

The *Integrated Ship Database*
A Rapid-Access Database of
Naval Ship Information

A User's Manual

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Introduction

Analytical and information support for Navy decision-makers and staff action officers demands easy, quick access to reliable information about ships. In this CNA Interactive Software (CIS) product, we offer a relatively quick and easy-to-learn way to find information on naval ships—future, current, and past—from authoritative sources on the Internet. We present the data in a simple database titled the *Integrated Ship Database*. The database resides in a Microsoft Excel workbook.

Our fundamental data source is the on-line *Naval Vessel Register (NVR)—The Official Inventory of US Naval Ships and Craft* [1]. The NVR contains a wealth of information on ships and service craft over the course of a vessel's life cycle. Although the on-line information is quite useful, it is not available in the standard database format of fields and records. Therefore, it is of only limited use to researchers and others who must search, sort, query, and count. We believe the information could be even more useful if it were available in such form.

To facilitate rapid access to other sources of ship data on the Internet, we inserted hyperlinks to the U.S. Navy Chief of Information (CHINFO) *United States Navy Fact File* [2], the Military Sealift Command (MSC) *Ship Inventory* web site [3], the Naval Historical Center (NHC) *Dictionary of American Naval Fighting Ships* (DANFS) [4], and the U.S. Department of Transportation Maritime Administration (MARAD) *Property Management & Archive Record System* (PMARS) [5]. In addition, we have drawn on National Defense Reserve Fleet (NDRF) ship inventory that is available on MARAD's web site [6].

We hope that this database will be useful to decision-makers, staff officers, and watch-standers in Navy and MSC operations centers, as well as to naval operations analysts. We especially hope that new analysts—both now and in the future—will find the database particularly

useful as they learn how naval vessels are identified and classified and where to find information about ships. It is to these analysts that we dedicate this product.

Organization of the paper

This memorandum describes the Microsoft Excel ship database workbook, which contains the database and an associated pivot table. The pivot table summarizes the content of the database and serves as a mechanism for quick, automated queries of the database.

After a brief introduction to the database, we describe its structure. We identify and characterize the fields and records contained within it. We briefly describe the data in each field, and summarize the make-up of the 2,510 records in the database. We also amplify on the information available in the fields through hyperlinks to the NVR, CHINFO, MSC, NHC, and MARAD on-line databases.

In the next section, we discuss how to use the standard database operations of Excel to query the database. Specifically, we consider the associated pivot table worksheet and Excel's autofilter function. To illustrate, we provide "snapshots" as examples of these functions.

The *Integrated Ship Database* file

This CNA Interactive Software product consists of two pieces: (1) this documentation, and (2) a Microsoft Excel workbook (*Integrated Ship Database_Sep05.xls*).¹ In this section, we describe the basic structure of the file as well as access to and protection of the data.

File structure

The Excel workbook consists of three worksheets. The sheet named *DataTableOriginal* contains the fields and records of the *Integrated Ship Database*. The second sheet, named *DataTableCopy*, is a blank sheet we inserted that enables you to use all of Excel's analysis features while protecting the data in *DataTableOriginal*. The third sheet, called *PivotTable*, can be used for rapid analysis and querying of the database.

Data access and protection

We have protected the data in the file by making it a password-protected, read-only file. That is, you must open it as "read only"; you cannot use the password option to obtain access. We hold the password in order to maintain the integrity of the original source file, and to control updating and modification of the data.

The read-only file attribute will allow you to manipulate the data, but you won't be able to save the file under its original name. To save your working version, you must rename the file.

1. The data in the database is current as of September 2005. Our intention is to update the database quarterly. In the meantime, the hyperlinks in the database can be used to access data currently available online.

To access the data, simply open the Excel file. Select “Read Only” when asked for a password. The file will open, displaying the top-most records of the database in the *DataTableOriginal* worksheet.

As we mentioned, *DataTableOriginal* is password protected. If you only want to search the data, use the hyperlinks, and explore the database with *PivotTable*, you won’t need to take any further steps.

However, Microsoft Excel restricts the sorting and filtering features in a protected worksheet. If you wish to sort and filter the database, you’ll need to copy the data from *DataTableOriginal* into *DataTableCopy*.²

Protecting the data in this way not only gives us control over the data, but also maintains the original data as a reference in any file that you might modify for your purposes.

2. Although we could have placed an unprotected copy of the database in *DataTableCopy*, we chose not to do this in order to keep the file as small as possible.

Structure of the database

Figure 1 displays the opening view of the database in the Excel application. This view shows some of the fields and a small portion of the records. The worksheet tabs at the bottom of the sheet control the access to and display of the three worksheets of the file: *DataTableOriginal*, *DataTableCopy*, and *PivotTable*.

In figure 2, the remaining fields (from *MSC Link* through *Date Last Updated*) are shown. You will notice that the left-most fields—*Ship Name*, *Prefix*, and *Hull No.*—remain in view even when you move the sheet to view the fields on the right.

The colored portions of *DataTableOriginal* distinguish the records of the various ship status categories in the NVR. We'll describe these categories later. But first, let's look at the field structure in more detail.

The fields

From the Naval Vessel Register

We initially defined the fields for our database after reviewing the NVR web site for ships. The NVR web site contains a separate page of detailed data for each ship, as shown for USS *John C. Stennis* (CVN 74) in figure 3. Table 1 is a list of the fields in the NVR ship pages.

Downloading the data

Unfortunately, not all of these data can be easily retrieved from the web site for import into a database application. The *Status of Ships* display offers one way to easily extract data for several fields. To get to the *Status of Ships* display, use the link on the “SHIPS” page of the NVR site (figure 4). Each status group title in *Status of Ships* (figure 5) links to a page like the one shown in figure 6, with information from the following fields: *Ship Class*, *Hull No.*, *Ship Name*, *Unit Identification Code (UIC)*, and *Homeport*. Transferring these data to Excel involved a simple cut-and-paste followed by text-to-column parsing into distinct fields.

Figure 1. Opening view of the database

The screenshot displays a Microsoft Excel spreadsheet titled "Integrated Ship Database_Sep05.xls". The spreadsheet contains a table with the following columns: Ship Name, Prefix, Hull No. (NVR Link), Type, UIC, Status, Date Status Changed, Class (NFF Link), Force, and MSC. The data is organized into rows, with the first row (row 1) serving as the header. A red box labeled "Fields" points to the column headers, and a red box labeled "Records" points to the data rows. At the bottom of the spreadsheet, a red oval highlights the "Worksheet Tabs" area, which includes "DataTableOriginal", "DataTableCopy", and "PivotTable".

	A	B	C	D	E	F	G	H	I	J
	Ship Name	Prefix	Hull No. (NVR Link)	Type	UIC	Status	Date Status Changed	Class (NFF Link)	Force	MSC
1										
2	NO NAME		AKE 4	AKE	23194	Authorized, for US Navy construction	7/19/2003	AKE 1		
3	NO NAME		AKE 5	AKE	23195	Authorized, for US Navy construction	1/27/2004	AKE 1		
4	NO NAME		AKE 6	AKE	23196	Authorized, for US Navy construction	1/27/2004	AKE 1		
5	NO NAME		AKE 7	AKE	23197	Authorized, for US Navy construction	1/2/2005	AKE 1		
6	NO NAME		AKE 8	AKE	23198	Authorized, for US Navy construction	1/2/2005	AKE 1		
7	SAMPSON		DDG 102	DDG	23161	Authorized, for US Navy construction	9/13/2002	DDG 51		
8	TRUXTON		DDG 103	DDG	23165	Authorized, for US Navy construction	9/13/2002	DDG 51		
9	STERETT		DDG 104	DDG	23166	Authorized, for US Navy construction	9/13/2002	DDG 51		
10	DEWEY		DDG 105	DDG	23162	Authorized, for US Navy construction	9/13/2002	DDG 51		
11	NO NAME		DDG 106	DDG	23163	Authorized, for US Navy construction	9/13/2002	DDG 51		
12	NO NAME		DDG 107	DDG	23164	Authorized, for US Navy construction	9/13/2002	DDG 51		
13	NO NAME		DDG 108	DDG	55684	Authorized, for US Navy construction	9/13/2002	DDG 51		
14	NO NAME		DDG 109	DDG	55685	Authorized, for US Navy construction	9/13/2002	DDG 51		
15	NO NAME		DDG 110	DDG	55686	Authorized, for US Navy construction	9/13/2002	DDG 51		
16	NO NAME		DDG 111	DDG	55687	Authorized, for US Navy construction	9/13/2002	DDG 51		
17	NO NAME		DDG 112	DDG	55688	Authorized, for US Navy construction	9/13/2002	DDG 51		
18	NEW YORK		LPD 21	LPD		Authorized, for US Navy construction	12/10/2002	LPD 17		
19	NEW HAMPSHIRE		SSN 778	SSN	23172	Authorized, for US Navy construction	8/14/2003	SSN 774		
20	NEW MEXICO		SSN 779	SSN	23183	Authorized, for US Navy construction	8/14/2003	SSN 774		
21	NO NAME		SSN 780	SSN	20002	Authorized, for US Navy construction	8/14/2003	SSN 774		
22	NO NAME		SSN 781	SSN	20079	Authorized, for US Navy construction	8/14/2003	SSN 774		
23	NO NAME		SSN 782	SSN	20080	Authorized, for US Navy construction	8/14/2003	SSN 774		
24	NO NAME		SSN 783	SSN	20034	Authorized, for US Navy construction	8/14/2003	SSN 774		
25	LEWIS AND CLARK		AKE 1	AKE	23191	Under construction in US by Navy, unassigned to fleet	10/19/2001	AKE 1		USNS Lewis
26	SACAGAWEA		AKE 2	AKE	23192	Under construction in US by Navy, unassigned to fleet	10/19/2001	AKE 1		
27	NO NAME		AKE 3	AKE	23193	Under construction in US by Navy, unassigned to fleet	7/16/2002	AKE 1		
28	GEORGE H. W. BUSH		CVN 77	CVN	23170	Under construction in US by Navy, unassigned to fleet	1/26/2001	CVN 68		
29	KIDD		DDG 100	DDG	23152	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 51		
30	GRIDLEY		DDG 101	DDG	23151	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 51		
31	BAINBRIDGE		DDG 36	DDG	23153	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 51		
32	FORREST SHERMAN		DDG 38	DDG	23149	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 51		
33	FARRAGUT		DDG 39	DDG	23150	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 51		
34	MAKIN ISLAND		LHD 8	LHD	23171	Under construction in US by Navy, unassigned to fleet	4/19/2002	LHD 1		
35	SAN ANTONIO		LPD 17	LPD	07207	Under construction in US by Navy, unassigned to fleet	12/17/1996	LPD 17		
36	NEW ORLEANS		LPD 18	LPD	23168	Under construction in US by Navy, unassigned to fleet	1/25/1998	LPD 17		
37	MESA VERDE		LPD 19	LPD	32421	Under construction in US by Navy, unassigned to fleet	2/15/2000	LPD 17		
38	GREEN BAY		LPD 20	LPD		Under construction in US by Navy, unassigned to fleet	5/15/2000	LPD 17		
39	TEXAS		SSN 775	SSN	23028	Under construction in US by Navy, unassigned to fleet	9/30/1998	SSN 774		
40	HAWAII		SSN 776	SSN	23159	Under construction in US by Navy, unassigned to fleet	9/30/1998	SSN 774		
41	NORTH CAROLINA		SSN 777	SSN	23190	Under construction in US by Navy, unassigned to fleet	9/30/1998	SSN 774		
42	CONSTITUTION	USS	"Old Ironsides"	Frigate	01024	Active, in commission	10/1/1971	"Old Ironsides"		
43	PUEBLO	USS	AGER 2	AGER	20256	Active, in commission	5/13/1967	AGER 2		
44	DOLPHIN	USS	AGSS 555	AGSS	05072	Active, in commission	8/17/1968	AGSS 555	Auxiliary	
45	CAMDEN	USS	AOE 1	AOE	05833	Active, in commission	4/1/1967	AOE 1	Battle Force	
46	SAFEGUARD	USS	ARS 50	ARS	21245	Active, in commission	8/17/1985	ARS 50	Support Force	

