

**ORIGINAL**

Contributed by Bobbie R. Bailey

DEPARTMENT OF THE NAVY

SUPERVISOR OF SHIPBUILDING, U. S. NAVY

2400 - 11TH AVENUE, S. W.

SEATTLE, WASHINGTON 98134

IN REPLY REFER TO:

LPD/9410

Ser 552Q-771

5 Feb 1965

From: Supervisor of Shipbuilding, U. S. Navy, Seattle  
 To: Chief, Bureau of Ships (Code 529)

Subj: DENVER (LPD-9) and LPD-10, Contract NObs 4660; Puget Sound Bridge  
 and Dry Dock Company Purchase Order LPD-2, Main Propulsion and  
 Reduction Gears, Drawing, comments concerning

Ref: (a) Specs for Building LPD-7 C1 Ships, Sect 9410-1  
 (b) Mil Specs MIL-T-17600 (SHIPS) of 5 Apr 1961

Encl: (1) GE Co Dwg No. 7493E63, Rev D, Main Propulsion Unit Outline (Port)  
 (2) PSB&DD Co, Seattle ltr JAF:bb(2) Ser LPD 9481 of 15 Jan 1965

1. One (1) each of enclosures (1) and (2) is forwarded with the following  
 comments:

a. Information required by 3.17.6.2.1 (c), (f), (g), (h), (i) and (j)  
 of reference (b) is not shown or is incomplete on the drawing, enclosure (1).

b. The total weight of the turbine units is indicated by enclosure (1)  
 as 54,500 pounds. Page 389, lines 64 and 65 of reference (a) specifies that  
 turbines for one shaft shall not exceed 50,300 pounds in weight. Each  
 turbine total weight exceeds the specification limitation by 4,200 pounds.

2. Due to the importance of the subject equipment Bureau action is requested.  
 To prevent delay of ship delivery, it is recommended that a Change Order  
 be issued with the requirement that any increase in weight or moment result-  
 ing from the change be chargeable to the Shipbuilder.

237

529

LPD 7 CLASS/9428

E. T. MEYER

By direction

Copy to:  
 BUSHIPS (Code 641)

650210-0308

COPY TO CODE 641

**ORIGINAL**

PORT SOUND BRIDGE & DRY DOCK CO.  
822 10th AVENUE S. W.  
SEATTLE 4, WASHINGTON

*Supplies*

General Electric Company  
1100 Western Avenue  
West Lynn, Massachusetts 01903

JAF:hb (2)  
Serial LFD 9461  
15 January 1965

Attn: Mr. B. Siegal

Subj: Contract NOs 4660, LFD 9-10; FURMAN Co. P.O. LFD-2;  
Main Propulsion & Reduction Gears; Drawings, Comments  
Concerning

Ref: (a) G. E. Transmittal Memo of 4 January 1965  
(b) G. E. Des. No. 749333, Rev. E, Main Propulsion Unit  
Outline (Part)  
(c) Supship, Seattle ltr LFD/9020 ser 252-3008 of  
8 November 1963

Comment:

Reference (b), a preliminary Class 3 drawing forwarded by  
reference (a), is approved for LFD 9 and 10 by authority of refer-  
ence (c) when revised as follows:

a. Enter in the approval block: "Validated for Supship,  
Seattle as a Class 3 drawing per FURMAN Co. ltr ser 9461 dated  
15 January 1965".

b. Enter in the revision column: "E-Approval added" with  
date and initials.

c. Add "E" in the revision box of the title block in place  
of "D".

This plan approval does not relieve the manufacturer of  
his responsibility for the satisfactory performance of his equip-  
ment for the purpose intended, nor does it include any departures  
from the specification or plans which have not specifically been  
approved by the shipbuilder.

02H'13 H D  
K02210107 W00V000  
IN 50 14 55 IN .E. 650210-0308  
BEEBIAEB

AND BRIDGE & DRY DOCK CO.  
2929-16th AVENUE S. W.  
SEATTLE 4, WASHINGTON

General Electric Company  
Serial LPD 9481  
15 January 1965

Discipline white background prints indicating approval data, suitable for microfilming, will be required for forwarding to the Bureau via the shipbuilder. Prints from a copia or van dyke have not been acceptable. These prints are in addition to the five (5) normal prints required for distribution.

This is a release to manufacture the equipment delineated in the referenced drawing.

Yours very truly,

FRANK BOWEN BRIDGE & DRY DOCK Co.

