EXHIBIT NO. 6

NAVY EXHIBIT

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(Item 1 is a map of the North Pacific Ocean showing the disposition of the United States Pacific Fleet on 7 December, 1941. This map is printed as Item No. 8 in EXHIBITS-ILLUSTRATIONS to Proceedings of Joint Committee)

TABLE OF DISTANCES

The following table presents distances between important U. S. Pacific outposts and other points in the Pacific Ocean (one nautical mile equals 11/8 land miles; all distances are shortest navigable distances):

PEARL HARBOR to-	Nautical miles	MIDWAY to-Con.	Nautical miles
San Francisco		Guam	2, 301
San Diego	2, 278	Saipan	
Los Angeles (Long Bea		Manila	
Panama		WAKE to—	,
Seattle		Yokohama	1,740
Midway	1, 134	Hitokappu (tennei)_	
Wake		Sasebo	
Johnston		Ominato	
Canton Islands		Kwajalein	
Hilo		Eniwetok	533
Palmyra		Truk	
Kwajalein		Guam	1, 334
Dutch Harbor		Manila	2,772
Truk	3,028	MANILA to-	
Samoa		Pearl Harbor	4, 767
Manila		Midway	
Yokohama (Yokosuka	3, 397	Wake	
Sasebo		Guam	1,499
Kure	3, 683	San Francisco	6, 221
Ominato		Palao	
Hitokappu Nan (Tenno		Takao	495
MIDWAY to-		Sama (Hainan)	720
Yokohama	2, 250	Sasebo	1, 349
Hitokappu (Tennei)		Yokohama	1,758
Sasebo		Shanghai	
Ominato	2, 260	Hong Kong	631
Wake		Singapore	1, 330
Kwajalein	1, 425	Saigon	
Truk	2, 146	Davao to Palao	600

ITEM 3

(Item 3 is a map of the Hawaiian Islands showing fleet operating areas in the Hawaiian area. This Map is printed as Item No. 9 in EXHIBITS-ILLUSTRATIONS to Proceedings of Joint Committee.)

Ітем За

(Item 3a is a map of the Hawaiian Islands showing U. S. Naval Installations in the Hawaiian area. This map is printed as Item No. 10 in EXHIBITS-ILLUSTRATIONS to Proceedings of Joint Committee.)

Time comparison tables for each hour of the day at Greenwich, Washington, D. C., San Francisco, Hawaii, Japan, and Manila on December 6, 7 and 8, 1941

GREENWICH	WASH. D. C.	SAN FRANCISCO	HAWAII	JAPAN	MANILA
0000	1900 1	1600 1	1330 1	0900 1	0000 1
0100	2000 📑	1700	1430	1000	0900
0200	/ 2100 ⁶	1800	1530	1100	1000
0300	\ 2200 ;	1900 [76]	1630	1200	1100
0400	/ 2300 A	2000 ທີ	1730 🕏	1300	1200
0500	`ōōōō ×	2100 宮	1830 🛴	1400	1300
0600	0100	2200	1930 ല്ല	1500 🕏	1400 र
0700	0200	2300	2030	1600 5	1500
0800	0300	0000	2130	1700 2	1600 ·
0900	0400	0100	2230	1800	1700
1000	0500	0200	2330 🗸	1900	1800
1100	0600	0300	0030	2000	1900
1200 1	0700 17	0400	0130	2100	2000
1300	0800	0500	0230	2200	2100
1400 2	9900 · DEC	0600	0330	2300	2200
1500	1000 🛱	0700 61	0430	0000	2300
1600	1100	0800	0530	0100	0000
1700	1200	0900 曽	0630 1	0200	0100
1800	1300	1000	0730	0300 -176	0200
1900	1400	1100	0830 °	0400	0300 176
2000	1500	1200	093C F	0500	0400
2100	1600	1300	1030	0600	0500
2200	1700	1400	1130	0700	0600
2300 ₩	1800 ₹	1500 ₩	1230 ₩	0800 ₩	0700 4

GREENWICH	WASH. D. C.	SAN FRANCISCO	HAWAII	J.\PAN	MANILA
0000	1900 🔨	1600 ↑	1330 🛧	0900 1	0800 1
0100	2000	1700	1430	1000	0900
0200	2100 [7	1800	1530	1100	1000
0300	\ 2200 °.	1900 - 1761	1630	1200	.1100
0400	2300	2000	1730 1761	1300	1200
0500	0000	2100 2	1830 5	1400	1300
0600	0100	2200	1930 සු	1500	1400
0700	0200	2300	2030	1600 761	1500 1
0800	0300	<u>0000</u>	2130	1700	1600
0900	0400	0100	2230	1300	1700 日
1000	0500	0200	2330	1900	1800
1100	0600	0300	0030	2000	1900
1200	0700 1761	0400	0130	2100	2000
1300	0800	0500	0230	2200	2100
1400	0900 °	0600 1	0330	2300	2200
1500	1000	0700 61	0430	00000	2300
1600	1100	0800	0530	0100	0000
1700	1200	900 日	0630 7	0200	0100
1800	1300	1000	0730	0300 17	0200
1900	1400	1100	0830 .	0400 🚡	0300 1
2000	1500	1200	0930 日	0500 ·	0400
2100	1600	1300	1030	0600	0500 .
2200	1700	1400	1130	0700	0600 E
2300	1800 ↓	1500 ↓	1230 1	0800 1	0700 1

GREENVICH	WASH. D. C.	SAN FRANCISCO	HAWAII	JAPAN	MANILA
0000	1900 1	1600 🛧	1330 ↑	0900 ↑	0800
0100	2000 17	1700	1430	1000	0900
0200	5100 6	1800	1530	1100	1000
0300	2200	1900 1761	1630	1200	1100
0400	2300	2000 7	1730 🕏	1300	1200
0500	0000	2100 2	1830	1400	1300
0600	0100	2200	1930 은	1500 [76]	1400 उ
0700	0200	2300	2030	1600 👼	1500
0800	0300	0000 4	2130	1700 음	1600
0900	0400	0100	2230	1800	1700
1000	0500	0200	2330	1900	1800
1100	0600	0300	0030	2000	1900
1200	0700 - 1761	0400	0130	21.00	2000
1300 61	0800	0500	0230	2200	2100
1400 00	0900 5	0600 14,61	0330	2300	2200
1500- 莒	1000	0700	0430	0000	2300
1.600	1100	0300 5	0530	0100	00000 ↑
1700	1200	0900	0630 4	0200	0100
1800	1300	1000	0730 7	0300 4	0200
1900	1400	1100	0830 °	0400	0300 4
2000	1500	1200	0930 日	0500	0400
2100	1600	1300	1030	0600 日	0500
2200	1700	1400	1130	0700	0600
2300 ↓	1800 ↓	1500 ↓	1230	0000 1	0700