Figure 2. View of the remaining fields

	A	B	C	J	K	L	M	N	O	P	Q	R	S	T	U	V
	Ship Name	Prefix	Hull No. (NVR Link)	MSC Link	MARAD NDRF Program-Type / Status [PMARS Link]	DANFS Link	Homeport [NVR Link]	Previous, Other Names	Award Date	Keel Date	Launch Date	Delivery Date	Commission Date	Decommission Date	Stricken Date	Date Last Updated
1																
2	NO NAME		AKE 4						7/18/2003							10/14/2003
3	NO NAME		AKE 5						1/27/2004							4/30/2004
4	NO NAME		AKE 6						1/27/2004							4/30/2004
5	NO NAME		AKE 7						1/12/2005							1/18/2005
6	NO NAME		AKE 8						1/12/2005							1/18/2005
7	SAMPSON		DDG 102						9/13/2002	3/19/2005						3/30/2005
8	TRURTON		DDG 103						9/13/2002	3/28/2005						3/30/2005
9	STERETT		DDG 104						9/13/2002							6/10/2005
10	DEWEY		DDG 105						9/13/2002							5/17/2004
11	NO NAME		DDG 106						9/13/2002							2/6/2003
12	NO NAME		DDG 107						9/13/2002							2/6/2003
13	NO NAME		DDG 108						9/13/2002							2/6/2003
14	NO NAME		DDG 109						9/13/2002							2/6/2003
15	NO NAME		DDG 110						9/13/2002							2/6/2003
16	NO NAME		DDG 111						9/13/2002							2/6/2003
17	NO NAME		DDG 112						9/13/2002							2/21/2003
18	NEW YORK		LPD 21						11/25/2002	9/10/2004						11/3/2004
19	NEW HAMPSHIRE		SSN 778						8/14/2003							8/9/2004
20	NEW MEXICO		SSN 779						8/14/2003							12/8/2004
21	NO NAME		SSN 780						8/14/2003							3/18/2004
22	NO NAME		SSN 781						8/14/2003							3/18/2004
23	NO NAME		SSN 782						8/14/2003							3/18/2004
24	NO NAME		SSN 783						8/14/2003							3/18/2004
25	LEWIS AND CLARK		AKE 1	USNS Lewis And Clark					10/18/2001	4/22/2004	5/21/2005	7/20/2005				8/4/2005
26	SACAGAWEA		AKE 2						10/18/2001	6/8/2005						7/19/2005
27	NO NAME		AKE 3						7/16/2002							10/14/2003
28	GEORGE H. W. BUSH		CUN 77						1/24/2001	9/6/2003						5/24/2004
29	KIDD		DDG 100						3/6/1998	4/14/2004	1/19/2005					1/20/2005
30	GRIDLEY		DDG 101						3/6/1998	7/30/2004						11/3/2004
31	BAINBRIDGE		DDG 96						3/6/1998	5/7/2003	10/30/2004					11/3/2004
32	FORREST SHERMAN		DDG 98						3/6/1998	8/12/2003	6/30/2004					11/2/2004
33	FARRAGUT		DDG 99						3/6/1998	1/7/2004	7/9/2005					8/4/2005
34	MAKINISLAND		LHD 8						4/19/2002	2/14/2004						1/18/2005
35	SAN ANTONIO		LPD 17						12/17/1996	12/19/2000	7/12/2003					7/15/2004
36	NEW ORLEANS		LPD 18						12/18/1998	10/14/2002	11/13/2004					11/18/2004
37	MESA VERDE		LPD 19						2/29/2000	2/25/2003	11/19/2004					1/18/2005
38	GREEN BAY		LPD 20						5/30/2000	8/11/2003						7/16/2004
39	TEXAS		SSN 775						9/30/1998	7/12/2002	4/9/2005					4/28/2005
40	HAWAII		SSN 776						9/30/1998	8/27/2004						9/8/2004
41	NORTH CAROLINA		SSN 777						9/30/1998							3/18/2004
42	CONSTITUTION	USS	SSN 799			Constitution	Location:Charleston, MA	(ex-CONSTITUTION, OLC)	03/01/1794	11/01/1794	10/21/1797	10/01/1797	10/01/1797			10/1/2003
43	PUEBLO	USS	AGSS 2			Pueblo	Location:Namp'a, PRK	(ex-FS 344, AKL 44)			4/16/1944	7/5/1944	5/13/1967			12/13/2001
44	DOLPHIN	USS	AGSS 555				SANDIEGO, CA		8/10/1960	11/9/1962	6/8/1968	1/31/1969	8/17/1968			8/17/1998
45	CAMDEN	USS	AOE 2				BREMERTON, WA		4/25/1963	2/17/1964	5/29/1965	3/11/1967	4/1/1967			5/22/2002
46	SAFEGUARD	USS	ARL 50				SASEBO, JAPAN		8/28/1981	11/8/1982	11/12/1983	8/2/1985	8/7/1985			8/13/2001
47	GRASP	USS	ARL 51				NORFOLK VA (LITTLE CREEK)		2/11/1982	5/2/1983	4/21/1984	11/26/1985	12/14/1985			8/13/2001
48	SALVOR	USS	ARL 52				PEARL HARBOR, HI		2/11/1982	8/16/1983	7/28/1984	5/30/1986	6/14/1986			8/13/2001
49	GRAPPLE	USS	ARL 53				NORFOLK VA (LITTLE CREEK)		10/29/1982	4/25/1984	12/8/1984	10/7/1986	11/15/1986			8/13/2001

Figure 3. NVR ship web page for USS *John C. Stennis* (CVN 74)

N·V·R
NAVAL VESSEL REGISTER

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USS JOHN C. STENNIS (CVN 74)
MULTI-PURPOSE AIRCRAFT CARRIER (NUCLEAR-PROPULSION)

Class:	CVN 68	UIC:	21847
Status:	Active in commission	Fleet:	Pacific
Date status changed:	12/09/1995	Homeport:	BREMERTON, WA
Maintenance Category:		Berth:	
Force:	Battle Force	MARAD Type:	
Builder:	NEWPORT NEWS/NEWPT		
Award Date:	06/30/1988	Delivery Date:	11/09/1995
Keel Date:	03/13/1991	Age (since delivery):	9.3 years
Launch Date:	11/13/1993	Commission Date:	12/09/1995
Age (since launch)	11.3 years	Decommission Date:	
		Years from Commission to Decommission:	
		Stricken Date:	

Overall Length:	1092 ft	Waterline Length:	1040 ft
Extreme Beam:	252 ft	Waterline Beam:	134 ft
Maximum Navigational Draft:	42 ft	Draft Limit:	41 ft
Light Displacement:	78453 tons	Full Displacement:	103300 tons
Dead Weight:	24847 tons		

Hull Material: Steel hull, steel superstructure.
 Number of Propellers: 4
 Propulsion Type: Steam Turbines (Nuclear)
 Accommodations: Officers: 200 Enlisted: 6075

Custodian: US NAVY Ships Program Manager: 312
 Planning Yard: Norfolk NSY, Norfolk, VA Nuclear Planning Yard: Newport News Shipbuilding and Drydock Co., Newport News, VA

[No changes to this information were reported since 01/18/2005.](#)

To learn more about this type of ship visit:

RELATED LINKS AND DISCLAIMERS

Table 1. Fields from NVR data^a

Type of information	NVR fields	
Unit Identification	<i>Ship Name</i> <i>Ship Name Prefix</i> <i>Hull Number</i> Ship Type	<i>Previous Names</i> <i>Unit Identification Code (UIC)</i> <i>Class</i>
Location	Fleet Berth	<i>Homeport</i>
Status/Force/Type	<i>Status</i> <i>Force</i> MARAD Type	<i>Date Status Changed</i>
History	Builder <i>Award Date</i> <i>Launch Date</i> <i>Delivery Date</i> <i>Commission Date</i> Years from Commission to Decommission <i>Stricken Date</i>	<i>Keel Date</i> Age (since launch) Age (since delivery) <i>Decommission Date</i>
Physical Characteristics	Overall Length Extreme Beam Maximum Navigational Draft Light Displacement Dead Weight	Waterline Length Waterline Beam Draft Limit Full Displacement Hull Material
Propulsion	Propulsion Type Accommodations: Officers; Enlisted	Number of Propellers
Custody/Design Agent	Custodian	Planning Yard
Information currency	<i>Date of Last Change to Information</i>	

a. We have incorporated the fields in *italics* in the Integrated Ship Database.

Figure 4. NVR SHIPS web page

N·V·R

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S H I P S

[Fleet Size](#)
Ship [Hull Classification Symbols](#)
Ship [Names](#)
[Homeports](#) of Active and NRFA Ships
Ship [Status](#) of Ships
Ship [Custodian Assignments](#)
[Planning Yard \(Hull\) Assignments](#)
[Planning Yard \(Nuclear Reactor Plant/Nuclear Facility\) Assignments](#)
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Figure 5. NVR status groups



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Ship Status Groups

- [Authorized](#)
- [Under Construction](#)
- [Active](#)
- [Naval Reserve Force, Active](#)
- [Stand Down](#)
- [Inactive](#)
- [Leased](#)
- [Loan](#)
- [Stricken](#)
- [Disposed](#)
- [Special, Miscellaneous](#)
- [MARAD Custody](#)
- [Military Sealift Command, Naval Fleet Auxiliary Force](#)
- [Military Sealift Command, Cargo - Fast Sealift - Support, Specialized](#)
- [Military Sealift Command, Contract Operated](#)
- [Military Sealift Command, Ready Reserve Force](#)
- [Military Sealift Command, Special Mission Support](#)
- [All Hulls](#)

Figure 6. List of units in *Active* status category



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Ships, Both Coasts, Active

Class	Hull	Name	UIC	Homeport
		CONSTITUTION	01024	
AGER 2	AGER 2	FUEBLO	20256	
AGF 3	AGF 3	LA SALLE	07172	GAETA, ITALY
AGF 11	AGF 11	CORONADO	07194	SAN DIEGO, CA
AGSS 555	AGSS 555	DOLPHIN	05072	SAN DIEGO, CA
AOE 1	AOE 2	CAMDEN	05833	BREMERTON, WA
AOE 1	AOE 3	SEATTLE	05848	EARLE, NJ
AOE 1	AOE 4	DETROIT	20120	EARLE, NJ
ARS 50	ARS 50	SAFEGUARD	21245	SASEBO, JAPAN
ARS 50	ARS 51	GRASP	21467	NORFOLK, VA (LITTLE CREEK)
ARS 50	ARS 52	SALVOR	21468	PEARL HARBOR, HI
ARS 50	ARS 53	GRAPPLE	21441	NORFOLK, VA (LITTLE CREEK)
AS 39	AS 39	EMORY S. LAND	20635	LA MADDALENA, ITALY
AS 39	AS 40	FRANK CABLE	20865	GUAM, MARIANA ISLANDS
CG 47	CG 49	VINCENNES	21295	YOKOSUKA, JAPAN
CG 47	CG 51	THOMAS S. GATES	21344	PASCAGOULA, MS
CG 47	CG 52	BUNKER HILL	21345	SAN DIEGO, CA
CG 47	CG 53	MOBILE BAY	21346	SAN DIEGO, CA
CG 47	CG 54	ANTIETAM	21387	SAN DIEGO, CA
CG 47	CG 55	LEYTE GULF	21388	NORFOLK, VA
CG 47	CG 56	SAN JACINTO	21389	NORFOLK, VA
CG 47	CG 57	LAKE CHAMPLAIN	21428	SAN DIEGO, CA

Other NVR data were relatively easy to enter manually. These fields included the *Prefix* to the ship name (e.g., USS, USNS, MV, SS), *Previous Names* for the ship, and the specific battle or support *Force*² to which a ship is assigned.

Still other data—specifically, the various dates related to ship history, status change, and data currency—took more time to enter. We decided to include these data because of their considerable value for historical research and analysis.

We added the *Type* field although it has information that can be found in the *Hull Number* field. Having a separate field for ship type facilitates sorting and counting in the pivot table.

From the other data sources

CHINFO *Navy Fact File*

The database does not contain specific information from the *Navy Fact File*. Instead, there are hyperlinks to the *Fact File* in the *Class* field.

MSC *Ship Inventory*

The field, *MSC Link*, contains the ship's name as presented in the *MSC Ship Inventory* database.

MARAD *Property Management & Archive Record System*

The information from MARAD is in column K, in the field named *MARAD NDRF Program-Type / Status*. The information in the field in the program, type, and status description is as presented in the monthly NDRF inventory report [6]. We did not include the data for the numerous other ships in the PMARS data that are not in the

2. This field reports the Battle Forces Category used in the Ships and Aircraft Data Supplemental Table (SASDT) of the Navy's budget reporting system. One major grouping, *Ship Battle Forces*, comprises: *Battle Forces*; *Mobilization Forces-Category A Assets*, *Strategic Forces*, and *Support Forces*. The second major grouping, *Local Defense and Miscellaneous Support Forces*, includes: *Strategic Sealift Forces*, *Auxiliary Ships*, and *Mobilization Force-Category B Assets*.

NDRF, specifically those in the “Disposed” category of USN and MSC ships.

NHC *Dictionary of American Naval Fighting Ships*

The field, *DANFS Link*, contains the name of the ship as it appears in the DANFS. The ship history information is accessed through hyperlinks.

Fields with hyperlinks

In figure 7, we show the fields in the database that contain the hyperlinks. To activate a link, simply click once on the hypertext in a cell defined by the particular ship record and link destination of interest.

The fields with hyperlinks include the following:

- The *Hull No.* field contains the links to the NVR pages for individual ships. For example, figure 3 is the NVR page for USS *John C. Stennis*.
- As mentioned above, the *Class* field, with ship class from the NVR, contains hyperlinks to the type and class information in the CHINFO *Navy Fact File*. Figure 8 shows the page from the *Fact File* for aircraft carriers. (Note: Links on a *Fact File* page can take you to the web pages of individual ships. Figure 9 shows the page for USS *Abraham Lincoln* (CVN 72), which was accessed through the link shown at the bottom of the Fact File page for carriers.)
- The links in the *Force* field connect to the respective definitions in the NVR for the entries.
- *MSC Link* accesses the pages for individual ships in the MSC *Ship Inventory*. The page for USS *Arctic* (T-AOE 8) is shown in figure 10.
- The links in the field, *MARAD NDRF Program-Type/Status*, connect to the individual ship pages in the PMARS database. An example, the page for *Neosho*, is shown in figure 11.
- *DANFS Link* connects users to the appropriate page for a ship name in the NHC *Dictionary of American Naval Fighting Ships*

database. The DANFS page for USS *Kitty Hawk* (CV 63) is shown in figure 12. Since several ships may have the same name at different points in time, you may have to search through the web page to find the specific ship of interest.

