information, it is noted in the text.

- (1) United States: The number of U.S. Naval Reservists is from [7] and is approximately the number of Selected Reservists. Our discussion in the text illustrates the ambiguity that surrounds definitions of U.S. Naval Reserves, which are comparable to the naval reserve definitions of other countries.
- (2) U.S.S.R.: The information is taken from [7] and [6]. The latter suggests about 75 percent of the active Navy of 450,000 are conscripts. Since all Navy veterans are counted as members of the Navy Reserve until they are 50 years old, there are probably in excess of 1 million Reservists in the U.S.S.R.
- (3) China (PRC): The information is from [7]. The numbers are estimates.
- (4) United Kingdom: [6] lists a slightly larger number of actives (71,727) and the reserves smaller at 37,300. It divides the reserves into Navy Reg and Vol, and Marine Reg and Vol totaling some 32,700.
- (5) France: Reference [7]'s estimate of French naval reserves is somewhat higher, namely 90,000. The 64,000 naval reservists are volunteers who have had active Navy experience. They train two or three times a year. All Frenchmen can be mobilized until age 35.
- (6) China (Taiwan): Both [7] and [6] list slightly smaller numbers of trained reservists (45-60 thousand).
- (7) Spain: The procurement system for the active navy is primarily conscription. Enlisted personnel are in active service for 18 months, in the Temporary Service Forces for 6 months, and then in the Naval Reserve until they are 38 years old. There are 328,200 naval reservists, 15,000 Temporary Service Forces, and 36,900 active navy forces. We have omitted the 15,000 Temporary Service Forces from either the active duty or reserve personnel enumerations. It should be noted, however, that what the Spanish call reserves are more comparable to U.S. veterans and the Temporary Service Forces are more comparable to reserves in the United States. Reference [7] lists 43,800 active Navy personnel and about 190,000 Navy and Marine trained reservists.
- (8) India: The information is from [7] and [6]; neither mentions naval reserves, although the army requires 3-5 years of reserve time after regular duty.

- (9) Brazil: The information is from [7]. There is no mention of naval reserves, reserve tour is required for army, and para-military forces are available. [6] mentions active slightly higher at 49,000.
- (10) Turkey: The information is from [7]; numerical estimates include Marines.
- (11) Japan: The SOF (reserves) must participate in military training for 5 days each year (1 day in the case of those who retired from active service within a year) to prepare for a callout for national defense service.
- (12) Italy: Italian naval reservists would be procured through mobilization and the initial obligation would be as needed. Reference [7] suggests that active Navy and Marine personnel are 42,000 and that Italy has 116,000 men available for rapid mobilization.
- (13) Korea (S): Every male, 18 years or older, has an obligation for military duty. Thus the general procurement scheme is conscription. The Navy and Air Force, however, fill all recruit positions on a volunteer basis. Individuals automatically move from the active Navy to the Homeland Reserve Forces. Reference [7] lists 20,000 active personnel and 30,000-35,000 trained reservists.
- (14) Indonesia: Twenty-five thousand is from [7]. Indonesia has no reserves, but it does have a paramilitary (full-time) force which includes Sea Police, a paranaul force. [6] lists reserves: National Strategic Command HQ only to command Special Reserve forces in strategic operations.
- (15) Argentina: The information is from [7]. No reserves are mentioned for the Navy and the 33,000 active-duty personnel include Marines. [6] lists actives slightly higher at 36,000
- (16) Germany (W): Numbers in the table are from [7]. West Germany has a system of general conscription, but fills some Navy positions with volunteers.
- (17) Korea (N): Reference [7] lists 30,000 active-duty personnel and 15,000 naval reservists. Reference [6] lists 33,000 actives and 40,000 naval reservists.
- (18) Thailand: Reference [7] lists 13,000 active Navy personnel and 7,000 Marines as well as 30,000 trained naval reservists. Reference [6] lists 32,000 active-duty Navy and Marine personnel, but does not mention naval reserves. [1] all men between ages of 21 and 30 are subject to 2 years of military service; about 20 percent actually serve.

- (19) Chile: Procurement for the Active Navy is voluntary; initial obligations last 10 years. Although the main source of reserve procurement is retired naval personnel, it is mandatory for all Chileans (male and female) to apply to the National Military Service upon reaching their 18th birthday. Between the ages of 18 and 30, they may be called for training for a period up to, but not more than, 2 years. Upon completion of this training, they return to civilian life and become Trained Reserves. Those not called to service before their 30th birthday become Untrained Reserves. All Chileans up to the age of 45 years old can be called into Active Service in case of emergency. Reference [1] lists the same number of active-duty personnel but does not mention any naval reserves.
- (20) Poland: The number of active-duty personnel is from [7]; neither it nor [6] mentions naval reserves.