1. TABLE FOR CONVERTING NAVY THE TO CIVILIAN THE FOR EACH HALF HOUR OF THE DAY.

	TIE COL	NVERSICN	
NAVY	CIVILIAN	$\overline{NV\Delta \Lambda}$	CIVIPIAN
0000	MIDNIGHT	1200	NOON
0030	00:30 A.M.	1230	12:30 P.M.
0100	1:00 A.M.	1300	1:00 P.M.
0130	1:30 A.M.	1330	1:30 P.M.
0200	2:00 · A.M.	1400	2:00 P.M.
0230	2:30 A.M.	1430	2:30 P.M.
0300	3:00 A.M.	1500	3:00 P.M.
0330	3:30 A.M.	1530	3:30 P.M.
0400	4:00 A.M.	1600	4:00 P.M.
0430	4:30 A.M.	1630	4:30 P.M.
0500	5:00 A.M.	1700	5:00 P.M.
0530	5:30 A.M.	1730	5:30 P.M.
0600	6:00 A.M.	1800	6:00 P.M.
0630	6:30 A.M.	1830	6:30 P.M.
0700	7:00 A.M.	1900	7:00 P.M.
0730	7:30 A.M.	1930	7:30 P.M.
0800	8:00 A.M.	2000	8:00 P.M.
0830	8:30 A.M.	2030	8:30 P.M.
0900	9:00 A.M.	2100	9:00 P.M.
0930	9:30 A.M.	2130	9:30 P.M.
1000	10:00 A.M.	2200	10:00 P.M.
1030	10:30 A.M.	2230	10:30 P.M.
1100	ll:00 A.M.	2300	11:00 P.M.
1130	11:30 A.M.	2330	11:30 P.M.

ITEM V

Disposition of the U.S. Pacific Fleet at 8 a. m. on 7 Dec. 1941 (except ships in Pearl Harbor which are listed separately)

Location	Ship name	Ship No.	Remarks
	(Enterprise	CV 6	This group of ships was desig-
	Northampton	CA 26	nated Task Force Eight.
	Chester	CA 27	Location was about 200
	Salt Lake City	CA 25	miles west of Pearl Harbor
	Balch	DD 363	returning from Wake Is-
	Maury	DD 401	land. Ships consisted of
21-11N, 161-00W	Craven	DD 382) the following types:
	Gridley	DD 380	Aircraft Carrier 1
	McCall	DD 400	
	Dunlap	DD 384	Destroyers 9
	Benham Fanning	DD 397 DD 385	Total 13
	Ellet	DD 383 DD 298	10181 13
	(Ellet	1) 1) 230	This group of ships was desig-
			nated Task Force Twelve.
	(Lexington	CV 2	Location was about 460
	Chicago	CA 29	miles from Midway Island
	Portland	CA 33	enroute Midway. Ships
02 2037 170 2033	Astoria	CA 34	consisted of the following
23-30N, 170-30W	Porter Drayton	DD 356 DD 366	\ types:
	Flusser	DD 368	Aircraft Carrier 1
	Lamson	DD 367	Heavy Cruisers 3
	Mahan	DD 364	Destroyers 5
		22 001111111	metal 0
			Total 9
			This group of ships was des-
	(Indianapolis	CA 35	ignated Task Force Three. Ships consisted of the
	Hopkins	DMS 13	following types:
Off Johnston Island	Southard	DMS 10	Heavy Cruiser 1
OH FUNDOM ADMINISTRATION	Dorsey	DMS 1	Destroyer Mine-
	Elliot	DMS 4	sweepers5
	(Long	DMS 12	_
			Total 6
			(Location was in the Fleet
			Operating Area, about 25
	(Minneapolis	CA 36	miles south of Oabu.
	Chandler	DMS 9	Ships consisted of the fol-
21-N, 158-W	{Hovey		lowing types:
	Boggs	DMS 3	Heavy Cruiser 1
	Lamberton	DMS 2	Destroyer Mine- sweepers 4
			Sweepers
			Total 5
	(Plunger	SS 179	1
22N, 155W	Pollack	SS 180	Three submarines. About
The second secon	Pompano	SS 181	200 miles east of Oahu.
	(Litchfield	DD 336	(Destroyer. About 60 miles
20N, 159W) Dittermend	1717 000	southwest of Oahu.
2021, 2001	Thresher	SS 200	Submarine. About 60 miles
17NT 160W			southwest of Oahu.
17N, 166W	Robin	AM 3	Minesweeper. About 550
22N, 163W	Wright	AV 1	miles southwest of Oahu. Seaplane tender. About 300
2214, 105 W	Wilding	A V I	miles west of Oahu.
21N, 172W	Sonoma	AT 12	Ocean-going tug. Between
*****	001101114	11 12	Oahu and Wake.
Off Midway	Trout	SS 202	Submarine.
28N, 177W	Argonaut		Submarine. Near Midway.
27N, 175W	Regulus.	AK 14	Cargo ship. Near Midway.
19N, 167E	Tambor	SS 198	Submarine. Near Wake.
20N, 170E	Wm. Ward Burrows	AP 6	Transport. Enroute Wake.
Off Wake	Triton	SS 201	Submaring
7N, 161W	Kuala	AG 33	Enroute Palmyra, 60 miles
	Vinafishas	4 3 / OF	northeast.
Samas		AM 25	Minesweeper.
Samoa	Kingfisher	C 1 00	
Samoa 8S, 171E	Lcuisville	CA 28	Heavy cruiser. Escort duty
8S, 171E	Lcuisville		Solomons Is. area.
Samoa_ 8S, 171E	Lcuisville Pensacola		Solomons Is. area. Heavy cruiser. Escort duty
8S, 171E	Pensacola	CA 24	Solomons Is. area. Heavy cruiser. Escort duty Samoa area.
8S, 171E	Lcuisville		Solomons Is. area. Heavy cruiser. Escort duty Samoa area. Ocean-going tug. Honolulu
8S, 171E	Pensacola	CA 24	Solomons Is. area. Heavy cruiser. Escort duty Samoa area.

Disposition of the U.S. Pacific Flect at 8 a.m. on 7 Dec. 1941—Continued

Location	Ship name	Ship No.	Remarks
Honolulu	[Antares	AKS 3	Stores issue ship.
Honordia	[Vega	AK 17	Cargo ship.
v 1 1 70 1 m vv	Seagull	AM 30	Minesweeper.
Lahaina Roads, T. H	Arctic	AF 7	Stores ship. At degaussing
	Clark	DD 361	range.
	Cushing	DD 376	
	Perkins.	DD 377	
	Preston	DD 379	Shins at the Mare Island
	Smith	DD 378	Ships at the Mare Island Navy Yard consisted of
	Rathburne	DD 113	the following types:
	S-27	SS 132	Destroyers6
	S-28	SS 133	Submarines 5
Mare Island Navy Yard	Nautilus	SS 168	Oilers 3
	Cuttlefish	SS 171	Seaplane tender 1
	Tuna	SS 203	Stores ship1
	Kanawha	AO 1	Destroyer tender 1
	Sabine Kaskaskia	AO 25 AO 27	Total 17
	Pelican	AV 6	10181
	Bridge	AF 1	
	Dixie	AD 14	
Passage from San Diego to	Ballard	AVD 10	Seaplane tender.
Mare Island Navy Yard.			Ships at or off San Dlego
	Saratoga	CV 3	consisted of the following
	Concord	CL 10	types:
	Dent.	DD 116	Aircraft carriers 1
	Talbot	DD 114	Light cruisers 1
	Waters	DD 115 SS 123	Destroyers 3
San Diego	S-18 S-23		Submarines 4
	S-23 S-34	SS 139	Transport 1
	S-35	SS 140	Submarine rescue ves-
	Harris	AP 8	sel1
	Ortolan	ASR 5	Oiler1
	Cuyama	AO 3	m. 4.1
20 N 101 W	1 \		Total
33-N, 121-W	Sepulga	A O 20 A T 33	Oiler. Near San Diego.
San Pedro Los Angeles	Pinola Platte	OA 24	Ocean going tug.
Alameda, Cal	Procyon		Oiler. Stores ship.
	(Boreas		_
San Francisco	Aldebaran	AF 10	Stores ships.
Wilmington, Calif	Tippecanoe	AO 21	Oiler.
,			Ships in Puget Sound Navy
	[Colorado	BB 45	Yard:
Puget Sound Navy Yard	Casco	AVP 12.	Battleship
ager sound in a first	Williamson	AVD 2	Seaplane tenders 2
			Total
Seattle	Teal	AVP 5	Seaplane tender.
Yakutat Bay, Alaska	Gillis	AVD 12	Seaplane tender.
53-N 156-W	Brazos	AO 4	Oiler. About 600 miles east
		~~ ~	of Dutch Harbor.
10-S, 83-W	Richmond	CL 9	Light cruiser. Off Peru.
Balboa, C. Z		CL 11	Light cruiser.
11-N, 91-W	Fulton	AS 11	Submarine tender. Off
77 N 100 N	CAR	00 000	Guatemala.
17-N, 102-W	GAR	SS 206	Submarine. Off Mexico.