- The links in the *Homeport* field take you to the NVR pages that list all ships with the same homeport as the ship of the record. Figure 13 shows the list of ships homeported in Yokosuka, Japan.

Figure 7. Fields with hyperlinks

Microsoft Excel - Integrated Ship Database_Sep05.xls

File Edit View Insert Format Tools Data Window Help Acrobat

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	A	C	H	I	J	K	L	M
	Ship Name	Hull No. (NVR Link)	Class (NFF Link)	Force	MSC Link	MARAD NDRF Program-Type / Status [PMARS Link]	DANFS Link	Homeport (NVR Link)
42	CONSTITUTION	"Old Ironsides"	"Old Ironsides"				Constitution	Location:Charlestown, MA
43	PUEBLO	AGER 2	AGER 2				Pueblo	Location:Namp'o, PRK
44	DOLPHIN	AGSS 555	AGSS 555	Auxiliary				SAN DIEGO, CA
45	CAMDEN	AOE 2	AOE 1	Battle Force				BREMERTON, WA
46	SAFEGUARD	ABS 50	ABS 50	Support Force				SASEBO, JAPAN
47	GRASP	ABS 51	ABS 50	Support Force				NORFOLK, VA (LITTLE CREEK)
48	SALVOR	ABS 52	ABS 50	Support Force				PEARL HARBOR, HI
49	GRAPPLE	ABS 53	ABS 50	Support Force				NORFOLK, VA (LITTLE CREEK)
50	EMORY S. LAND	AS 39	AS 39	Support Force				
51	FRANK CABLE	AS 40	AS 39	Support Force				
52	THOMAS S. GATES	CG 51	CG 47	Battle Force				PASCAGOULA, MS
2029	ALGOL	T-AKR 287	AKR 287	Strategic Sealift	USNS Algol		Algol	
2030	BELLATRIX	T-AKR 288	AKR 287	Strategic Sealift	USNS Bellatrix			
2031	DENEbola	T-AKR 289	AKR 287	Strategic Sealift	USNS Denebola			
2032	POLLUX	T-AKR 290	AKR 287	Strategic Sealift	USNS Pollux			
2033	ALTAIR	T-AKR 291	AKR 287	Strategic Sealift	USNS Altair		Altair	
2034	REGULUS	T-AKR 292	AKR 287	Strategic Sealift	USNS Regulus			
2035	CAPELLA	T-AKR 293	AKR 287	Strategic Sealift	USNS Capella			
2036	ANTARES	T-AKB 294	AKR 287	Strategic Sealift	USNS Antares		Antares	
2052	CAPE JACOB	AK 5029	AK 451	Strategic Sealift	SS Cape Jacob	BBF - Break Bulk / BBF		Diego Garcia
2053	CHESAPEAKE	AOT 5084	AOT 181	Strategic Sealift	SS Chesapeake	BBF - Tanker / BBF		Diego Garcia
2054	PETERSBURG	AOT 9101	AOT 181	Strategic Sealift	SS Petersburg	BBF - Tanker / BBF		Guam
2055	WRIGHT	AVB 3	AVB 3	Strategic Sealift	SS Wright	BBF - Break Bulk / BBF		Baltimore, MD
2056	CURTISS	AVB 4	AVB 3	Strategic Sealift	SS Curtiss	BBF - Break Bulk / BBF	Curtiss	San Diego, CA
2057	CAPE ISLAND	T-AKB 10	AKR 10	Auxiliary	SS Cape Island	BBF - BORO /		Long Beach, CA

DataTableOriginal / DataTableCopy / PivotTable

Figure 8. Portion of Navy Fact File page for aircraft carriers

The United States Navy

United States Navy
Fact File

Aircraft Carriers - CV, CVN

Updated: 2 March 2005

 Video of *USS Dwight D. Eisenhower (CVN 69)* underway in the Atlantic. (This video is more than 2.2 MB) (silent)

Description: Aircraft carriers provide a wide range of possible response for the National Command Authority.

The Carrier Mission

- To provide a credible, sustainable, independent **forward presence** and conventional deterrence in peacetime,
- To operate as the cornerstone of joint/allied maritime expeditionary forces in times of crisis, and
- To operate and support aircraft attacks on enemies, protect friendly forces and engage in sustained independent operations in war.

Features: The aircraft carrier continues to be the centerpiece of the forces necessary for **forward presence**. Whenever there has been a crisis, the first question has been: "Where are the carriers?" Carriers support and operate aircraft that engage in attacks on airborne, afloat, and ashore targets that threaten free use of the sea, and engage in sustained operations in support of other forces.

Aircraft carriers are deployed worldwide in support of U.S. interests and commitments. They can respond to global crises in ways ranging from peacetime presence to full-scale war. Together with their on-board air wings, the carriers have vital roles across the full spectrum of conflict.

The *Nimitz*-class carriers, eight operational and two under construction, are the largest warships in the world. *USS Nimitz (CVN 68)* was the first to undergo its initial refueling during a 33-month Refueling Complex Overhaul at Newport News Shipbuilding in Newport News, Va., in 1998. The next generation of carrier, CVN 21, the hull number will be CVN 78, is programmed to start construction in 2007 and is slated to be placed in commission in 2014 to replace *USS Enterprise (CVN 65)* which will be over its 50-year mark. CVN 79 is programmed to begin construction in 2012 and to be placed in commission in 2018, replacing *USS John F. Kennedy (CV 67)* in her 50th year.

Point of Contact:
Public Affairs Office
Naval Sea Systems Command
Washington, D.C 20362

General Characteristics, *Nimitz* Class

Builder: Newport News Shipbuilding Co., Newport News, Va.
Power Plant: Two nuclear reactors, four shafts
Length, overall: 1,092 feet (332.85 meters)
Flight Deck Width: 252 feet (76.8 meters)
Beam: 134 feet (40.84 meters)
Displacement: Approx. 97,000 tons (87,996.9 metric tons) full load
Speed: 30+ knots (34.5+ miles per hour)
Aircraft: 85
Cost: about \$4.5 billion each

Ships:
[USS *Nimitz \(CVN 68\)*, San Diego, Calif.](#)
[USS *Dwight D. Eisenhower \(CVN 69\)*, Norfolk, Va.](#)
[USS *Carl Vinson \(CVN 70\)*, Bremerton, Wash.](#)
[USS *Theodore Roosevelt \(CVN 71\)*, Norfolk, Va.](#)
[USS *Abraham Lincoln \(CVN 72\)*, Everett, Wash.](#)

Figure 9. Web page for USS Abraham Lincoln



Figure 10. MSC Ship Inventory page for USNS Arctic

 Ship Inventory	MSC Overview	Commander	Media Center
	Organization	Contracts	Employment & HR
	Ship Inventory	Publications	CVMAR
Home	Privacy Policy	Accessibility	Search
Help	FOIA	<input type="text"/>	Search

USNS ARCTIC (T-AOE 8)

Fast Combat Support Ship



USNS Arctic is one of Military Sealift Command's four [Fast Combat Support Ships](#) and is part of the 37 ships in the [Naval Fleet Auxiliary Force](#).

- **Length:** 754 feet
- **Beam:** 107 feet
- **Draft:** 38 feet
- **Displacement:** 48,500 long tons
- **Speed:** 25 knots
- **Civilian:** 160
- **Military:** 28

Click on image at left for larger picture.

[Return to ship inventory main page](#)

[Glossary of Terms](#)

Military Sealift Command, ATTN: Public Affairs, 914 Charles Morris Ct. SE, Washington Navy Yard, DC, 20398-5540
General Information: 1-888-SEALIFT • Marine Employment Opportunities: 1-877-JOBS-MSC • Email: webmaster@msc.navy.mil

Figure 11. MARAD PMARS page for *Neosho*

Home	Ships	Artifacts	PMARS	MARAD	Other
		Custody CARDS		Disposal CARDS	
		Front of Card 1		Back of Card 1 No Image	
Basic Ship Data		History Data		Current Status Data	
				Artifact Data	
Basic Ship Data					ACTIVE SHIP
Ship Name	Other Names	Year Built	Sister Ship(s)		
NEOSHO	Select Other Name ▾	1953	View Sister Ships		
Official No.	Marad Hull No.	Class	Gross Tonnage		
T-AO143	T-AO143		19240		
Net Tonnage	CargoCapacity	MastHeight	Length		
11422			655.0		
Beam	Summer Draft	Summer Displacement	Summer Deadweight		
86.00	35.00	36251	36251		
Summer Immersion	Lightweight Draft	Lightweight Displacement	Lightweight Immersion		
		10537			
Ship yard Information	Ship Yard	Ship Yard City	Ship Yard State		
MARAD Design	Military Design	Specific Type	General Type		
Navy/24K		Tanker (Liquid Bulk)	Tanker		
Classification Society	Classification ID				
U.S. Navy	T-AO143				
Historical Data					
Entry	Entry Date	Region	FleetSite		
	6/30/1946	SOUTH ATLANTIC	JRRF, James River VA		
Acquisition	ACQ Date	Method	Cost		
	6/30/1946	Reimbursable Customer			
	Previous Owner	Remarks			
Disposition	Disposition Date	Method	New Owner		
	3/21/1947	Returned to Reimbursable Customer			
	Remarks				
	CUST 1948/SOLD				
Withdrawal	Date				
	3/21/1947				
Entry	Entry Date	Region	FleetSite		
	8/12/1992	SOUTH ATLANTIC	JRRF, James River VA		
Acquisition	ACQ Date	Method	Cost		
	8/12/1992	Reimbursable Customer			
	Previous Owner	Remarks			
Ship Event	Event Date	Event Name	Event Document		
	2/9/2005	Departure			
	Event Remarks				
	NEOSHO departed the JRRF on 2/9/2005 for the ISL Brownsville, TX facility.				

Figure 12. DANFS page for USS *Kitty Hawk* (CV 63)