H. P. Welch  
Project Engineer

cc:RBY  
GMB  
RLE

H. P. Martin, G. E. Seattle  
S/S (3) w/2 copies ref (b)

AD

C O

NAVSHIPS 4577 (REV. 12-63)

CHANGE ORDER JUSTIFICATION

Ser 641B-250

FROM: Code <u>641</u>	BRIEF OF CHANGE: <b>Increase allowable weight for propulsion turbines</b>	
TO: Code <u>406</u>		
VIA: Code <u>529</u>	SHIPS INVOLVED OR EQUIPMENT CONTRACT NOS.: <b>LPD9-10 - NObs-4660 (Puget Sound Bridge and D.D. Co.)</b>	
<input type="checkbox"/> MUST BE DONE DURING BUILDING	<input checked="" type="checkbox"/> SHOULD BE DONE DURING BUILDING	DELAY IN COMPLETION (If yes, explain under Remarks) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
COST: <input checked="" type="checkbox"/> NO CHANGE	<input type="checkbox"/> INCREASE \$ _____	<input type="checkbox"/> DECREASE \$ _____
<input checked="" type="checkbox"/> SUPSHIP REQUESTED	<input type="checkbox"/> FLEET INITIATED	<input type="checkbox"/> OTHER BUREAUS _____
<input type="checkbox"/> CONTRACTOR REQUESTED	<input type="checkbox"/> SCB OR CNO INITIATED	<input type="checkbox"/> BUSHIPS CODE _____

CHANGE OR MODIFICATION (As will appear on directive to contractor/shipyard)

"Page 389, lines 64-65; delete 'turbines for one shaft --- 50,300 pounds in weight' and substitute 'turbines for one shaft shall not exceed 52,000 lbs. in weight'

55,000 per  
McDuffy (529) 7 Apr. 65

EST. CHANGE IN WEIGHT AND/OR MOMENT <b>Plus 3400 #/ship/no change</b>		CODE 448 APPROVAL	
REMARKS - GAIN TO NAVY:			
<input type="checkbox"/> SAVING IN COST OR WEIGHT	<input type="checkbox"/> SAFETY OF SHIP OR PERSONNEL	<input type="checkbox"/> IMPROVE HABITABILITY	<input type="checkbox"/> VALUE ENGINEERING
<input checked="" type="checkbox"/> COVER ERROR OR CLARIFY SPECS	<input type="checkbox"/> INCREASE RELIABILITY	<input type="checkbox"/> INCREASE ECONOMY	<input type="checkbox"/> IMPROVE OPERATIONAL/MILITARY CHARACTERISTICS OF SHIPS
OTHER:			
IS CHANGE OF INTEREST TO CODE 1500?		IF YES, HAS IT BEEN CLEARED?	
<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
WILL MATERIAL BE AVAILABLE ON TIME?		WILL PLANS AND OTHER DESIGN WORK BE AVAILABLE?	
<input type="checkbox"/> YES <b>N/A</b>	<input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> NOT REQUIRED
ARE VENDOR SERVICES REQUIRED?		ARE THEY INCLUDED?	
<input type="checkbox"/> YES <b>N/A</b>	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
DOES CHANGE HAVE GEN SPEC APPLICABILITY?		OTHER SHIP SPECS?	
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	CONTRACT SPECS FOR GFM?	
		<input type="checkbox"/> YES <input type="checkbox"/> NO	
IF YES: ACTION <input type="checkbox"/> HAS BEEN TAKEN <input type="checkbox"/> WILL BE TAKEN BY CODE _____ TO INCORPORATE.			
SIGNATURE (Originating Code)		SIGNATURE (Project Manager)	
CRB MEETING			
DATE _____	ACTION: <input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED <input type="checkbox"/> DEFERRED PENDING: <input type="checkbox"/> APPROVED SUBJECT TO:		

LPD9-10/9410  
Ser 641B-321

16 APR 1965

From: Chief, Bureau of Ships  
To: Supervisor of Shipbuilding, U.S. Navy, Seattle

Subj: LPD9 and 10, NObs-4660, propulsion turbines; comments on outline (port)

Ref: (a) SUPSHIP Seattle ltr Ser 5520-771 of 5 Feb 1965  
(b) G.E. Dwg. 7493E63, Rev. D, Main Propulsion Unit Outline (Port)  
(c) PSB & DD Co. Seattle ltr Ser LPD9481 of 15 Jan 1965  
(d) MIL-T-17600B  
(e) BUSHIPS ltr Ser 641B-796 of 17 July 1964

1. Reference (a) forwards references (b) and (c) to the Bureau with comment.

2. The Bureau has reviewed references (b) and (c) and concurs with the Supervisor that the requirements of paragraph 3.17.6.2.1 of reference (d) have not been fulfilled. Previous Bureau comments on Revision B of reference (b) are contained in paragraphs 12 and 14 of reference (e) and these comments remain pertinent to Revision D of the drawing. The directions included within reference (c) appear to meet the intent of paragraph 2.b of reference (e).