ITEM 6
Troop and cargo carriers west of Hawaii on 7 December 1941

Name of ship	Position on 7 Dec. 1941, 0800	Destination	Loading	Escort	Date departed Honolulu
S. Hawaiian Planter	1-S 167-W (between Honolulu and Samoa).	Samoa	General cargo	None	3 December.
S. Harry Luckenbach	12-N 165-W (between Honolulu and	Suva, Fijis	do	do	5 December.
. S. Jane Christensen	the Fiji Island). 10–N 163-W (between Honolulu and	Samoa	do	do	4 December.
. S. Mauna Loa	Samoa). 8-N 167-W (between Honolulu and	Suva, Fijis	do	do	3 December.
S. S. Chaumont	the Fiji Islands). 4–S 170–W (near Samoa)	Manila	Troops	U. S. S. Pensacola	29 November (Convoy No
S. S. Niagara	do	do	Some general eargo	do	4002). Do.
S. S. Republic.	do do	do	Troopsdo	dodo	Do. Do.
brook	do				Do.
. S. Bloemfountein	do	do	Troops and general cargo	OD	Do. Do.
S Admiral Halstead	do	do	dodo	do	Do.
J. S. A. T. Irving L. Hunt	6-N 167-W (between Fiji Islands and Honolulu).				Bound for Honolulu.
J. S. A. T. Scott	8-S 171-E (near Solomons Islands) do	do	Troops	U. S. S. Louisville	Do. Do.

In addition, the following ships were in the port's indicated.

	Location on
Name of ship:	7 Dec. 1941. 0800
S. S. Mariposa	
S. S. Portmar	Do.
S. S. Collingsworth	Port Darwin.
S. S. Perida	Do.
U. S. A. T. Liberty	Port Moresby.
M. V. Day Star	
S. S. Admiral Cole	Philippine Islands.
S. S. American Leader	
S. S. President Grant	
U. S. A. T. Ludington	

ITEM 7

(Item 7 is a map of the South coast of Oahu, T. H., showing the approaches to the Pearl Harbor Entrance Channel and the Inshore Patrol Area. This map is printed as Item No. 11 in EXHIBITS-ILLUSTRATIONS to Proceedings of Joint Committee.)

ITEM 8

(Item 8 is a map showing the Pearl Harbor Anchorage Plan, 7 December, 1941. This map is printed as Item No. 12 in EXHIBITS-ILLUSTRATIONS to Proceedings of Joint Committee.)

ITEM 9

List of ships present at Pearl Harbor at the time of the Japanese attack Dec. 7, 1941

Name	Class	Tonnage	Year com- pleted
Battleships:			
West Virginia	West Virginia	31, 800	1923
Maryland	do	31,500	1921
Tennessee	Tennessee	32, 300	1920
California	do	32,600	1921
Pennsylvania	Pennsylvania	33, 100	1916
Arizona	do	33, 100	1916
Nevada	Nevada	29,000	1916
Oklahoma	do	29,000	1916
Heavy cruisers:			
New Orleans	New Orleans	9, 950	1934
San Francisco	do	9, 950	1934
Light cruisers:			
St. Louis	St. Louis.	10,000	1939
-Helena	Helena	10,000	1938
	do	10,000	1938
Honolulu	do	9, 650	1937
Raleigh	Raleigh	7, 050	1922
	do	7, 050	1922
Destroyers:			
Bagley	Gridley	1, 500	1938
Patterson	do	1, 500	1938
	do	1, 500	1938
	do	1, 500	1937
	do	1, 500	1936
	do	1, 500	1937
Jarvis	do	1, 500	1937
Blue	do	1, 500	1938
Conyngham	Mahan	1, 500	1937
Reid	do	1, 480	1937
Tucker	do	1, 500	1937
	do	1, 500	1937
	do	1,500	1935
Cassin	do	1, 500	1935
Downes	do	1, 500	1936
Cummings	do	1, 465	1937

List of ships present at Pearl Harbor at the time of the Japanese attack Dec. 7, 1941—Continued

Name	Class	Tonnage	Year com- pleted	
Destroyers—Continued				
Selfridge	Porter	1,850	1937	
Phelps	do	1,850	1936	
	Farragut	1, 365	1934	
Monoghan	do	1, 395	1935	
		1, 395	1935	
Aylwin	do	1, 365	1935	
	do	1, 395	1935	
	do	1, 345	1934	
Worden	dodo_	1, 410	1935	
MacDonough	dodo.	1, 395	1935	
Schley	Flush Deck DD	1,060	1918	
Chew.	do	1,060	1918	
Allen		920	1917	
Submarines:				
Gudgeon	Tambor	1, 475	1941	
Tautog	do	1, 475	1940	
		1, 110	1933	
		2, 730	1929	
		1, 540	1932	
		1, 430	1914	
Destroyer minelayers:		1, 100	1	
Preble		1, 190	1920	
		1, 160	1918	
		1, 190	1920	
		1, 190	1920	
		1, 190	1920	
		1, 160	1918	
		1, 160	1918	
			1918	
Airolayer: Oglola		1, 160	1907	
Tiffelayer: Ogiala		6,000	1907	
Destroyer minesweepers:		1 100	1922	
		1, 190		
		1, 190	1921	
		1, 190	1922	
		1, 190	1921	
Minesweepers:		040	1010	
		840	1918	
Bodolink		840	1918	
V Ireo		840	1918	
		840	1918	
		840	1918	
Tern		840	1918	
uxiliaries:	n 1 11	10 100	1000	
Medusa	Repair ship	13, 480	1923	
Vestal	do	9, 435	1909	
	Battle damage, repair ship	9, 245	1918	
Neosho	Oiler	21,077	1941	
	do	16, 800	1919	
Dobbin	Destroyer tender	1, 245	1921	
Whitney	do	1, 245	1921	
Curtiss	Seaplane tender	13, 880	1940	
Tangier	do	17, 606	1940	
Avocet	Small seaplane tender	840	1918	
Swan	do	840	1918	
Thornton	Destroyer seaplane tender	1, 190	1919	
Hulbert	do	1, 190	,1918	
Argonne	Miscellaneous auxiliary	11, 400	1920	
Sumner	do	4, 400	1915	
Solace	Hospital ship	8,660	1927	
Castor	Store issue ship	13, 900	1939	
Pelias	Submarine tender	14, 200	1939	
Utab.	Target ship	19, 800	1909	
Navajo.	Oceangoing tug	1, 270	1940	
Ontario	dodo	1, 080	1912	
Pyro	Ammunition ship	7, 025	1920	
- 310	ZEIMINGHICION SHIP			
McFarland	Destroyer seaplane tender	1, 190	1920	