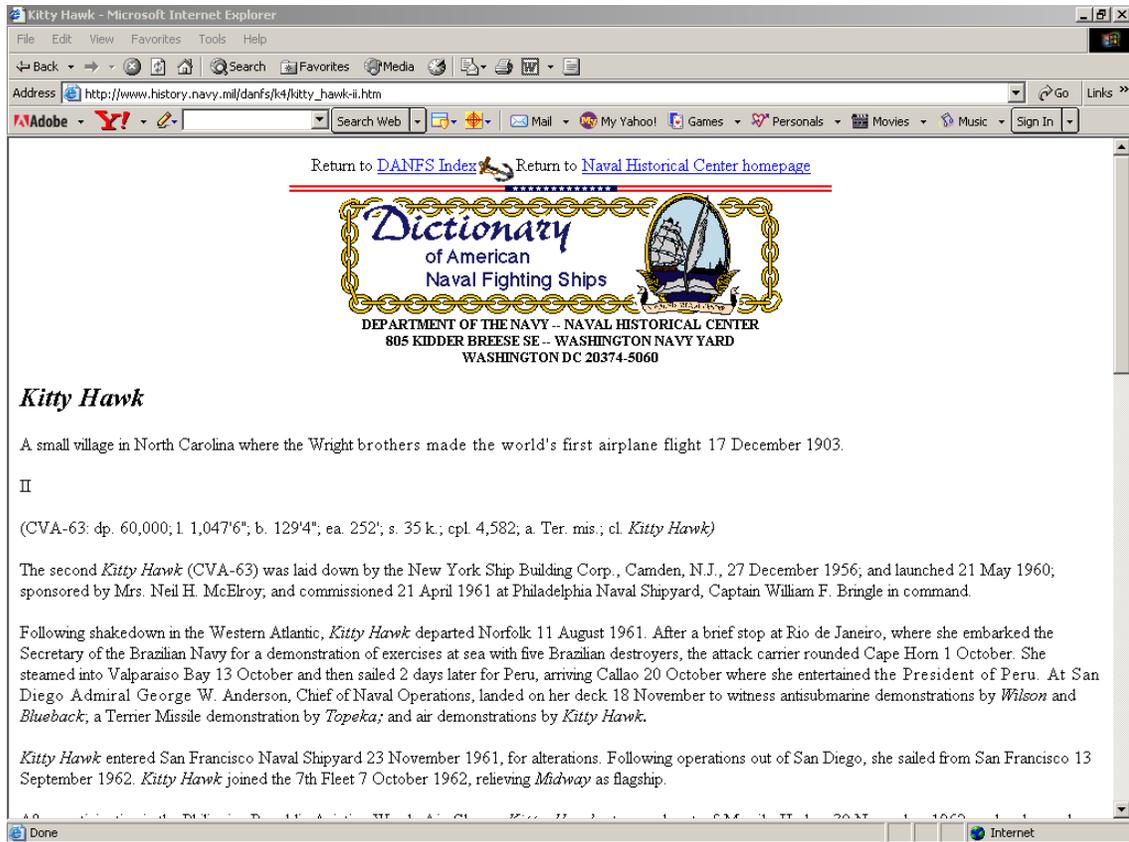
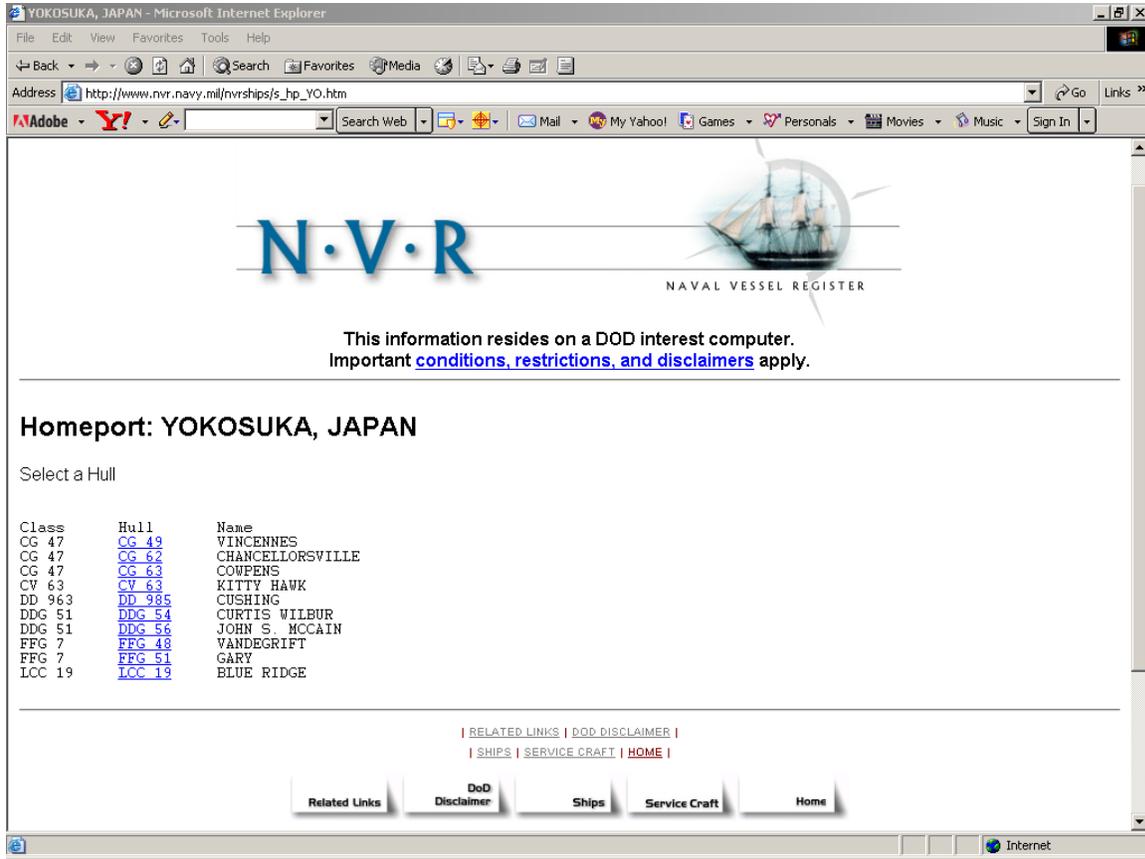


Figure 13. NVR homeport page for ships in Yokosuka, Japan



The records – database composition and NVR status

The database contains a total of 2,510 records.³ As mentioned above, we grouped the records by ship status and used colors to set them apart, generally according to the NVR’s ship status groups listed in figure 5. Table 2 summarizes the composition of the database by these status groups.

3. All but 96 of the records came from the NVR. Of those 96 records, 86 came from MARAD’s PMARS database and 10 came from the MSC *Ship Inventory*.

For a more in-depth breakout, please refer to the *PivotTable* worksheet in the Excel file. There you will be able to see the composition by the specific status descriptions in the NVR. We also refer you to the appendix for a detailed discussion of ship-status categorization.

Table 2. Database composition

Category	No. of records
U.S. Navy Ships	1,933
Authorized	23
Under Construction	17
Active	244
Naval Reserve Force, Active	23
Stand down	1
Inactive – In reserve	20
Inactive – Leased, loan, or grant	14
Inactive – To be disposed of	8
Stricken	72
Disposed ^a	1,510
Other ^b	1
Military Sealift Command	117
Naval Fleet Auxiliary Force	35
Special Mission Support	24
Prepositioning Program	30
Sealift Program	28
Maritime Administration	460
RRF – Prepositioning Program	5
RRF – Sealift Program	54
NDRF – Retention for mobilization	49
NDRF – Non-retention	141
NDRF – Custody for Navy	1(12) ^c
Disposed by MARAD	210
TOTAL	2,510

a. Includes disposal of ships that spent a portion of their lifetime under custody of MSC.

b. *Integrity* (AGOS 24): “Hull number assigned, authorized to be built but never awarded, authorization cancelled.”

c. Of the 12 ships in the NDRF under MARAD custody for the Navy, one ship (*Proteus* (EX AS 19)) is not included in the NVR database.

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Querying the database

PivotTable

For rapid querying of the database and counting of the records within it, we built *PivotTable*. It uses four fields from the database: *Ship Name*, *Status*, *Type*, and *Force*. We grouped the status titles similar to the way described in our discussion above on the structure of the database. Figure 14 shows the opening view of the pivot table.

Ship Name, *Status*, and *Type* are in columns B, C, and D, respectively. The grouped “field” in column A, which we named *Status Category*, combines the *Status* groups for MSC and MARAD. Due to the volume of USN records, we were unable to gather them into a single group. Thus, we grouped these records by phase of the life-cycle and annotated each group with “USN:” as a prefix. Figure 14 shows the count of each group in column M.

Hiding and unhiding data

One of the very nice features of a pivot table is that data can be analyzed easily if you simply double-click the mouse on the text cells found beneath the title fields (highlighted in grey). Double-clicking a cell at one level will unhide the cells at the next level down. For example, double-clicking on the “MSC” cell under *Status Category* will reveal groupings by various titles in the *Status* field as shown in figure 15. You can see the sub-total of records for each *Status* title in column M in addition to the rolled-up total of 117 records at the top of the open section.

Double clicking a second time in the same location will “re-hide” the cells just unhidden.

Figure 16 has a view of the *Status* and *Type* fields unhidden under the *Status Category*, “USN: Under Construction.” In this view, you can see

Figure 14. Opening view of pivot table

The screenshot shows a Microsoft Excel window titled "Microsoft Excel - Integrated Ship Database_Sep05.xls". The PivotTable is titled "Count of Ship Name" and is displayed in a PivotTable view. The columns are "Status Category", "Status", "Type", "Ship Name", and "Grand Total". The rows list various ship status categories and their corresponding counts.

Status Category	Status	Type	Ship Name	Grand Total
USN: Authorized				23
USN: Under construction				17
USN: Active, In commission / In service				244
USN: Naval Reserve Force, Active				23
USN: Stand down				1
USN: Inactive				42
USN: Stricken				72
USN/MSC: Disposed				1,510
USN: Other				1
MSC				117
MARAD				460
Grand Total				2,510

Figure 15. Example of an ungrouped view at the *Status* level

	A	B	C	D	M
1					
2					
3	Count of Ship Name				
4					Grand Total
5	Status Category	Status	Type	Ship Name	
6	USN: Authorized				23
7	USN: Under construction				17
8	USN: Active, in commission / In service				244
9	USN: Naval Reserve Force, Active				23
10	USN: Stand down				1
11	USN: Inactive				42
12	USN: Stricken				72
13	USN/MSC: Disposed				1,510
14	USN: Other				1
15	MSC				117
16		Military Sealift Command (MSC) Naval Fleet Auxiliary Force			34
17		Reactivated and assigned to the Military Sealift Command (MSC) Naval Fleet Auxiliary Force			1
18		Military Sealift Command (MSC), Special Mission Support			24
19		Military Sealift Command (MSC) {Prepositioning Program}			1
20		Military Sealift Command (MSC), in service, contract operated {Prepositioning Program}			16
21		Special, chartered by MSC, listed here as part of the U.S. Navy Ship Battle Forces, entered the force on this date {Prepositioning Program}			13
22		Military Sealift Command (MSC), in service, contract operated {Sealift Program}			15
23		Military Sealift Command (MSC), Cargo - Fast Sealift Ships (FSS) {Sealift Program}			8
24		Military Sealift Command (MSC) {Sealift Program}			3
25		Military Sealift Command (MSC), in service, contract operated			2
26	MARAD				460
27	Grand Total				2,510
28					
29					
30					

Figure 16. View with *Status* and *Type* fields under “USN: Under construction” *Status Category* opened

The screenshot shows a Microsoft Excel window titled "Microsoft Excel - Integrated Ship Database_Sep05.xls". The PivotTable is displayed with the following data:

Status Category	Status	Type	Ship Name	Grand Total
USN: Authorized				23
USN: Under construction				17
	Under construction in US by Navy, unassigned to fleet	AKE		3
			CYN	1
			DDG	5
			LHD	1
			LPD	4
			SSN	3
	Under construction in US by Navy, unassigned to fleet Total			17
USN: Active, In commission / In service				244
USN: Naval Reserve Force, Active				23
USN: Stand down				1
USN: Inactive				42
USN: Stricken				72
USN/MSC: Disposed				1510
USN: Other				1
MSC				117
MARAD				460
Grand Total				2510

the numbers of ships under construction by type. To view the specific list of ships by name, double-click on each of the cells designating type. This will produce the view in figure 17.

There is another way to hide and unhide the details in a pivot table, i.e., by using drop-down menus. For example, if you select the gray cell, *Status Category*, and right click, the option menu in figure 18 will appear. By flying the cursor over *Group and Outline*, you will see *Hide Detail*, *Show Detail*, *Group*, and *Ungroup* options. Selecting *Show Detail* will unhide the next lower level of the pivot table for all *Status Category* cells. Figure 19 displays the uppermost portion of a pivot table with these fields open.⁴

4. Warning: With this approach, you will see a “Hide” command on the menu when you right-click. If you select it, you will remove that variable from the pivot table. There is no “Unhide” command to reinsert it. You’ll have to use the pivot table controls to reinsert. If you don’t know how to do this, either consider it a learning opportunity or find someone who can help you. Alternatively, you can close the file without saving and reopen it to restore it to the original condition.

Figure 17. View with *Status*, *Type*, and *Ship Name* fields opened under “USN: Under construction”

The screenshot shows a Microsoft Excel window titled "Microsoft Excel - Integrated Ship Database_Sep05.xls". The PivotTable is set to show data for "USN: Under construction". The columns are Status, Type, Ship Name, and Grand Total. The data is summarized as follows:

Status	Type	Ship Name	Grand Total	
USN: Under construction	Under construction in US by Navy, unassigned to fleet	AKE	LEWIS AND CLARK	1
			NO NAME	1
			SACAGAWEA	1
		AKE Total		3
		CVN	GEORGE H. W. BUSH	1
		CVN Total		1
		DDG	BAINBRIDGE	1
			FARRAGUT	1
			FORREST SHERMAN	1
			GRIDLEY	1
			KIDD	1
		DDG Total		5
		LHD	MAKIN ISLAND	1
		LHD Total		1
		LPD	GREEN BAY	1
			MESA VERDE	1
			NEW ORLEANS	1
	SAN ANTONIO	1		
LPD Total		4		
SSN	HAWAII	1		
	NORTH CAROLINA	1		
	TEXAS	1		
SSN Total		3		
	Under construction in US by Navy, unassigned to fleet Total		17	
USN: Active, In commission / In service			244	
USN: Naval Reserve Force, Active			23	
USN: Stand down			1	
USN: Inactive			42	
USN: Stricken			72	
USN/MSC: Disposed			1,510	
USN: Other			1	
MSC			117	
MARAD			460	
Grand Total			2,510	