Perhaps the most striking aspect of table 4 is the plethora of comments. Their numbers testify to the formidable definitional problems that surround numerical comparisons of reserves. Abstracting from strategic differences across countries which would suggest different levels of appropriate active/reserve force configurations, the numbers do suggest that the U.S. Navy is at one end of the spectrum. We would argue, however, that the U.S. Naval force mix is closer to that of other countries than the crude numbers themselves suggest. This is primarily because of definitional differences across countries.

For the United States, the personnel counts are those provided in references [7] and [6]; they are counts of the Selected Reserve.* In contrast to the enumeration of drilling reservists in the U.S., Spain's and Italy's enumerations are essentially naval veterans.

Except for the United Kingdom, our information on other countries reserve structures is not complete enough to warrant a detailed examination. We shall examine the U.S./U.K. force mixes in greater detail; first, however, let us turn to some general comments about table 4.

* These numbers are equivalent to those the Library of Congress calculated (for all Services) for Sen. John Warner.

We selected the 20 largest navies by using Jane's Fighting Ships [8] (naval personnel numbers). It may surprise some that Canada, Australia, Mexico, and Sweden are missing; despite large coastal areas and/or large population, they have smaller navies, at least by this criteria.

We defined countries as having voluntary procurement if there was no system of conscription. Countries with conscription, but that stated in their questionnaires that naval enlistments were voluntary, are asterisked. As is clear from the table, most countries rely on conscription to staff their militaries.

Where possible, force level numbers in table 4 are from returned questionnaires. If the embassy did not return the questionnaire (or if published sources suggested different numbers), these are noted at the end of table 4. All entries on table 4 should be examined for possible caveats in the footnotes.

British-United States Comparisons

We devote the most detail to a comparison of the U.S. and British navies. The United States and Britain have the largest free world navies; moreover, both procure personnel by voluntary methods. From that point, however, fairly sharp differences emerge.

Until very recently, the typical enlistment in the British Navy was nine years and began when the recruit was 17 1/2 years old. Since September of 1982, the British have gone to an "Open Engagement" system with new recruits signing up for 22 years (until retirement). The U.S. Navy recruits from 17-19 year olds, but the typical contract is only for 4 years.* Moreover, unlike the U.S., the average British sailor has an obligation with the Royal Fleet Reserve (RFR) after his 9 years of active duty.

In addition to the RFR, Britain has a Royal Naval Reserve (RNR) in which entrance is voluntary. Here initial obligations are 5 years for males and 3 years for females; these periods are renewable by 5 and 3 years, respectively, up to the age of 50. The numbers for British Naval Reservists combine personnel from the Royal Naval Reserve and the Royal Fleet Reserve.

Since the two countries have organized their naval personnel systems so differently, clear parallels are not unambiguous. In table 5, we present several active/reserve force mix ratios, each for a different definition of "naval reserves".

* In the United States initial active-duty Navy contracts vary from 3-6 years; in Britain these contracts vary from 9-12 years. The initial 9-year contracts carry an additional obligation (up to 3 years) in the Royal Fleet Reserve. Twelve-year British obligors have no reserve obligation.

With the Open Engagement system (for entrants since September 1982) recruits with at least after 2.5 years of service may leave the Navy after an 18 months' notice period. This new system will have impact upon the British naval reserve system, but it is premature at this point to try to determine that impact.

TABLE 5

COMPARISONS OF BRITISH AND U.S. ACTIVE/RESERVE FORCE MIXES

Britain (1 Apr. 1982)

Royal Navy	65,200
Naval Reserve (all categories)	31,300
Ratio (active/reserve)	2.08

United States (30 Sept. 1981)

Naval personnel on active duty	540,504
--	---------

Reserve Forces not on active duty

Ready Reserve	186,850
Ratio (Active/Reserve)	2.89

Components:

Selected Reserve	87,599
Individual Ready Reserve	99,251

Naval Reserve	323,271
Ratio (active/reserve)	1.67

Components:

Ready Reserve	186,850
Standby Reserve	20,036
Retired Reserve	116,385

Naval Reserve Resources	652,931
Ratio (active/reserve)	.83

Components:

Naval Reserve	323,271
Fleet Reserve*	75,920
USN, Retired*	253,740

Definition of U.S. reserves most parallel to British . .	262,770
Ratio (active/reserve)	2.06

Components:

Ready Reserve	186,850
Fleet Reserve	75,920

* The numbers for Fleet Reserve and USN, Retired, are from May 1983 (see table 1). The source for the other data is reference [9].

Initially, we follow the basic U.S. reserve classification scheme but, as we believe this scheme is misleading for U.K./U.S. comparisons, we conclude with a definition of U.S. "Naval Reserves" that does not follow the usual taxonomy. It is this latter definition, however, that we feel most closely parallels the British definition of naval reservists.