(Item 10 is a diagram showing air searches flown in the Hawaiian area (a) 6 December 1941, (b) prior to the Japanese attack 7 December 1941, and (c) after the Japanese attack 7 December 1941. This diagram is printed as Item No. 13 in EXHIBITS-ILLUSTRATIONS to Proceedings of Joint Committee.)

ITEM 11

Table summarizing number of Japanese planes taking part in attack

	Torpedo planes	Dive bombers	Horizontal bombers	Totals
Total number of planes making attacks (including those which repeated) Total number of planes (exclusive of those which repeated) Phase I (torpedo and dive-bomber attacks) Phase II ("Lull") Phase III (horizontal bomber attacks) Phase IV (dive-bomber attacks)	21 21 21	90 48 30 1 15 18 1 27	45 36 15 	156 105 66 15 48 27

¹ Engaged in earlier attacks.

ITEM 12
Status of Navy and Marine Corps aircraft in Hawaiian area, Dec. 7, 1941

UTILITY SQUADRONS

Location	Squadron	Number of planes	Туре	Number available	Number in oper- ating con- dition	Readiness in operating condition	Readiness of crews	Number partici- pating in combat	Service assignment
NAS, Pearl Harbor	VJ-1	18	9 J2F-4 9 JRS-1	18	18	Operational	Same as planes	0	Utility.
Ewa, Marine Air Station.	VJ-2 VJ-2 VMJ 252 VMJ-252	10 2 1 8	10 J2F-4	1	10 2 · 1 1 2 1 1 1	1 in repair	Same as planesdododododododododododododo	0	Do. Utility included in Patrol Plane Report. Normally based at Ewa. Utility. Do. Do. Do. Do. Utility (also included in Marine Scout Bomber Report).
NAS, Puunene (Maui)		8	4 JRB-1 1 J2V 1 JRF-4 2 BT-1	4 1 1 2	4 1 1 2	do dodo	do dododo	0 0 0 0	Utility. Do. Do. Do. Do.
NAS, Johnston Island Pearl Harbor Kanoehe		2 4 3 1	PBY-1	4 3 1	4 3 1	dodododo	do do	0 0 0	Utility (also included in Patrol Plane Report). Left by aircraft carriers. Do. Commandant's plane.

MARINE FIGHTERS AND SCOUT BOMBERS

Ewa	VMSB-231 VMSB-232	7 23	SB2U SBD	7 23	. 7 . 22	7 (operational)	Same as planesdo	0	General peacetime training. Do.
Do	VMF-211	11	F4F-3	11	10	der repair. der repair.	do	0	Same as above plus to cover the fleet when sortieing from Pearl Harbor.
Do Do	VMJ-252 VMJ-252	1	SBDSB2U	1	1 1	1 (operational)	do	. 0	Utility squadron. Do.
					PATROL	PLANES		4/1	
Kaneohe	VP 11 VP 12	12 12	PBY-5 PBY-5	12 12	12 11	On 4-hour notice 5 on 4-hour notice, 6 on 30-minute notice,	On 4-hour notice5 on 4 hours, 6 on 30-minute notice.	. 0	Fleet operations. Do.
	∇P 14	12	PBY-5	12	10	1 under repair. 4 on 4-hour notice, 3 on 30-minute notice, 3 in air, 2 under repair.		11	Fleet operations, 3 covering operating area south of Oahu.
Midway	VP 21	12	PBY-3	12	11	7 in air, 4 on 10-minute notice, 1 under re- pair.	do	0	Fleet operations, 4 as ready striking force; 5 search 120-170°; 2 rendezvous Lex- ington planes.
Pearl Harbor	VP 21 VP 22	1 14	PBY-3	1 14	0 12	1 under repair12 on 4-hour notice, 2	Same as planes		Repair. Fleet operations.
	VP 23	12	PBY-5	12	11	under repair. 11 on 4-hour notice, 1	do	0	Do.
	VP 24	6	PBY~5	6	- 5	under repair. 4 in air, 1 30-minute	do	0	4 planes, inter-type tactics.
Johnson Island	VJ-2 VJ-2	2 2	PBY-1	2 2	2 2	notice. Operationaldo	do	0	Utility. Do.

¹ WARD antisub action.

(Item 13 is a map of Oahu, T. H., showing the disposition, number, types, and operational and readiness condition of the U. S. Navy aircraft on 7 December 1941. This map is printed as Item No. 14 in EXHIBITS-ILLUSTRATIONS to Proceedings of Joint Committee.)

ITEM 14

Antiaircraft guns, by ship classes and types of guns

Units	Class	Туре	5-inch, 38-cal- iber	5-inch, 25-cal- iber	3-inch, 50-cal- iber	3-inch, 23-cal- iber	1.11 quad- ruple mount heavy AA ma- chine guns	.50 cal- iber AA ma- chinc guns	.30 cal- iber A A ma- chine guns	37 milli- meter-
-	Manada	Battleships		16	4			16		
2 2	Pennsulrania	do		16	4			16		
2	Tennessee	do			8			16		
1	Colorado	do		8	4			8		
1	West Virginia.	do		8	4			11		
2	New Orleans	Heavy cruisers Light cruisers		16	/4		4	16		
3	Brooklyn	Light cruisers.	8	16	6		6	24		
1	St. Louis	do	8		2 18		2	8		
2 8	Farragut	Destroyers	40		18			32		
8	Mahan	do do Destroyers do do	40					40		
8	Gridley	do	32					32		
ĭ	Allen	do			3			4		
2	Selfridge	do					4	4		
2	Flush-Deck	do				2		4		
4	Destroyer	High speed						24		
8	Destroyer	minesweep- ers. Light mine-				8		16		
ŭ	2700003011111	layers.								
5	Submarines				3			10		
1	Medusa	Repair ship			2			4		
1	Vestal	do			1			4		
1	Rigel	do			4			4		
1	Neosho	Oiler						4		
2	Ramapo Dobbin	Destroyer			8			8		
2	Doooth	tenders.			0					
1	Curlis	Seaplane tender.	4					10		
1	Tangier	do			4			8		
2	"Old Bird"	Small seaplane tenders. Ex-destroyer			4			4		
3	{Hulbert	seaplane	}					12		
	McFarland	seaplane tenders.	}							
1	Castor	Stores issue			4			4		
		ships.								
1	Antares	do.		,	4 4			2 4		
1	Argonne	Miscellaneous auxiliaries.			4			*		
1	Widgeon	Submarine rescue ves-			2			2	2	
		sel.								
1	Pelias	Sub tender				4		4		
1	Sacramento	Gunboat						12	12	1
6	Bird	Minelayers			12			12	1	
2	Tugs	TugAmmunition			1 2			4		
1	Pyro	ship. Store ship			4			4		
î	Oglala	Minelayer			ī					
	Totals		136	96	121	14	16	397	14	1

Crews also broke out of ships' arsenals numerous light landing force guns, .30 caliber Lewis machine guns and Browning automatic rifles, to augment standard antiaircraft batteries.