Figure 18. *Hide Detail* and *Show Detail* control of pivot table display

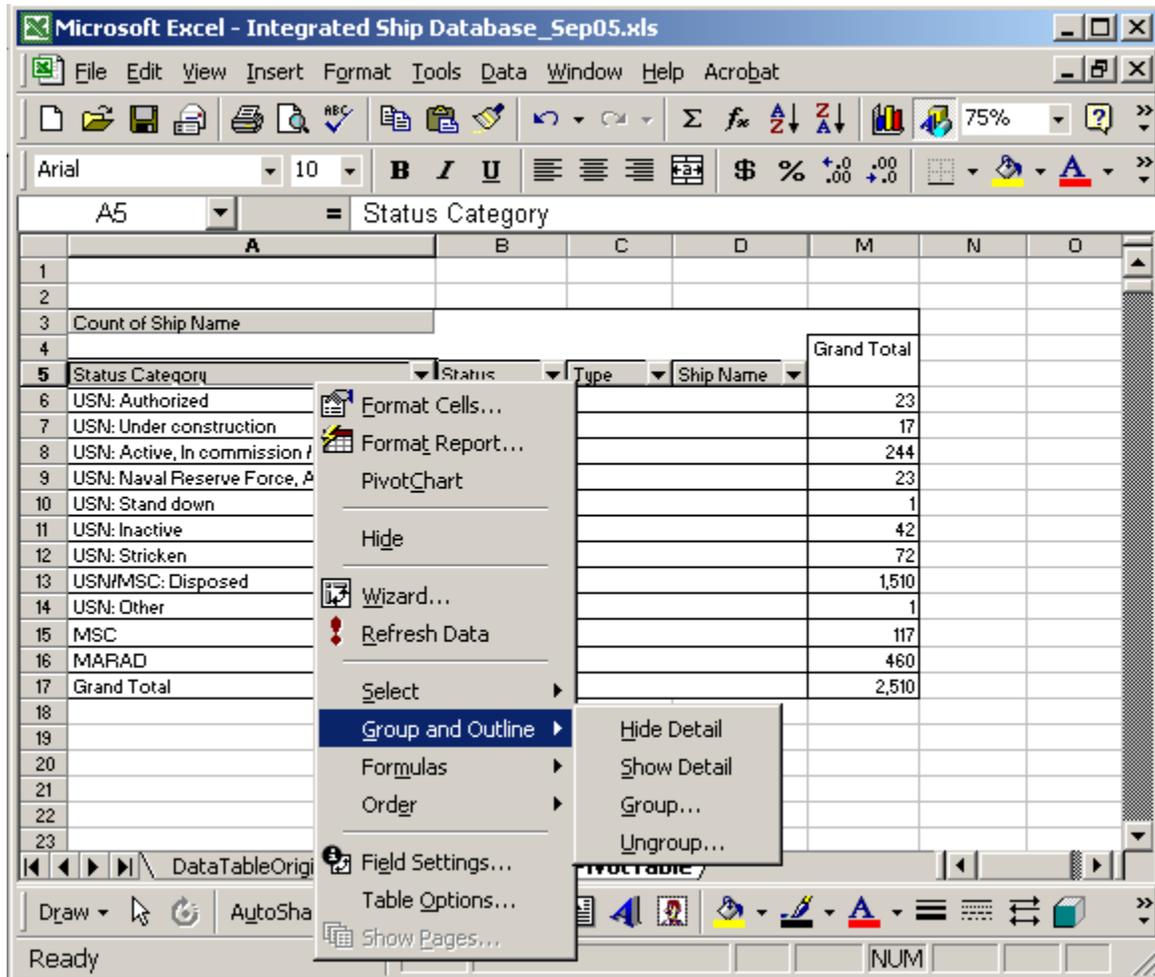


Figure 19. Completely open *Status Category*, *Status*, *Type*, and *Ship Name* fields

Status Category	Status	Type	Ship Name	Grand Total
USN: Authorized	Authorized, for US Navy construction	AKE	NO NAME	5
		AKE Total		5
		DDG	DEWEY	1
			NO NAME	7
			SAMPSON	1
			STERETT	1
			TRUXTUN	1
		DDG Total		11
		LPD	NEW YORK	1
		LPD Total		1
		SSN	NEW HAMPSHIRE	1
			NEW MEXICO	1
			NO NAME	4
		SSN Total		6
	Authorized, for US Navy construction Total			23
USN: Under construction	Under construction in US by Navy, unassigned to fleet	AKE	LEWIS AND CLARK	1
			NO NAME	1
			SACAGAWEA	1
		AKE Total		3
		CVN	GEORGE H. W. BUSH	1
		CVN Total		1
		DDG	BAINBRIDGE	1
			FARRAGUT	1
			FORREST SHERMAN	1
			GRIDLEY	1
			KIDD	1
		DDG Total		5
		LHD	MAKIN ISLAND	1
		LHD Total		1
		LPD	GREEN BAY	1
			MESA VERDE	1
			NEW ORLEANS	1
			SAN ANTONIO	1
		LPD Total		4
		SSN	HAWAII	1
			NORTH CAROLINA	1
			TEXAS	1
		SSN Total		3
	Under construction in US by Navy, unassigned to fleet Total			17
USN: Active, in commission / In service	Active, in commission	AGER	PUEBLO	1
		AGER Total		1

Query sheets with a double-click

The pivot table has yet another feature for rapidly querying the database. By double-clicking on any cell in column M, you can produce a query report on a new, separate worksheet for those units being counted in that cell. Excel will automatically name and number the query sheet. To return to the pivot table, just click on its tab.

For example, double-clicking on cell M7 of the opening view (see figure 14) will generate the query sheet shown in figure 20 for the 17 ships under construction for the USN.

Unhiding the SASDT *Force* information

The breakout by SASDT Ship Battle Force category in the pivot table is in columns E through L. In the opening view of the pivot table, these columns are hidden. Unhiding them will result in the display in figure 21.

Figure 20. Query sheet generated from the pivot table

Microsoft Excel - Integrated Ship Database_Sep05.xls

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G1 = Date Status Changed

	A	B	C	D	E	F	G	H	I	J
1	Ship Name	Prefix Hull No.	(NYR Link)	Type	UIC	Status	Date Status	Class	(N Force	MSC Link
2	BAINBRIDGE	DDG 96		DDG	23153	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 51		
3	FARRAGUT	DDG 99		DDG	23150	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 51		
4	FORREST SHERMAN	DDG 98		DDG	23149	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 51		
5	GEORGE H. W. BUSH	CVN 77		CVN	23170	Under construction in US by Navy, unassigned to fleet	1/26/2001	CVN 68		
6	GREEN BAY	LPD 20		LPD		Under construction in US by Navy, unassigned to fleet	5/15/2000	LPD 17		
7	GRIDLEY	DDG 101		DDG	23151	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 51		
8	HAWAII	SSN 776		SSN	23159	Under construction in US by Navy, unassigned to fleet	9/30/1998	SSN 774		
9	KIDD	DDG 100		DDG	23152	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 51		
10	LEWIS AND CLARK	AKE 1		AKE	23191	Under construction in US by Navy, unassigned to fleet	10/18/2001	AKE 1		USNS Lewis And Clark
11	MAKIN ISLAND	LHD 8		LHD	23171	Under construction in US by Navy, unassigned to fleet	4/19/2002	LHD 1		
12	MESA VERDE	LPD 19		LPD	32421	Under construction in US by Navy, unassigned to fleet	2/15/2000	LPD 17		
13	NEW ORLEANS	LPD 18		LPD	23168	Under construction in US by Navy, unassigned to fleet	11/25/1998	LPD 17		
14	NO NAME	AKE 3		AKE	23193	Under construction in US by Navy, unassigned to fleet	7/16/2002	AKE 1		
15	NORTH CAROLINA	SSN 777		SSN	23190	Under construction in US by Navy, unassigned to fleet	9/30/1998	SSN 774		
16	SACAGAWEA	AKE 2		AKE	23192	Under construction in US by Navy, unassigned to fleet	10/18/2001	AKE 1		
17	SAN ANTONIO	LPD 17		LPD	07207	Under construction in US by Navy, unassigned to fleet	12/17/1996	LPD 17		
18	TEXAS	SSN 775		SSN	23028	Under construction in US by Navy, unassigned to fleet	9/30/1998	SSN 774		
19										
20										
21										
22										

DataTableOriginal / DataTableCopy / Sheet1 / PivotTable

Figure 21. Pivot table showing SASDT Ship Battle Force unhidden

Count of Ship Name	SASDT Force							Local Defense and Misc. Support Forces			(blank)	Grand Total
Status Category	Status	Type	Ship Name	Battle Force	Strategic Force	Support Force	Mobilization Cat. A	Strategic Sealift	Auxiliary	Mobilization Cat. B	(blank)	Grand Total
USN: Authorized											23	23
USN: Under construction											17	17
USN: Active, in commission / In service				207	18	6			10		3	244
USN: Naval Reserve Force, Active							14				9	23
USN: Stand down											1	1
USN: Inactive				1							41	42
USN: Stricken											72	72
USN/MSC: Disposed											1,510	1,510
USN: Other											1	1
MSC				30							56	117
MARAD								16	43		401	460
Grand Total				238	18	27	14	72	53	9	2,079	2,510

The AutoFilter feature of Excel

Excel's AutoFilter offers still another way to rapidly query the database. Unfortunately, Excel disables AutoFilter when a worksheet is protected. Because we have protected *DataTableOriginal*, we have included the sheet *DataTableCopy* in the workbook. Make sure you create a copy of the original one.

Figure 22 is a view of *DataTableCopy* that shows the drop-down-menu path to toggle the AutoFilter off and on. In this view, the AutoFilter is on, as indicated by the check mark. Further indication of the AutoFilter being on is given by the gray drop-down boxes in each of the field name cells in row 1 of the spreadsheet.

Now we'll present an example to show how the AutoFilter works. Let's identify all the aircraft carriers in the database. First, we draw down the filter options for the *Type* field and select the *Custom* option, as shown in figure 23.

The *Custom Autofilter*, in which one can enter filtering criteria, appears. It is shown in figure 24. Here we've entered "begins with" and "CV" to select all records for aircraft carriers. Figure 25 shows a partial list of the records selected.

Figure 22. View of *DataTableCopy* with Autofilter toggled on

	Ship Name	Prefix	Hull No. (NVR Link)	Type	UIC	Status	Date Status Changed	Class (NFF Link)
2	NO NAME		AKE 4	AKE	23194	Authorized, for US Navy construction	7/18/2003	AKE 1
3	NO NAME		AKE 5	AKE	23195	Authorized, for US Navy construction	1/27/2004	AKE 1
4	NO NAME		AKE 6	AKE	23196	Authorized, for US Navy construction	1/27/2004	AKE 1
5	NO NAME		AKE 7	AKE	23197	Authorized, for US Navy construction	1/2/2005	AKE 1
6	NO NAME		AKE 8	AKE	23198	Authorized, for US Navy construction	1/2/2005	AKE 1
7	SAMPSON		DDG 102	DDG	23161	Authorized, for US Navy construction	9/13/2002	DDG 5
8	TRUXTUN		DDG 103	DDG	23165	Authorized, for US Navy construction	9/13/2002	DDG 5
9	STERETT		DDG 104	DDG	23166	Authorized, for US Navy construction	9/13/2002	DDG 5
10	DEWEY		DDG 105	DDG	23162	Authorized, for US Navy construction	9/13/2002	DDG 5
11	NO NAME		DDG 106	DDG	23163	Authorized, for US Navy construction	9/13/2002	DDG 5
12	NO NAME		DDG 107	DDG	23164	Authorized, for US Navy construction	9/13/2002	DDG 5
13	NO NAME		DDG 108	DDG	55684	Authorized, for US Navy construction	9/13/2002	DDG 5
14	NO NAME		DDG 109	DDG	55685	Authorized, for US Navy construction	9/13/2002	DDG 5
15	NO NAME		DDG 110	DDG	55686	Authorized, for US Navy construction	9/13/2002	DDG 5
16	NO NAME		DDG 111	DDG	55687	Authorized, for US Navy construction	9/13/2002	DDG 5
17	NO NAME		DDG 112	DDG	55688	Authorized, for US Navy construction	9/13/2002	DDG 5
18	NEW YORK		LPD 21	LPD		Authorized, for US Navy construction	12/10/2002	LPD 17
19	NEW HAMPSHIRE		SSN 778	SSN	23172	Authorized, for US Navy construction	8/14/2003	SSN 774
20	NEW MEXICO		SSN 779	SSN	23183	Authorized, for US Navy construction	8/14/2003	SSN 774
21	NO NAME		SSN 780	SSN	20002	Authorized, for US Navy construction	8/14/2003	SSN 774
22	NO NAME		SSN 781	SSN	20079	Authorized, for US Navy construction	8/14/2003	SSN 774
23	NO NAME		SSN 782	SSN	20080	Authorized, for US Navy construction	8/14/2003	SSN 774
24	NO NAME		SSN 783	SSN	20034	Authorized, for US Navy construction	8/14/2003	SSN 774
25	LEWIS AND CLARK		AKE 1	AKE	23191	Under construction in US by Navy, unassigned to fleet	10/18/2001	AKE 1
26	SACAGAWEA		AKE 2	AKE	23192	Under construction in US by Navy, unassigned to fleet	10/18/2001	AKE 1
27	NO NAME		AKE 3	AKE	23193	Under construction in US by Navy, unassigned to fleet	7/16/2002	AKE 1
28	GEORGE H. W. BUSH		CVN 77	CVN	23170	Under construction in US by Navy, unassigned to fleet	1/26/2001	CVN 68
29	KIDD		DDG 100	DDG	23152	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 5
30	GRIDLEY		DDG 101	DDG	23151	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 5
31	BAINBRIDGE		DDG 96	DDG	23153	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 5
32	FORREST SHERMAN		DDG 98	DDG	23149	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 5
33	FARRAGUT		DDG 99	DDG	23150	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 5
34	MAKIN ISLAND		LHD 8	LHD	23171	Under construction in US by Navy, unassigned to fleet	4/19/2002	LHD 1
35	SAN ANTONIO		LPD 17	LPD	07207	Under construction in US by Navy, unassigned to fleet	12/17/1996	LPD 17
36	NEW ORLEANS		LPD 18	LPD	23168	Under construction in US by Navy, unassigned to fleet	1/25/1998	LPD 17
37	MESA VERDE		LPD 19	LPD	32421	Under construction in US by Navy, unassigned to fleet	2/15/2000	LPD 17
38	GREEN BAY		LPD 20	LPD		Under construction in US by Navy, unassigned to fleet	5/15/2000	LPD 17

Figure 23. Autofilter drop-down menu showing *Custom Autofilter* option selected

The screenshot shows a Microsoft Excel spreadsheet titled "Integrated Ship Database_Sep05.xls". The spreadsheet has columns for Ship Name, Prefix, Hull No. (NVR Link), Type, UIC, Status, Date Status Changed, and Class (NFF Link). A drop-down menu is open over the 'Type' column, showing a list of ship types. The 'Custom...' option is selected. The data rows are color-coded: green for 'Authorized, for US Navy construction' and yellow for 'Under construction in US by Navy, unassigned to fleet'.