We only have one definition of British Naval Reserves, and thus the ratio of active to reserve naval personnel in Britain is quite clear. Our best guess about which U.S. Naval reservists are comparable to the British Naval Reserve is the total of individuals in the Fleet Reserve and the Ready Reserve; totaling these personnel gives an active/reserve force mix of 2.06, a number quite close to the British ratio of 2.08.

The U.S. Navy's Fleet Reserve, as in Britain, is "a pool of trained and experienced personnel who could support the active Navy in an emergency without significant pretraining" [10]. In the United States, however, Fleet Reservists have had at least 20 years of active-duty experience as opposed to the 9 years of service for British Fleet Reservists. Another group of U.S. naval reservists similar to the British Royal Fleet Reserve is the United States' Individual Ready Reserve*: both programs involve a short period of Reserve service after release from active duty and both emphasize the concept of a stock of pretrained

* Individual Ready Reservists are primarily veterans who have completed less than 6 years of active duty.

manpower. For mobilization purposes the Ready Reserve and the Fleet Reserve are similar: both can be mobilized without congressional consent. In short, they are the easiest groups for the President to mobilize in a national emergency. Moreover, both groups are pretrained and have recent active duty experience.

Table 5, however, presents several definitions of U.S. naval reservists. Each definition generates a corresponding active reserve force mix. These ratios vary widely. Our judgment suggests that the last definition is the most comparable, and this definition yields very similar active/reserve force mixes for the two countries.

As an aside, it is worth noting that the U.S. active-duty personnel structure will generate proportionally more pretrained veterans than will the British. This follows directly from the length of the typical first-term contracts in the two countries. In fact, holding other factors constant, the shorter the length of the first-term contract, the greater the numbers of veterans or pretrained manpower that is produced. Some individuals in the veteran pool are also in some form of the reserves; most, however, are not. It would take new legislation to mobilize veterans who are not part of the reserve system. Still, this pool of experienced Navy manpower should not be overlooked.

SUMMARY AND CONCLUSIONS

After ^{looking} ~~a~~ look at the components of the U.S. Naval Reserve, ~~we~~ ^{the authors} attempted to make comparisons of active/reserve force mixes among the U.S. and other countries with large navies. These comparisons are very difficult, ^{since} ~~They are hampered first~~ by a paucity of information. ~~Second~~, even when information is relatively complete, ^{as it is in the British and the United States}, dissimilar organizational structures run the risk of an ^{apples to oranges} ~~comparisons~~. *This study*

Our look ^{suggests} that the U.S. Navy has a richer mix of active to reserves than do other countries with large navies. However, this finding may be caused by definitional problems: other countries classify broader categories of individuals as reservists than does the United States. In fact, ^(their) ~~our~~ closer look at the British Navy suggested that the active/reserve force mix was roughly comparable to that of the United States. *They conclude*

To do more meaningful comparisons across countries of active/reserve forces involves a larger collection of information. Such an effort would be worthwhile. Until then, we would recommend that considerable caution be exercised in any active/reserve force mix comparisons across countries.

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APPENDIX A
EXAMPLE OF SURVEY

(United Kingdom)

CENTER FOR NAVAL ANALYSES

2000 North Beauregard Street, Post Office Box 11280, Alexandria, Virginia 22311 (703) 998-3600



4 May 1983

Rear Admiral P.S. Symon
Office of the Naval Attache
P.O. Box 4855
Washington, D.C. 20008

The purpose of this letter is to corroborate the information shown on the attached page on your nation's naval reserve forces. The information will be used as part of a Center for Naval Analyses project comparing Naval Reserves for nations with an Active Navy of at least 20,000 individuals. The paper will be unclassified.

In order to meet our deadline, it would be most helpful if you could respond to this request not later than 1 June 1983. Any additional information on the structure of Active/Reserve forces that you would consider helpful would be appreciated. (In fact, you may note that some basic information is missing on the attached sheet; if published unclassified sources disagreed, we left the entry blank.) I would be happy to discuss the study further with you, and can be reached at 998-3660. If you would like a copy of the paper, please indicate on the attached page.

Thank you in advance for your attention.

Sincerely,

Anne S. Sicilia

AS/bh
Encl.

United Kingdom (British)

NAVAL FORCES INFORMATION

	<u>Active Navy</u>	<u>Naval Reserves</u>
Method of procurement	Voluntary	Voluntary
Initial obligation		Remainder of active time, if early release is opted
Size of force	71.5 thousand	28.0 thousand

General Information: To gain flexibility and attract recruits, early release is offered, provided service is 3 years total.

Note: It would be especially helpful if you could provide more detail on the nature of the Reserve obligation.

Comments:

Please send a copy of the paper.

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