Damage to United States naval forces and installations resulting from the Japanese attack on the island of Oahu on 7 Dec. 1941

(a) The following United States ships were sunk or damaged at Pearl Harbor;

Туре	Name	Tonnage	Sunk
Battleships	Arizona	33, 100	Sunk.
	California	32, 600	Do.
	West Virginia	31,800	Do.
	Oklahoma	29,000	Capsized.
	Nevada	29,000	Heavily damaged.
	Maryland	31, 500	Damaged.
	Pennsylvania	33, 100	Do.
	Tennessee	32, 300	Do.
Light eruisers	Helena Helena	10,000	Heavily damaged.
,	Honolulu	10,000	Damaged.
	Raleigh	7,050	Heavily damaged.
Destroyers	Shaw	1, 500	Do.
	Cassin	1,500	Heavily damaged, burned,
	Downes.	1, 500	Do.
Repair ships	Vestal	9, 435	Badly damaged.
Minelayers	Oglala	6,000	Sunk.
Seaplane tenders	Curtiss	13, 880	Damaged.
Miscellaneous auxiliary	Utah	19,800	Capsized.

BATTLESHIPS

Arizona.—33,100 tons. Sank at her berth as a result of being hit by one or more aircraft torpedoes and about eight heavy bombs. One of the bomb hits (estimated as 2,000 pounds) exploded the forward magazines. The ship was considered to be a total wreck except for

material which could be salvaged and reassigned.

California.—32,600 tons. Sank at her berth as a result of hits by two aircraft torpedoes and one or more near bomb misses. Also received one large bomb hit on starboard upper deck abreast of foremast, which caused a serious 5-inch powder fire. She sank gradually for about 3 or 4 days and rested rather solidly on a mud bottom so that the quarterdeck was under about 12 feet of water and the port side of forecastle under about 3 feet of water.

West Virginia.—31,800 tons. Sank at her berth as a result of four or five aircraft torpedo hits and at least two bomb hits and rested on a hard bottom with all spaces flooded up to 2 or 3 feet below the main deck. Most of the damage from torpedoes was in the midship area, which was badly wrecked both below water and above water. A large bomb passed through the firetop and the boat deck and apparently exploded near the port side on the main or second deck. plosion caused considerable wreckage and a terrific powder and oil fire, which burned out the whole area and extended to the foremast structure up to and including the bridge. A second bomb hit the top of turret III and passed through the 6-inch top. The nature of the penetration indicated defective material. This bomb did not explode but caused damage to the slide of the left gun. Subsequently, another torpedo hole and parts of the torpedo were located aft under the counter.

Oklahoma.—29,000 tons. Capsized at her berth within 8 to 11 minutes after receiving three or more hits by aircraft torpedoes. The hull was 20° to 30° from being upside down with a considerable portion of the bottom and starboard side above water.

Nevada.—29,000 tons. Struck by one or more aircraft torpedoes and by at least five bombs and two near misses. Each of the near misses caused rupturing of the hull on the port and starboard bows, respectively. One bomb hit near the foremast, caused explosion and fire damage which wrecked the vertical area extending from the second deck to the bridge. Several bomb hits wrecked the forecastle from side to side forward of No. 1 turret, and this damage extended down to the second deck. Fragments from a bomb hit amidships caused considerable local damage to the mainmast, stack, and other structure and caused many casualties to 5-inch gun crews.

Maryland.—31,500 tons. Two bomb hits in the forecastle. One small bomb (probably 100 pounds) passed through the forecastle deck forward of the chain pipes and exploded on the main deck causing only a small amount of damage. The second bomb (probably 500 pounds) passed through port side of the ship about 12 feet under water and exploded in the construction and repair storeroom. This explosion wrecked flats and bulkheads in that area, and fragments caused numerous leaks in the sides and bottom. These were

temporarily patched without going into drydock.

Pennsylvania.—33,100 tons. One bomb hit near after 5-inch gun starboard side. The damage from bomb explosion was considerable, but not of a vital nature, although there were a large number of casualties and one gun was put out of commission. The damage did

not extend below the second deck.

Tennessee.—32,300 tons. Two bomb hits (probably 15-inch shell type). One of the bombs struck the center gun of No. 2 turret, causing a large crack which necessitated replacement of the gun. This bomb exploded and did considerable local fragment damage. Another similar bomb struck the top of No. 3 turret. This bomb was a dud and did no serious damage except for putting one rammer out of commission. The Tennessee also suffered serious damage aft in officers' quarters due to fire resulting from the great heat caused by the oil fire starting from the Arizona. The shell plates around the stern were somewhat buckled and joints broken.

LIGHT CRUISERS

Helena.—10,000 tons. Hit at frame 80 starboard side by aircraft torpedo causing the flooding of No. 1 and 2 firerooms and the forward engine room. The starboard engine was found to be seriously damaged. Temporary repairs to hull were completed at Pearl Harbor, and the vessel proceeded to Mare Island under two shafts to await

permanent repairs.

Honolulu.—10,000 tons. Damaged by large bomb (probably 500 pounds) which passed through deck and exploded 15 or 20 feet from the port side at frame 40. This explosion caused considerable damage to the hull and resulted in the flooding of storerooms and magazines in that area and also dimmed out the electric power cables of turret II. Most of the flooding resulted from rupture of a magazine flood seachest; the hull of the ship was not opened up but leaked some due to pulled joints and rivets. Permanent repairs were completed at Pearl Harbor.

Raleigh—7,050 tons. Hit by one aircraft torpedo amidships on port side which flooded the forward half of the machinery plant. The

ship was also hit by one bomb (probably 500 pounds) which passed through three decks and out the ship's side and finally exploded about 50 feet away. The damage from the explosion was not extensive but, together with the hole made in the side, caused serious flooding on the port side aft. This flooding was out of all proportion to the extent of damage and resulted from inability to close armored hatches tightly against the water head. The bomb struck only a few feet abaft of the gasoline stowage. Permanent repairs to the hull were completed at Pearl Harbor.

DESTROYERS

Shaw.—1,500 tons. Hit by one bomb while docked on floating dry-dock and by many fragments from another bomb which struck the drydock. The serious fire following the bomb hits resulted in blowing up of forward magazine and heat damage to shell plating in the forward areas. The after part of the ship was not seriously damaged. The Shaw was redocked on the same drydock on January 26, 1942, for

installation of a false bow at about frame 50.