	A	B	C	D	E	F	G	H
	Ship Name	Prefix	Hull No. (NVR Link)	Type	UIC	Status	Date Status Changed	Class (NFF Link)
2	NO NAME		AKE 4	(All)	23194	Authorized, for US Navy construction	7/18/2003	AKE J
3	NO NAME		AKE 5	(Top 10...)	23195	Authorized, for US Navy construction	1/27/2004	AKE J
4	NO NAME		AKE 6	(Custom...)	23196	Authorized, for US Navy construction	1/27/2004	AKE J
5	NO NAME		AKE 7	AB	23197	Authorized, for US Navy construction	1/12/2005	AKE J
6	NO NAME		AKE 8	ACS	23198	Authorized, for US Navy construction	1/12/2005	AKE J
7	SAMPSON		DDG 102	AD	23161	Authorized, for US Navy construction	9/13/2002	DDG 5J
8	TRUXTUN		DDG 103	ADG	23165	Authorized, for US Navy construction	9/13/2002	DDG 5J
9	STERETT		DDG 104	AE	23166	Authorized, for US Navy construction	9/13/2002	DDG 5J
10	DEWEY		DDG 105	AF	23162	Authorized, for US Navy construction	9/13/2002	DDG 5J
11	NO NAME		DDG 106	AFS	23163	Authorized, for US Navy construction	9/13/2002	DDG 5J
12	NO NAME		DDG 107	AG	23164	Authorized, for US Navy construction	9/13/2002	DDG 5J
13	NO NAME		DDG 108	AGC	55684	Authorized, for US Navy construction	9/13/2002	DDG 5J
14	NO NAME		DDG 109	AGDS	55685	Authorized, for US Navy construction	9/13/2002	DDG 5J
15	NO NAME		DDG 110	AGEH	55686	Authorized, for US Navy construction	9/13/2002	DDG 5J
16	NO NAME		DDG 111	AGER	55687	Authorized, for US Navy construction	9/13/2002	DDG 5J
17	NO NAME		DDG 112	AGF	55688	Authorized, for US Navy construction	9/13/2002	DDG 5J
18	NEW YORK		LPD 21	AGFF		Authorized, for US Navy construction	12/10/2002	LPD 17
19	NEW HAMPSHIRE		SSN 778	AGM	23172	Authorized, for US Navy construction	8/14/2003	SSN 774
20	NEW MEXICO		SSN 779	AGMR	23183	Authorized, for US Navy construction	8/14/2003	SSN 774
21	NO NAME		SSN 780	AGOR	20002	Authorized, for US Navy construction	8/14/2003	SSN 774
22	NO NAME		SSN 781	DDG	20079	Authorized, for US Navy construction	8/14/2003	SSN 774
23	NO NAME		SSN 782	LPD	20080	Authorized, for US Navy construction	8/14/2003	SSN 774
24	NO NAME		SSN 783	SSN	20034	Authorized, for US Navy construction	8/14/2003	SSN 774
25	LEWIS AND CLARK		AKE 1	SSN	23191	Under construction in US by Navy, unassigned to fleet	10/18/2001	AKE J
26	SACAGAWEA		AKE 2	AKE	23192	Under construction in US by Navy, unassigned to fleet	10/18/2001	AKE J
27	NO NAME		AKE 3	AKE	23193	Under construction in US by Navy, unassigned to fleet	7/16/2002	AKE J
28	GEORGE H. W. BUSH		CVN 77	CVN	23170	Under construction in US by Navy, unassigned to fleet	1/26/2001	CVN 68
29	KIDD		DDG 100	DDG	23152	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 5J
30	GRIDLEY		DDG 101	DDG	23151	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 5J
31	BAINBRIDGE		DDG 95	DDG	23153	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 5J
32	FORREST SHERMAN		DDG 98	DDG	23149	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 5J
33	FARRAGUT		DDG 99	DDG	23150	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 5J
34	MAKIN ISLAND		LHD 8	LHD	23171	Under construction in US by Navy, unassigned to fleet	4/19/2002	LHD J
35	SAN ANTONIO		LPD 17	LPD	07207	Under construction in US by Navy, unassigned to fleet	12/17/1996	LPD 17
36	NEW ORLEANS		LPD 18	LPD	23168	Under construction in US by Navy, unassigned to fleet	11/25/1998	LPD 17
37	MESA VERDE		LPD 19	LPD	32421	Under construction in US by Navy, unassigned to fleet	2/15/2000	LPD 17
38	GREEN BAY		LPD 20	LPD		Under construction in US by Navy, unassigned to fleet	5/15/2000	LPD 17

Figure 24. Custom filter set to find aircraft carriers

The screenshot shows a Microsoft Excel spreadsheet titled 'Integrated Ship Database_Sep05.xls'. A 'Custom AutoFilter' dialog box is open, showing the following configuration:

- Show rows where:
- Type: begins with CV
- And / Or: And (selected)
- Use ? to represent any single character
- Use * to represent any series of characters

The spreadsheet data is as follows:

Ship Name	Prefix	Hull No. (NVR Link)	Type	UIC	Status	Date Status Changed	Class (NFF Link)
NO NAME		AKE 4	AKE	23194	Authorized, for US Navy construction	7/18/2003	AKE J
NO NAME		AKE 5	AKE	23195	Authorized, for US Navy construction	1/27/2004	AKE J
NO NAME		AKE 6	AKE	23196	Authorized, for US Navy construction	1/27/2004	AKE J
NO NAME		AKE 7	AKE			1/12/2005	AKE J
NO NAME		AKE 8	AKE			1/12/2005	AKE J
SAMPSON		DDG 102	DDG			9/13/2002	DDG 5
TRUXTUN		DDG 103	DDG			9/13/2002	DDG 5
STERETT		DDG 104	DDG			9/13/2002	DDG 5
DEWEY		DDG 105	DDG			9/13/2002	DDG 5
NO NAME		DDG 106	DDG			9/13/2002	DDG 5
NO NAME		DDG 107	DDG			9/13/2002	DDG 5
NO NAME		DDG 108	DDG			9/13/2002	DDG 5
NO NAME		DDG 109	DDG			9/13/2002	DDG 5
NO NAME		DDG 110	DDG			9/13/2002	DDG 5
NO NAME		DDG 111	DDG			9/13/2002	DDG 5
NO NAME		DDG 112	DDG			9/13/2002	DDG 5
NEW YORK		LPD 21	LPD			12/10/2002	LPD 17
NEW HAMPSHIRE		SSN 778	SSN			8/14/2003	SSN 774
NEW MEXICO		SSN 779	SSN			8/14/2003	SSN 774
NO NAME		SSN 780	SSN			8/14/2003	SSN 774
NO NAME		SSN 781	SSN			8/14/2003	SSN 774
NO NAME		SSN 782	SSN	20080	Authorized, for US Navy construction	8/14/2003	SSN 774
NO NAME		SSN 783	SSN	20034	Authorized, for US Navy construction	8/14/2003	SSN 774
LEWIS AND CLARK		AKE 1	AKE	23191	Under construction in US by Navy, unassigned to fleet	10/18/2001	AKE J
SACAGAWEA		AKE 2	AKE	23192	Under construction in US by Navy, unassigned to fleet	10/18/2001	AKE J
NO NAME		AKE 3	AKE	23193	Under construction in US by Navy, unassigned to fleet	7/16/2002	AKE J
GEORGE H. W. BUSH		CVN 77	CVN	23170	Under construction in US by Navy, unassigned to fleet	1/26/2001	CVN 68
KIDD		DDG 100	DDG	23152	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 5
GRIDLEY		DDG 101	DDG	23151	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 5
BAINBRIDGE		DDG 36	DDG	23153	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 5
FORREST SHERMAN		DDG 38	DDG	23149	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 5
FARRAGUT		DDG 39	DDG	23150	Under construction in US by Navy, unassigned to fleet	3/6/1998	DDG 5
MAKIN ISLAND		LHD 8	LHD	23171	Under construction in US by Navy, unassigned to fleet	4/19/2002	LHD 1
SAN ANTONIO		LPD 17	LPD	07207	Under construction in US by Navy, unassigned to fleet	12/17/1996	LPD 17
NEW ORLEANS		LPD 18	LPD	23168	Under construction in US by Navy, unassigned to fleet	11/25/1998	LPD 17
MESA VERDE		LPD 19	LPD	32421	Under construction in US by Navy, unassigned to fleet	2/15/2000	LPD 17
GREEN BAY		LPD 20	LPD		Under construction in US by Navy, unassigned to fleet	5/15/2000	LPD 17

Figure 25. Portion of database filtered for aircraft carriers

Microsoft Excel - Integrated Ship Database_Sep05.xls

File Edit View Insert Format Tools Data Window Help Acrobat

Arial 11 B I U

A1 = Ship Name

	A	B	C	D	E	F	G	H
	Ship Name	Prefix	Hull No. (NVR Link)	Type	UIC	Status	Date Status Changed	Class (NFF L)
28	GEORGE H. W. BUSH		CVN 77	CVN	23170	Under construction in US by Navy, unassigned to fleet	1/26/2001	CVN 68
75	KITTY HAWK	USS	CV 63	CV	03363	Active, in commission	4/29/1961	CV 63
76	JOHN F. KENNEDY	USS	CV 67	CV	03367	Active, in commission	10/12/2000	CV 67
77	ENTERPRISE	USS	CVN 65	CVN	03365	Active, in commission	9/1/1960	CVN 65
78	NIMITZ	USS	CVN 68	CVN	03368	Active, in commission	5/3/1975	CVN 68
79	DWIGHT D. EISENHOWER	USS	CVN 69	CVN	03369	Active, in commission	10/18/1977	CVN 68
80	CARL VINSON	USS	CVN 70	CVN	20993	Active, in commission	3/13/1982	CVN 68
81	THEODORE ROOSEVELT	USS	CVN 71	CVN	21247	Active, in commission	10/25/1986	CVN 68
82	ABRAHAM LINCOLN	USS	CVN 72	CVN	21297	Active, in commission	11/11/1989	CVN 68
83	GEORGE WASHINGTON	USS	CVN 73	CVN	21412	Active, in commission	7/4/1992	CVN 68
84	JOHN C. STENNIS	USS	CVN 74	CVN	21847	Active, in commission	12/9/1995	CVN 68
85	HARRY S. TRUMAN	USS	CVN 75	CVN	21853	Active, in commission	7/25/1998	CVN 68
86	RONALD REAGAN	USS	CVN 76	CVN	22178	Active, in commission	7/12/2003	CVN 68
353	ORISKANY		CV 34	CV	03334	Stricken	7/30/1997	CV 19
359	SARATOGA		CV 60	CV	03360	Stricken, available for donation as a museum and memorial	1/12/2000	CV 59
363	RANGER		CV 61	CV	03361	Stricken, on donation hold as a museum and memorial	3/8/2004	CV 59
420	INDEPENDENCE		CV 62	CV	03362	Stricken, to be disposed of, type of disposal not known	3/8/2004	CV 59
421	CONSTELLATION		CV 64	CV	03364	Stricken, to be disposed of, type of disposal not known	12/2/2003	CV 63
441	MIDWAY		CV 41	CV	03341	Donated as a Museum and Memorial	8/29/2003	CV 41
442	YORKTOWN		CVS 10	CVS	03312	Donated as a Museum and Memorial	8/15/1974	CVS 10
443	INTREPID		CVS 11	CVS	03313	Donated as a Museum and Memorial	4/27/1981	CVS 11
444	HORNET		CVS 12	CVS	03314	Donated as a Museum and Memorial	5/26/1998	CVS 10
534	CORAL SEA		CV 43	CV	03343	Disposed of by scrapping, dismantling	9/8/2000	CV 41
535	BON HOMME RICHARD		CVA 31	CVA	03331	Disposed of by scrapping, dismantling	2/4/1992	CVA 19
774	AMERICA		CV 66	CV	03366	Disposed of in support of Fleet training exercise	5/14/2005	CV 63
						Disposed of, sold by Defense Reutilization and Marketing Service (DRMS) for		

DataTableOriginal DataTableCopy PivotTable

Appendix: Organization by ship status

In this appendix, we discuss the organizational structure by ship status in the *PivotTable* sheet in *Integrated Ship Database*. First, we discuss our overall organization and how we derived it from the NVR's presentation on ship status. Then we present our organizing structure. We show the specific NVR status definitions within each status category.

Overall organization

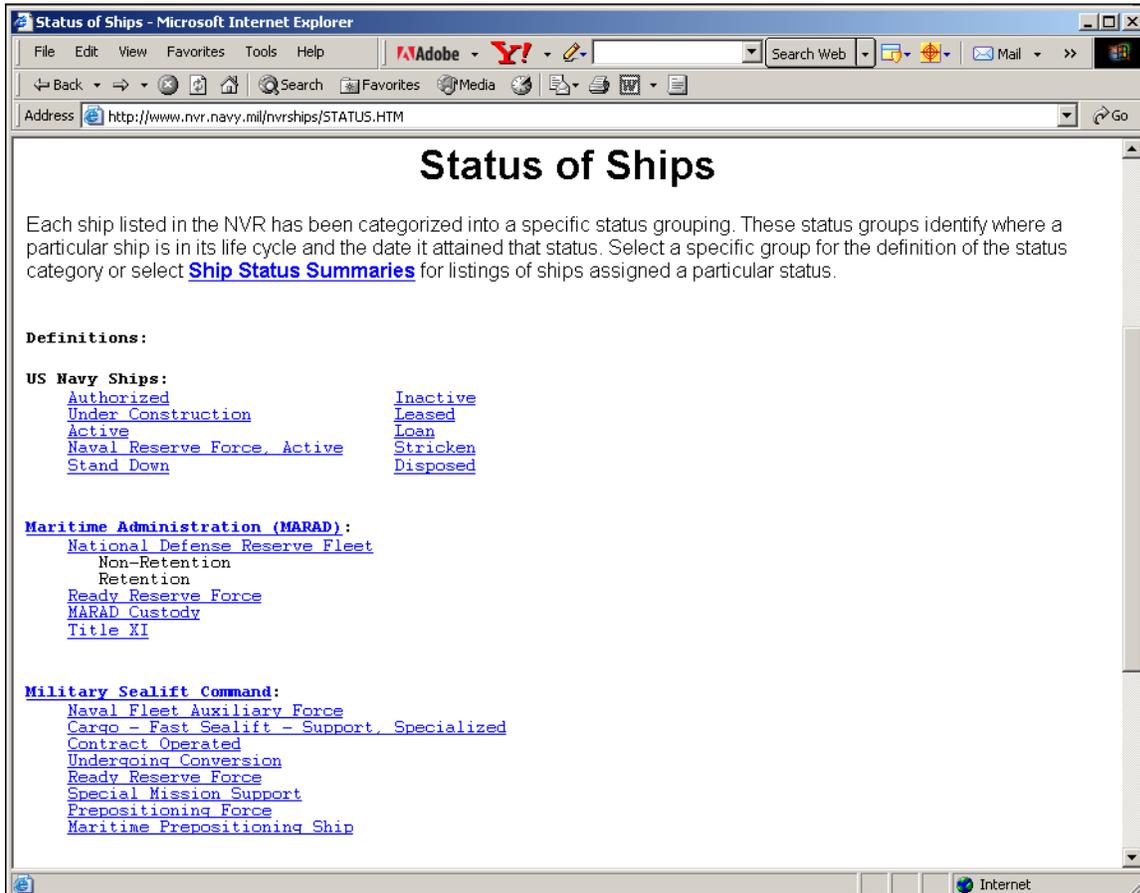
NVR's method

We based our method of organization on the NVR's structure in figure 26. The first level of organization distinguishes between Navy, MSC, and MARAD custody. The organizing principle for the next level of organization varies within each group.

- The principle for Navy ships is generally based on the “cradle to grave” life-cycle of a ship. In addition, commissioned vessels in the Active fleet are distinguished from those in the Naval Reserve Fleet, Active.
- The structure for MSC ships revolves around its four business programs: the Naval Fleet Auxiliary Force Program, the Special Mission Program, the Prepositioning Force Program, and the Sealift Program.
- The organization for MARAD ships is based on the structure of the NDRF in terms of RRF, Custody, Retention, and Non-Retention programs discussed in [6].

NVR also defined its ship status organization as shown in the list in figure 5. That list includes: ten Navy life-cycle groups; four groups related to MSC business programs and one group for MSC contract-operated ships; one group for ships in MARAD custody; and one *Special, Miscellaneous* group that consists of an assortment of MARAD and MSC ships.

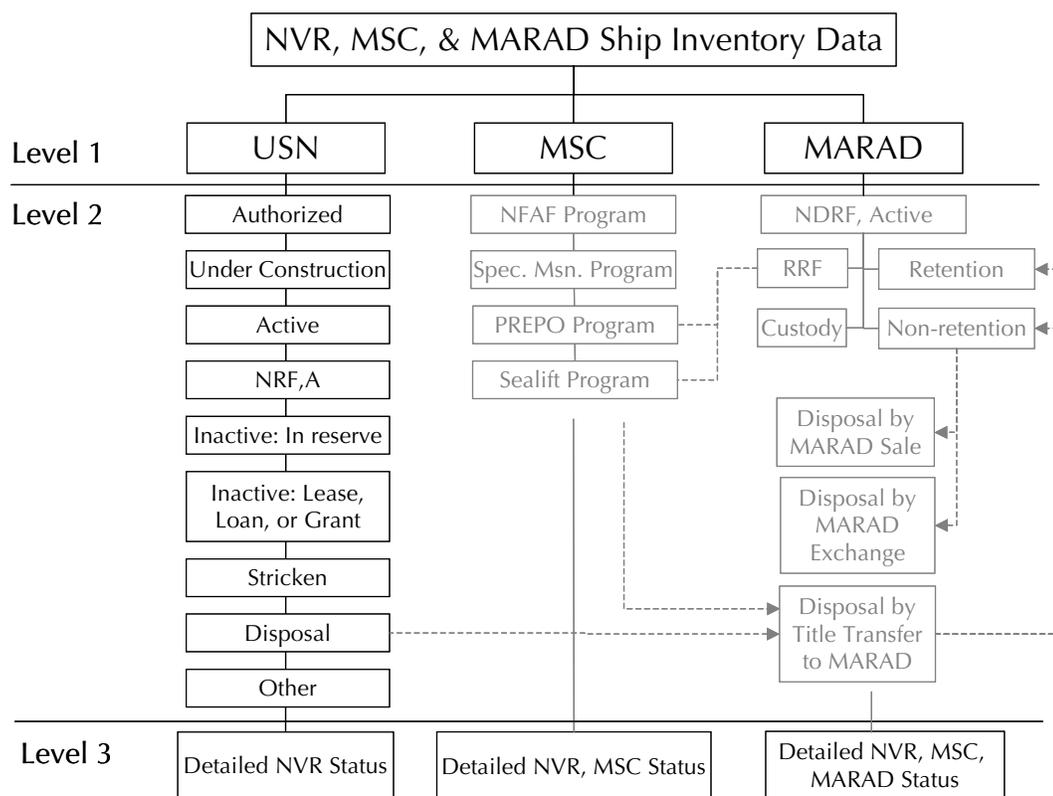
Figure 26. Status of Ships organization from the NVR



Our structure

We distilled our organizing structure out of the various schemes we found. It is similar to all of them, but not identical to any of them. Figure 27 summarizes our approach.

Figure 27. Status organization for *Integrated Ship Database* pivot table^a



a. The Level 2 structure under USN is actually used in *PivotTable*. The Level 2 structures under MSC and MARAD are not explicit in *PivotTable*, but are notional. This is the reason for their lighter appearance.

Our structure comprises three levels, at least conceptually. The top level distinguishes records by custodian: Navy, MSC, or MARAD. The lowest level is the detailed status description in the source database: For the records from the NVR, we used the specific NVR status. For the MSC records not in the NVR, we assigned one of the NVR status descriptions based on program descriptions in the *MSC Ship Inventory*

system. For MARAD ships not in the NVR, we assigned the status: *MARAD/NDRF, Not in NVR*. The *MARAD NDRF Program-Type/Status* field elaborates further on these records.

The middle level is less straightforward. The Level 2 structure under USN is the life-cycle structure We use these states explicitly in the *Status Category* grouping in *PivotTable*.

The Level 2 structures under MSC and MARAD do not explicit appear in *PivotTable*. They are conceptually reasonable, however, in that they underlie the detailed status descriptions in the NVR and are consistent with the several higher-level depictions of NVR status categories.

In the following sections, we present NVR definitions for the status groups in Level 2 and the detailed status descriptions in Level 3.

U.S. Navy

The Level 2 definitions from NVR for USN ships are quoted below. The Level 3 specific descriptions in the database are italicized in the bulleted lists under each Level 2 group.

Authorized. “Funding has been approved by Act of Congress for new construction or conversion.”

— *Authorized, for US Navy construction*

Under Construction. “A contract has been awarded to a builder for new construction or conversion.”

— *Under construction in US by Navy, unassigned to fleet*

Active. “A ship or service craft that has been formally accepted by the Navy that is either in-service or in commission.”

— *Active, in commission*

— *Active, in service.*

Naval Reserve Force, Active. “Ships of this category are still commissioned ships. They have a reduced or skeletonized crew of

active duty personnel assigned to provide training of assigned reservists for limited operations and maintenance. Under mobilization, reservists assigned to a particular ship will be activated, complementing the active duty personnel.”

— *Naval Reserve Force, Active*

Stand Down. “Start of the inactivation cycle. These hulls are not counted in either the active or inactive fleet counts.”

— *In Commission, in Reserve (Stand Down), commencement of inactivation availability*

Inactive. “A ship or service craft that has been taken out of commission or out of service for retention as a mobilization asset or for pending disposal.”

— *Inactive, Out of Commission, in reserve*

— *Inactive, out of service, in reserve*

— *Inactive, reinstated in the Naval Vessel Register, in reserve, out of Commission*

Leased. “A ship or service craft that has been inactivated and leased to a foreign government for a specified period of time with title retained by the US Navy.”

— *Leased (not SAP)*

— *SAP, loaned or leased*

— *SAP, grant aid*

Loan. “A ship or service craft owned by the US Navy and loaned to contractors or scientific institutions.”

— *Loaned (not SAP), loan was renewed on date shown in “Status Date”*

— *Loaned (not SAP), loan was effective/ renewed on date shown in “Status Date”*

— *Loaned indefinitely and carried in the Ship Donation Program as a Museum and Memorial*

Stricken. “A ship or service craft formally removed from the Naval Vessel Register by SECNAV on recommendation of CNO. A legal preliminary to disposal.”

- Scrapping, Recycling⁵
 - *Stricken, to be disposed of by submarine recycling*
 - *Stricken, to be disposed of by scrapping*
 - *Stricken, to be disposed of by recycling*
- Navy Sale
 - *Stricken, to be disposed of by the Security Assistance Program (SAP), for cash sale*
 - *Stricken, sold, but Contractor defaulted, repossessed by the Navy, contract terminated*
 - *Stricken, to be disposed of by Navy sale*
 - *Stricken, sold, but Contractor defaulted, repossessed by the Navy, contract terminated, to be resold*
- Donation, Historic Memorial
 - *Stricken, on donation hold as a museum and memorial*
 - *Stricken, retained by Navy as museum*
 - *Stricken, available for donation as a museum and/or memorial*
 - *Stricken on 08/20/1994, moved from donation hold status to disposal as an experimental ship and then returned to donation hold status again*
- Experimental/Target
 - *Stricken, to be disposed of in support of Fleet training exercise”*
- Transfer to other government agencies, etc.

5. The lists of Level 3 status descriptions for *Stricken* and *Disposal* are quite long. We grouped them as shown here as an aid to understanding.

— *Stricken, to be disposed of by transfer to government agencies, activities, foreign countries (not SAP), MARAD, Sea Scouts, etc.*

- Retain

— *Stricken, to be disposed of, retain as logistics support asset*

— *Stricken, to be disposed of, retain as submarine moored training ship*

- Other

— *Stricken*

— *Stricken, to be disposed of, type of disposal not known*

Disposed. “Navy assets must first be stricken from the Naval Vessel Register before they can be disposed of. Once stricken their disposition can be by several methods: Scrapping; Transfer to MARAD; Foreign Transfer; Experimental/Target; Donation; Historic Memorial; Transfer to Other Government/Non-Government Agencies; and Navy Sale.”

- Scrapping, Recycling⁵

— *Disposed of, sold by Defense Reutilization and Marketing Service (DRMS) for scrapping*

— *Disposed of by scrapping, cannibalization*

— *Disposed of, sold for scrapping*

— *Disposed of by scrapping, dismantling*

— *Disposed of by submarine recycling*

— *Disposed of by recycling*

— *Disposed of, resold by Defense Reutilization and Marketing Service (DRMS) for scrapping*

— *Disposed of, sold by Defense Reutilization and Marketing Service (DRMS) for reuse/conversion*

- Foreign transfer

- *Disposed of through the Security Assistance Program (SAP), transferred, cash sale, ex-US fleet hull foreign military sale case number assigned*
- *Disposed of through the Security Assistance Program (SAP), transferred, Foreign Assistance Act (FAA) Section 516, Southern Region Amendment*
- *Disposed of, built in US for foreign government (not SAP)*
- *Disposed of, hull transferred to foreign government (not SAP)*
- *Disposed of through the Security Assistance Program (SAP), transferred, grant aid, ex-US fleet hull*
- *Disposed of through the Security Assistance Program (SAP), transferred, Foreign Assistance Act (FAA) Section 519, Southern Region Amendment*
- *Disposed of through the Security Assistance Program (SAP), transferred, Foreign Assistance Act (FAA) Section 517, Southern Region Amendment*
- *Disposed of through the Security Assistance Program (SAP), transferred, grant aid, continental US constructed for SAP*
- *Disposed of through the Security Assistance Program (SAP), transferred, Military Assistance Service Funded, ex-US fleet hull*
- **Experimental/target**
 - *Disposed of in support of Fleet training exercise*
 - *Disposed of, hull stricken, for use in test and research work*
- **Transfer to other government/non-government agencies**
 - *Disposed of by transfer to other Government Agencies, States, Schools, Sea Scouts, etc.*
- **Donation, Historic Memorial**
 - *Donated as a Museum and Memorial*
 - *Dedicated as a Memorial*
 - *Donated as a Memorial*

- Miscellaneous

- *Disposed of by abandoning, burning, scuttling, or sinking*
- *Disposed of, destroyed by enemy action with the Japanese in World War II*
- *Disposed of by return to owner*
- *Disposed of by navy title transfer*
- *Disposed of, hull stricken, disposition unknown, data shown is stricken*
- *Disposed of, sold by Defense Reutilization and Marketing Service (DRMS) for reuse and conversion to a power barge*

Other. One ship, the *Integrity* (AGOS 24), was not categorized into another USN status group because of its peculiar and unique status title. The NVR does not have a status category Level 2 named, “Other.” We added it, to accommodate this exception.