Cassin and Downes.—Cassin was struck by one bomb and Downes by two (probably 500 pounds). One bomb explosion aft between the two vessels apparently knocked the Cassin partly off the drydock blocking and caused her to fall over on the Downes when the dock was being flooded during the raid. This caused a serious structural failure amidships and considerable local damage in way of the bridge. The torpedo warheads in the starboard tube of the Downes were set off and blew out the main deck and starboard side of the vessel in that area. This caused some damage to boilers and engines. A serious oil fire followed the explosion and caused extensive damage to the hull of both vessels. Fragments and explosions caused over 200 holes in the hull of the Cassin and probably well over 400 in the hull of the Downes.

REPAIR SHIPS

Vestal.—9,435 tons. Struck by two bombs (probably 500 pounds). One bomb hit forward and exploded in the steel shape storage which stopped a large part of the fragments and minimized damage considerably. The other bomb struck aft and exploded in the hold, causing a large number of fragment holes through the shell. Flooding aft caused the after part of the vessel to submerge to the main deck. The vessel was alongside the Arizona when the raid commenced and was beached at Aeia to prevent further sinkage.

MINELAYERS

Oglala.—6,000 tons. Sunk by one aircraft torpedo which passed under the ship from the starboard side and exploded against the starboard side of the *Helena*. Vessel sank slowly at 10–10 dock and capsized against the dock about 1½ hours after being struck.

SEAPLANE TENDERS

Curtiss.—13,880 tons. Struck on kingpost starboard crane by Japanese airplane out of control. This resulted in some wreckage and damage due to fire. Machinery of the crane was seriously damaged,

and the radio antennas were put out of commission. One bomb (probably 500 pounds) struck the forward end of the hangar on the port side off the center line, exploding on the second deck. The explosion and resulting fire caused a great amount of wreckage and loss of material.

MISCELLANEOUS AUX.

Utah.—19,800 tons. Struck by two, and possibly three, aerial torpedoes and capsized at berth. Ship was within a few degrees of being exactly upside down.

ITEM 16

U. S. NAVAL AND MARINE CORPS AIRCRAFT LOSSES

U. S. plane losses and damage to installations at Ford Island Naval Air Station, Kaneohe Naval Air Station, the marine air base at Ewa, and the *Enterprise* is shown in the following table:

1. Ford Island Naval Air Station.

(1) Plane losses.

Airborne	Non- airborne	Total
0 0 0 0 0 0	4 3 19 0 0 0	4 3 19 0 0 0 0
	0 0 0 0 0 0 0	airborne airborne

(2) Installations.—The only portion of this station subject to severe attack was the seaplane hangars and parking area in the southwest corner of the island.

Damage sustained to the station was as follows:

Hangar No. 6 was set on fire apparently as a result of a bomb explosion immediately to the east of the hangar and the consequent explosive action of the nearby patrol planes which were ignited by this blast. There were at least five bomb hits in the vicinity of Hangar No. 6, the largest producing a crater approximately 20 feet in diameter and 7 feet deep. The northeast corner of Hangar No. 6 was badly damaged by fire. In addition to the damage to the seaplane parking area, minor damage was inflicted on Hangar No. 38 by nearby bomb explosions.

2. Kaneohe.

(1) Plane losses.

	Airborne	Nonair- borne	Total
Fighters (VF) Scout Bombers (VSB) Patrol Bombers (VPB) Observation/Scouts (VO-VS) Utility (VJ) Training (VN) Transports (VR) Total	0 0 0 0 0 0 0	0 0 27 1 0 0 0	0 0 27 1 0 0 0 0

(2) Installations.—A complete hangar (No. I), in which planes were already stored, was destroyed together with the planes and with fire-fighting apparatus which had been brought there to fight the fire.

Two other hangars under construction, one almost completed, were not bombed. The seaplane parking area and the Aqua system were damaged.

3. Ewa.

(1) Plane losses.

	Airborne	Nonair- borne	Total
Fighters (VF) Scout Bombers (VSB) Patrol Bombers (VPB) Observation/Scouts (VO-VS) Utility (VJ) Training (VN) Transports (VR)	0 0 0 0 0	9 18 0 0 3 1 2	9 18 0 0 3 1 2
Total	0	33	33

(2) Installations.—Considerable damage was suffered by material, installations, machinery, tentage, and buildings at Ewa. Damage to Government motor vehicles was slight, but privately owned automobiles suffered heavily. Damage to aircraft was extremely heavy as the primary objective was aircraft on the ground and attacks were made on individual aircraft by enemy planes using explosive and incendiary bullets from extremely low altitudes.

4. Five Scout planes from the carrier *Enterprise* were lost.

ITEM 17

COMPOSITION OF TASK FORCE ALLOCATED TO PEARL HARBOR ATTACK

Striking force

Commanding Officer: CinC 1st Air Fleet, Vice Admiral Chuichi NAGUMO. Battleship Division 3 (1st Section) (HIEH, KIRISHIMA), 2 Battleships. Carrier Division 1 (KAGA, AKAGI).

Carrier Division 2 (HIRYU, SORYU).
Carrier Division 5 (SHOKAKU, ZUIKAKU), 6 Aircraft Carriers.

Cruiser Division 8 (TONE, CHIKUMA), 2 Heavy Cruisers.

Destroyer Squadron 1 (ABUKUMA), 1 Light Cruiser, 4 Destroyer Divisions, 16 Destroyers.

11 Train Vessels.

Advance expeditionary force

Commanding Officer: CinC 6th Fleet, Vice Admiral Mitsumi SHIMIZU. ISUZU, YURA, 2 Light Cruisers.

KATORI, 1 Training Light Cruiser.

I-class submarines (including Submarine Squadrons 1, 2, 3) 20 Submarines (I-1, 2, 3, 4, 5, 6, 7, 16, 17, 18, 20, 22-24, 68, 69, 74). Midget submarines, 5 Midget submarines.

6 Train Vessels.

ITEM 18

(Item 18 is a map of the North Pacific Ocean showing the track of the Japanese Striking Force. This map is printed as Item No. 15 in EXHIBITS-ILLUSTRATIONS to Proceedings of Joint Committee.)

(Item 19 is a diagram showing air searches flown in the Hawaiian area (a) 6 December 1941, (b) prior to the Japanese attack 7 December 1941, and (c) after the Japanese attack 7 December 1941, and the track of the Japanese Striking Force. This diagram is printed as Item No. 16 in EXHIBITS-ILLUSTRATIONS to Proceedings of Joint Committee.)

ITEM 20

(Item 20 is a diagram showing track of Japanese plane attack routes over Oahu, T. H. This diagram is printed as Item No. 17 in EX-HIBITS-ILLUSTRATIONS to Proceedings of Joint Committee.)

NOTE

(There are appended hereto copies of official photographs of damage to U.S. Navy ships and installations at Pearl Harbor on 7 December 1941.)



U. S. S. Raleigh, light cruiser, with decks awash after Jap attack on Pearl Harbor.



U. S. S. Shaw—Hit by three bombs which exploded her forward magazine, the 1,500-ton destroyer Shaw lies a twisted mass of wreckage in the heavily bombed floating drydock YFD-2. Note the bow of the Shaw lying on its side in the foreground. Part of the drydock, at right, is under water while the other side is listing heavily. Both the Shaw and the drydock are now back in use.



After the Japanese attack—Warships damaged at Pearl Harbor in the Japanese attack of December 7, 1941.