- Hull number assigned, authorized to be built but never awarded, authorization cancelled

Military Sealift Command

The Military Sealift Command organizes itself around four business programs. We quote the NVR descriptions for these programs and present the associated Level 3 status titles in italics.

Naval Fleet Auxiliary Force. “The NFAF provides direct support for Navy combatant ships allowing them to remain at sea for extended periods of time. These ships perform underway replenishment services for Navy battle groups and deliver food, fuel, spare parts and ammunition. Some NFAF ships provide ocean towing and salvage services. NFAF ships are crewed by civil service mariners and each ship carries Navy departments ranging in size from four to forty-five people.”

“Civilian crews operate the ships and perform underway replenishment and provide other logistics services to the fleet. Military personnel provide communications support, coordinate supply operations

and conduct military helicopter operations. In addition to logistics operations, the NFAF has two hospital ships, USNS *Mercy* (AH 19) and USNS *Comfort* (AH 20), designed to provide emergency on-site medical care for our US forces in a war or contingency. These two ships are maintained in an Reduced Operating Status (ROS) but can be fully operational, crewed, and ready for deployment within five days with 1,200 active duty medical personnel and 70 civil service mariners.”

— *Military Sealift Command (MSC) Naval Fleet Auxiliary Force*

— *Reactivated and assigned to the Military Sealift Command (MSC) Naval Fleet Auxiliary Force*

Special Mission Program. “Ships of this type are both U.S. government-owned and chartered vessels and are operated by civil service mariners or mariners employed by companies under contract to MSC. Military and civilian scientists and technicians carry out unique missions on various types of ships. SMSs⁶ provide highly specialized support services for their customers and often work in some of the most remote areas in the world. Some of SMSs’ missions are: oceanographic surveys; missile tracking; coastal surveys; cable laying and repair; submarine escort; deep submergence rescue support; and other Navy operations.”

— *Military Sealift Command (MSC), Special Mission Support*

Positioning Program. “The Military Sealift Command (MSC) has operational control of MSC chartered commercial ships and MARAD Ready Reserve Force (RRF) ships stationed at Diego Garcia and Guam/Saipan for the support of U.S. Army, Air Force, and Navy Requirements.”

Army Prepositioning Afloat (APA). “Currently there are 12 Army PREPO ships deployed to USCINCPAC AOR as part of the Afloat Prepositioning Force (APF). These ships carry Army War Reserve Stocks No. 3 (AWR-3) cargo and consist of seven RO/ROs carrying Army unit equipment. One Auxiliary Crane Ship (ACS), three LASH ships carrying ammunition, rations, and other non-ammunition cargo, and

6. SMS: Special Mission Ship.

one Flo-Flo/Semisubmersible ship which carries Army port support equipment. AWR-3 ships carry a US Army Brigade Afloat along with Combat Service Support and Humanitarian Assistance cargo. Eventually constructed or converted Large Medium Speed RO/ROs (LMSR) will replace the RRF ships supporting the APA program.”

“*US Air Force (USAF) Sponsored PREPO Ships.* Two PREPO ships, one LASH and one breakbulk, carry USAF munitions.”

“*US Navy (USN) Sponsored PREPO Ships.* One heavy lift/breakbulk ship carries a 500-bed combat tactical zone US Navy fleet hospital. This cargo is stored in ISO units within controlled temperature/humidity limits.”

“*Defense Fuel Supply Center (DFSC).* There are three PREPO tankers carrying petroleum (POL) products for use by service components as part of the prepositioned war reserve program of the DFSC. Two of these tankers are equipped with Offshore Petroleum Discharge System (OPDS) and are capable of in-stream discharge of POL. The third PREPO tanker is the USNS *Henry J. Kaiser* (T-AO 187) and is capable of console operations with additional manning and rig activation.”

— *Military Sealift Command (MSC), in service, contract operated {Prepositioning Program}*⁷

— *Special, chartered by MSC, listed here as part of the U.S. Navy Ship Battle Forces {Prepositioning Program}*

— *Military Sealift Command (MSC) {Prepositioning Program}*⁸

Sealift Program. “The mission of the Sealift Program is to provide ocean transportation to the Department of Defense by meeting its

7. The status title in the NVR does not indicate the specific MSC program for Prepositioning and Sealift ships. The MSC Ship Inventory web site does distinguish between these two programs. As a matter of information and convenience, we have appended the program name in brackets to the NVR status description.

8. We found some ships in the MSC Ship Inventory that were not in the NVR. We added them to the database for completeness. For these ships, we chose the descriptive status title shown here.

sealift requirements in peace, contingency and war with quality, efficient cost-effective assets and centralized management. Sealift is divided into three separate project offices: Tanker Project Office, Dry Cargo Project Office and the Surge Project Office.”⁹

“Tanker Project Office. MSC's Tanker Project Office works closely with the Defense Energy Support Center to transport petroleum products to DoD storage and distribution facilities around the world... The government-owned tankers and one of the long-term chartered ships are capable of conducting underway replenishment with Navy fleet oilers to provide additional logistics support to the fleet in time of need... In addition to the primary mission of providing transportation of fuel for the DESC, MSC's chartered tankers perform unique missions such as refueling the National Science Foundation's McMurdo Station in Antarctica as well as fuel for the Thule Air Base in Greenland. MSC also operates a shallow-draft shuttle tanker between Korea and Japan.”

“Dry Cargo Project Office. The Dry Cargo Project Office handles all Department of Defense cargo requirements that cannot be accommodated by regularly scheduled ocean liner service. Nearly all peacetime DOD cargo is shipped via U.S. flagged contracted or government-owned ships. During a military contingency, additional vessels may be chartered to expand sealift capabilities to meet additional demand... MSC's dry cargo ships carry engineering and construction equipment, military vehicles, helicopters, ammunition and supplies.”

“Surge Project Office. The Surge Project Office manages strategic sealift ships that can be activated from reduced operating status to support the U.S. military in exercises, contingencies and war... Ready Reserve Force ships are owned and maintained by the U.S Department of Transportation's Maritime Administration at strategic locations around the U.S. coasts near Army loading ports. Normally kept in four-, five-, 10- or 20-day reduced operating status, the 59 militarily useful ships come under MSC control when activated. Ships may be

9. In the absence of a description of MSC's Sealift program in the NVR, we used this description from the MSC web site.

activated for humanitarian operations, military exercises and contingencies and for war.”

- *Military Sealift Command (MSC), {Sealift Program}*
- *Military Sealift Command (MSC), Cargo - Fast Sealift Ships (FSS) {Sealift Program}*
- *Military Sealift Command (MSC), in service, contract operated {Sealift Program}*

Maritime Administration

The NVR organizes ships under MARAD custody, primarily in terms of the National Defense Reserve Fleet and the Ready Reserve Force.

National Defense Reserve Fleet. “The NDRF, under the custody of MARAD, is an inactive reserve source of basic Merchant design type ships that could be activated within 20 - 120 days to meet the shipping requirements of the United States during national emergencies. These merchant vessels are available for use in both military and non-military emergencies, such as commercial shipping crises... Naval auxiliaries are maintained at the fleet by MARAD on a retention basis for the Navy.”

- “Non-Retention – Ships in this category are no longer militarily or non-militarily useful assets and are scheduled for scrapping or they can be donated to individual US states for use as artificial fishing reefs.”
- “Retention – Ships in this category are militarily useful assets which are titled to either MARAD or to the Navy.”

Ready Reserve Force. “The RRF was created on 14 February 1977 specifically to enhance the readiness of sealift to respond rapidly in any contingency. The RRF (a quick response subset of the NDRF) is a select group of ships within the NDRF, which are relatively modern, highly militarily useful ships, rigorously maintained to meet Coast Guard and American Bureau of Shipping standards. They are crewed by Maritime Administration (MARAD) personnel in an increased

state of readiness that would permit their activation within four, five, ten and twenty days.”

The NVR defines other status groups for MARAD in figure 26 as follows:

MARAD Custody. “Ships or service craft maintained and laid up at MARAD facilities on a temporary basis when the Navy cannot accommodate the assets at its inactive fleet facilities. During this lay-up period, the Navy pays rent to MARAD for the pier space.”

Title XI. Ships or service craft acquired by MARAD following default on MARAD-guaranteed mortgages.”

The specific status descriptions in the NVR for ships under MARAD custody include the following:

- *Special, MARAD titled ship, listed here as part of the U.S. Navy Ship Battle Forces {Sealift Program/RRF}*
- *Special, Miscellaneous (MARAD-Titled, RRF) {Prepositioning Program}*
- *Special, Miscellaneous (MARAD-Titled, RRF) {Sealift Program}*
- *Military Sealift Command (MSC), MARAD custody - (NDRF)*
- *Military Sealift Command (MSC), MARAD custody - (RRF) {Sealift Program}*

“Disposed of” ships under MARAD custody

We noted that many of status titles in the USN/MSC *Disposed* status category involved sale or transfer of some kind to MARAD. In all cases, the NVR lists “MARITIME ADMINISTRATION (NATIONAL DEFENSE RESERVE FLEET)” as Custodian. As a result, we moved them from the *Disposed* status group to the MARAD group. We did retain the NVR’s descriptions of these ships, which include:

- *Disposed of by MARAD sale*
- *Disposed of by MARAD exchange*

- *Disposed of by Navy title transfer to the Maritime Administration*
- *Disposed of by transfer to Maritime Administration (NDRF) for mobilization*

The flow diagram under MARAD Level 2 in figure 27 depicts the relationship of these disposal categories as suggested by [5] and [6].

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Glossary

AOR	Area of responsibility
APA	Army Prepositioning Afloat
APF	Afloat Prepositioning Force
BRF	Beaumont Reserve Fleet
CHINFO	Chief of Information
CIS	CNA Interactive Software
CNO	Chief of Naval Operations
DANFS	<i>Dictionary of American Naval Fighting Ships</i>
DESC	Defense Energy Support Center
DFSC	Defense Fuel Supply Center
DRMS	Defense Reutilization and Marketing Service
FAA	Foreign Assistance Act
FSS	Fast Sealift Ship
GSA	General Services Administration
ISO	International Organization for Standardization
JRRF	James River Reserve Fleet
LASH	Lighter Aboard Ship
LMSR	Large Medium Speed RO/RO
MARAD	Maritime Administration

MSC	Military Sealift Command
NDRF	National Defense Reserve Fleet
NFAF	Naval Fleet Auxiliary Force
NFF	Navy Fact File
NHC	Naval Historical Center
NRF, A	Naval Reserve Force, Active
NVR	Naval Vessel Register
OPDS	Offshore Petroleum Distribution System
PMARS	Property Management & Archive Record System
POL	Petroleum, oil, & lubricants
PREPO	Prepositioned, prepositioning
RO/RO	Roll-on / Roll-off
ROS	Reduced operating status
RRF	Ready Reserve Force
SAP	Security Assistance Program
SASDT	Ships and Aircraft Supplemental Data Tables
SBRF	Suisan Bay Reserve Fleet
SECNAV	Secretary of the Navy
SMS	Special Mission Ship
UIC	Unit Identification Code

References

- [1] *NVR—Naval Vessel Register—The Official Inventory of US Naval Ships and Service Craft*. Naval Sea Systems Command (NAVSEA) Shipbuilding Support Office (NAVSHIPSO). Sep 2005 (<http://www.nvr.navy.mil>)
- [2] *United States Navy Fact File*. U.S. Navy Chief of Information. Sep 2005 (<http://www.navy.mil/navydata/fact.asp>)
- [3] *MSC Ship Inventory*. Military Sealift Command. Sep 2005 (<http://www.msc.navy.mil/inventory/>)
- [4] *Dictionary of American Naval Fighting Ships*. Naval Historical Center. Sep 2005 (<http://www.history.navy.mil/danfs/>)
- [5] *PMARS Property Management & Archive Record System*. U.S. Department of Transportation, Maritime Administration. Sep 2005 (<http://www.pmars.imsg.com>)
- [6] *National Defense Reserve Fleet Inventory—For the month ending August 31, 2005*. U.S. Department of Transportation, Maritime Administration, Sep 2005 (http://www.marad.dot.gov/Offices/Ship/Current_Inventory.pdf)

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