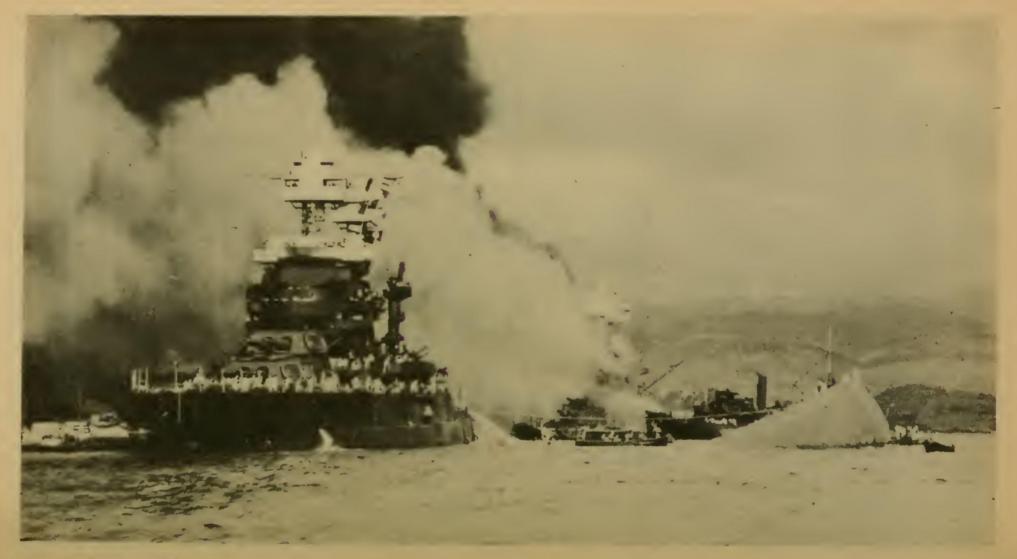
The side of the hull of the capsized mine ship Oglala is shown here in Pearl Harbor before she was salvaged. The Oglala capsized after being hit in the Japanese raid of December 7, 1941. In the background alongside Ford Island the hull of the capsized Oklahoma can be seen.



Japanese attack on Pearl Harbor. Hangar and planes damaged and set afire by Japanese bombs.



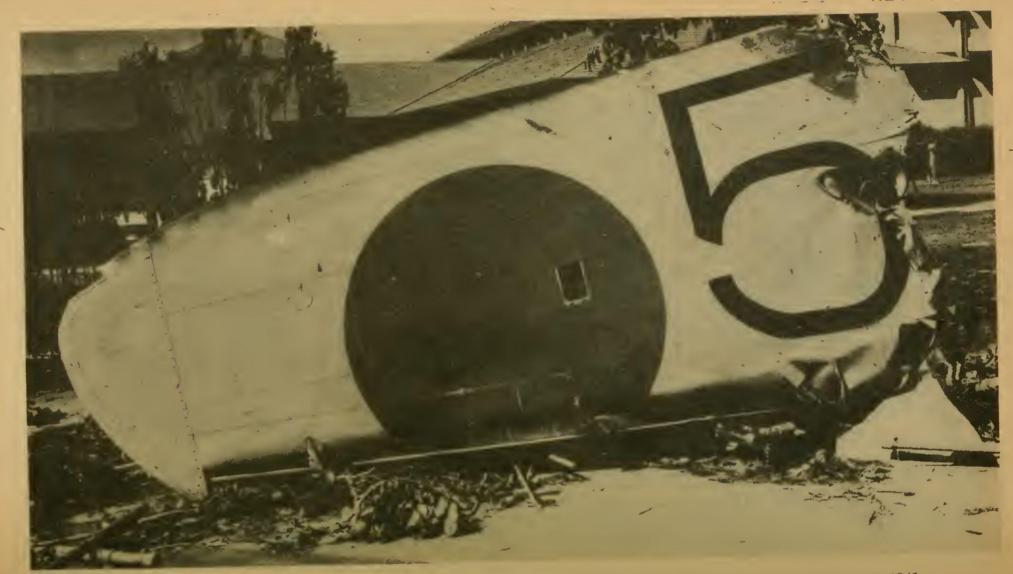
U. S. S. Arizona, at height of fire, following Japanese aerial attack on Pearl Harbor, Hawaii, December 7, 1941.



U. S. S. Maryland—Moored inboard of the U. S. S. Oklahoma, which capsized, the 31,500-ton Maryland was damaged slightly and was one of the first ships to rejoin the fleet after the Japanese attack.



Pearl Harbor attack-Jap version-"Our Sea Eagles' determined attack had already opened, and a column of water from a direct torpedo hit on a Maryland class is rising. On the surface of the water concentric waves are traced by the direct torpedo hits, while murky crude oil flows out. The three bright white streaks between the waves are the torpedo tracks. In the distance the conflagration at the Hickman Field hangars is seen." The above caption and Japanese aerial photograph were sent to neutral countries for propaganda purposes.



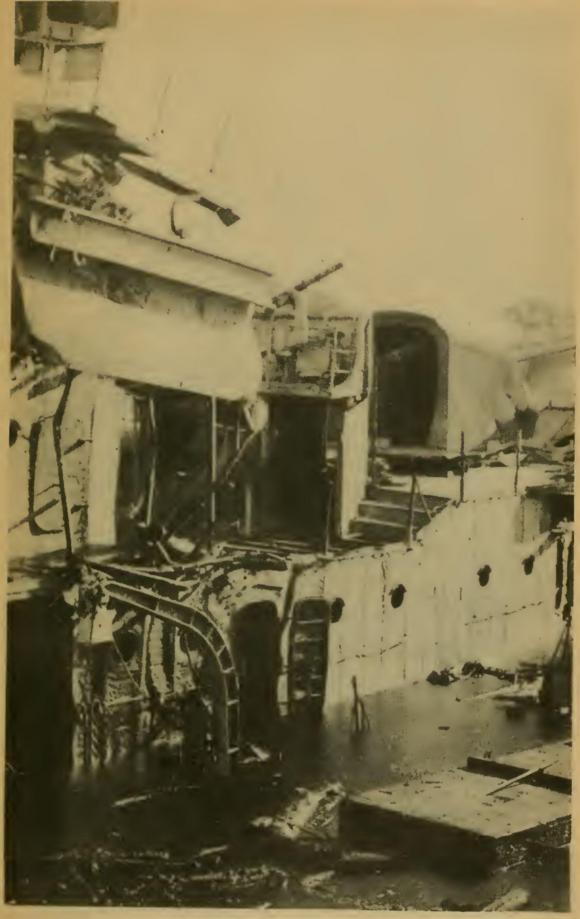
Wing from Japanese bomber shot down on the grounds of the Naval Hospital, Honolulu, T. H., December 7, 1941.



U. S. S. Raleigh—Torpedoed and bombed, the 7,000-ton light cruiser U. S. S. Raleigh is held affoat near her anchorage in Pearl Harbor by a barge. The capsized U. S. S. Utah is in the background. The Raleigh rejoined the fleet months ago.



Wreckage of the U.S.S. Shaw at Pearl Harbor, Hawaii, hit directly on the fore-castle during Japanese aerial attack, December 7, 1941.



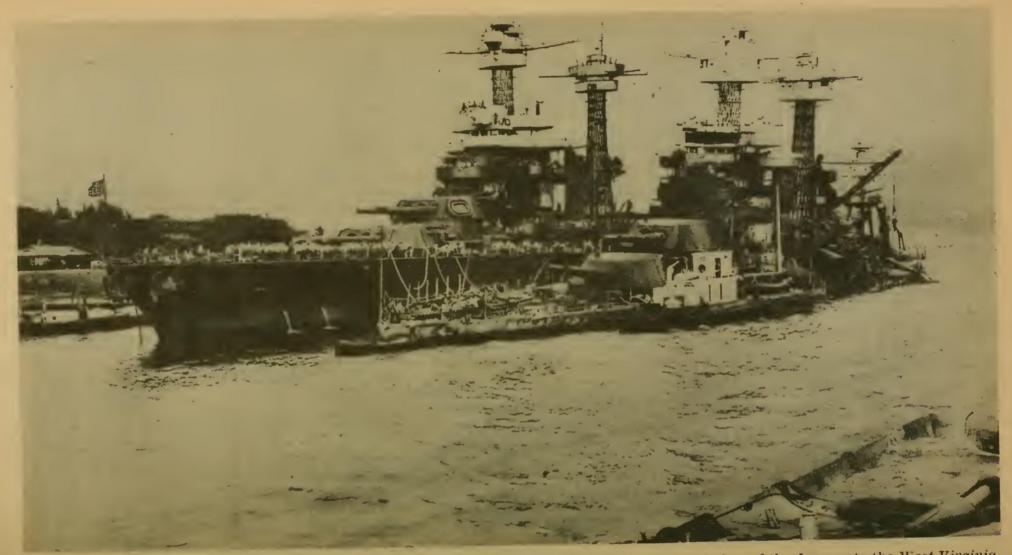
U. S. S. Downes—Destroyer, hit by Japanese bombs during attack on Pearl Harbor, Hawaii, December 7, 1941. U. S. S. Cassin, destroyer, in about same condition, lies behind the Downes.



Hangar burning after Jap air raid on Pearl Harbor, T. H.



Hangar burning after Jap air raid on Pearl Harbor, T. H., December 7, 1941.



This port quarter shot of the West Virginia, taken from the capsized Oklahoma, shows a general view of the damage to the West Virginia, sunk in the Japanese raid on Pearl Harbor, December 7, 1941.



Back in the fight—Run aground opposite Hospital Point, during the Japanese attack on Pearl Harbor, the U.S. S. Nevada, known as the "Cheerup Ship," lived up to its name by being one of the first of the Pearl Harbor casualties to go back into action.



California hit—Battered by aerial hombs and torpedoes, the U. S. S. California settles slowly into the mud and muck of Pearl Harbor. Clouds of black, oily smoke pouring up from the California and her stricken sister ships conceal all but the hulk of the capsized U. S. S. Oklahoma at extreme right.





Seaman rescued—A small boat rescues a seaman from the 31,800-ton U. S. S. West Virginia burning in the foreground. Smoke rolling out amidships shows where the most extensive damage occurred. Note the two men in the superstructure. The U.S. S. Tennessee



U. S. S. Vestal—This U. S. repair ship, twice bombed by Japanese fliers, was beached after the ship started flooding. The Vestal has since been repaired.



Patrol planes, Catalina type (PBY), wrecked on Ford Island at Pearl Harbor, Hawaii, during Japanese attack, December 7, 1941.



Hangar area at NAS Kaneohe Bay, T. H., showing damage wrought by Japanese bombing attack of December 7, 1941. Altitude 700 feet. Looking northwest.



NAVAL AIR STATION—This is the wreckage-strewn naval air station at Pearl Harbor following one of the Japanese sneak attacks on the morning of December 7, 1941. In the background, an explosion sends a mass of flames and smoke high into the sky.



U. S. S. Nevada—Beached at Hospital Point.



The U.S. S. Oklahoma, shown capsized following Japanese attack at Pearl Harbor, Hawaii, December 7, 1941.



The U.S. S. Oklahoma, shown capsized following Japanese attack at Pearl Harbor, Hawaii, December 7, 1941.



MAGAZINE OF U. S. S. SHAW EXPLODES—This, one of the most remarkable combat photographs of all times, was made at the exact moment the destroyer blew up during Japanese attack on Pearl Harbor, Hawaii, December 7, 1941.



U. S. S. Shaw, destroyer, shortly after Japanese aerial bomb made direct hit, Pearl Harbor, December 7, 1941.





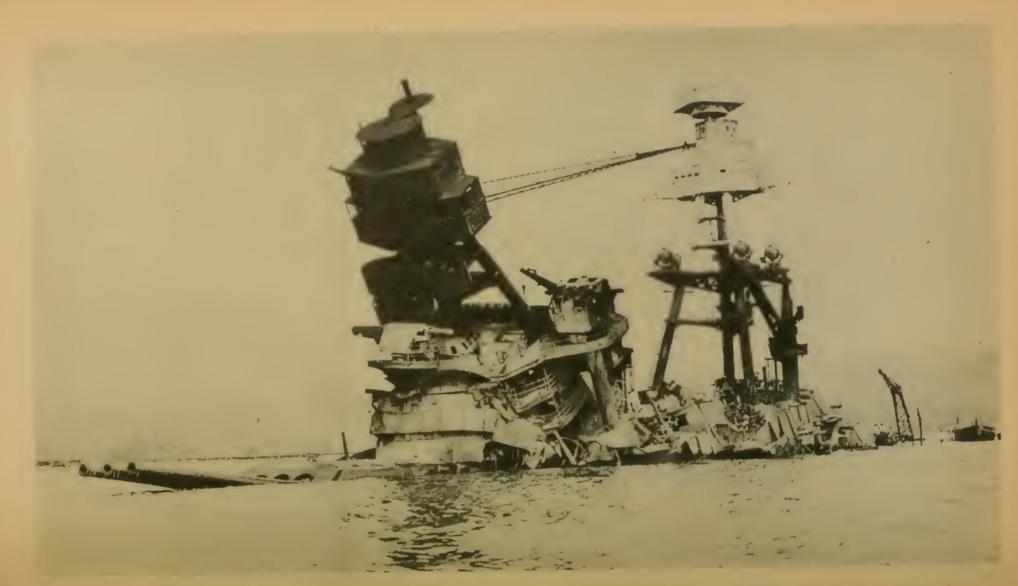
Hangar area at NAS Kaneohe Bay, T. H., showing damage wrought by Japanese bombing attack of December 7, 1941. Altitude 500 feet. Looking west.



Wreckage of U. S. S. Arizona, Pearl Harbor, Hawaii, December 7, 1941.



U. S. S. Downes and Cassin—The jumbled mass of wreckage in the foreground of drydock No. 1 are the U. S. destroyers, Downes (left) and Cassin (right). The battleship in the rear is the U. S. S. Pennsylvania, 33,100-ton Flagship of the Pacific Fleet, which suffered relatively light damage during the Japanese attack. The Pennsylvania was repaired shortly after the attack. Main and auxiliary machinery fittings of the Downes and Cassin are being transferred to new hulls.



Wreckage of the U.S. S. Arizona lying in the mud at Pearl Harbor, Hawaii.