3. As requested by paragraph 2 of reference (a), we will issue a change order to cover the increase in weight over specification requirements. Change Order will increase allowable weight from 50,300 pounds to 55,000 pounds. It should be noted that this weight limitation applies to the combined weights of one high pressure turbine, one low pressure turbine and one crossover pipe (with expansion joint). Foundations, girders, astern valves, strainers, spares, etc. are not intended to be included.

Copy to:  
641B  
529

F.R. HOOK  
By direction

Prepared by E.H. Olds, Ext. 66466  
Typed by F. Gallagher 4/9/65

ETH

General Electric Company  
1100 Western Avenue  
West Lynn 3, Mass., 01905

Letter No. 438-81750/T2A

Date: **SEP 7 1965**

To: Lockheed Shipbuilding & Construction  
Company  
2929-16th Avenue S. W.  
Seattle, Washington, 98134  
Attention: Master Plan Section

From: General Electric Company  
1100 Western Avenue  
West Lynn 3, Massachusetts, 01905

Subject: LPD-9 & 10 - Main Propulsion Turbines  
Lockheed P. O. LPD-2, Navy Contract NObs-4660  
G. E. Requisition 438-81750  
Plan Submittal Action

References:

G. E. DRWG. NO.

TITLE

- ✓ (a) 815D159 Rev. A Diagram of Gland Seal & Vent System.  
(b) Bureau of Ships letter Ser. 641B-473 of 5 May 1965.

Enclosures:

- (A): Five prints of reference (a) to Lockheed Shipbuilding &  
Construction Company  
(B): Two prints of reference (a) to Bureau of Ships, Code 641.

1. Enclosure (A), which has been modified in compliance with paragraph 1.b. of reference (b) is being submitted with this letter for revision approval.
2. With regard to the comment of paragraph 1.b.(6) of reference (b), the table columns have been arranged by SHP increments in accordance with contract requirements. Therefore, it is respectfully requested that this comment be withdrawn.
3. Enclosure (B) is being forwarded with this letter to the Bureau in accordance with the requirements of MIL-T-17600B.

Very truly yours,

GENERAL ELECTRIC COMPANY

B. SEGEL  
ENGINEER

BY: PAULINE SKORNIK  
SPECIALIST

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PS:mac

LPD 7cl/9410

244

650910-0467

ETU

-2-

Letter No. 438-81750/T2A

CC:

Bureau of Ships, Code 641  
Washington 25, D. C. (w/Encl. (B))

J. Marino, 64-6M  
D. J. McDonnell, San Francisco Office  
H. P. Vail, Seattle Office (w/2 prints)  
M. F. Martin, Seattle Office  
A. E. Lapham, 4-64G (w/1 print)  
Pauline Skornik, 3-64S

8/25/65

# GENERAL ELECTRIC COMPANY

1100 WESTERN AVENUE, WEST LYNN, MASS. . . . TELEPHONE LYnn 8-6000

MEDIUM STEAM

TURBINE GENERATOR

AND GEAR DEPARTMENT

Letter No. 438-81750/T10

Date: April 9, 1965

TO: Lockheed Shipbuilding & Construction Company  
2929-16th Avenue S. W.  
Seattle, Washington, 98134

Attention: Master Plan Section

FROM: General Electric Company  
1100 Western Avenue  
West Lynn 3, Massachusetts, 01905

SUBJECT: LPD-9 & 10 - Main Propulsion Turbines  
Lockheed P. O. LPD-2, Navy Contract NObs-4660  
G. E. Requisition 438-81750  
Plan Submittal Action

References:

G. E. Drawing No.	Title
(a) 815D559	Turbine Throttle Control Diagram

Enclosures:

- (A): Five prints of plan, reference (a) to Lockheed Shipbuilding & Construction Company
- (B): Two prints of plan, reference (a), to Bureau of Ships, Code 641

1. Enclosure (A) is being transmitted with this letter for approval.
2. Enclosure (B) is being forwarded with this letter to the Bureau in accordance with the requirements of MIL-T-17600B.

Very truly yours,

650414-0741

GENERAL ELECTRIC COMPANY

*B Siegel* ITP  
B. SIEGEL

*Pauline Skornik* ITP  
BY: PAULINE SKORNIK

PS:tp

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w

noh 4660

KVA



Letter No. 438-81750/T10

Page -2-

CC: Bureau of Ships, Code 641  
Washington 25, D. C. (W/Encl. (B) )

Inspector of Naval Material, USN  
Boston, Massachusetts  
Attn: QADS, Bldg. 64-6M  
Lynn, Massachusetts

H. P. Vail, Seattle Office, (W/2 prints)  
M. F. Martin, Seattle Office  
A. E. Lapham, 4-64-G  
Pauline Skornik, 3-64-S

650414-0741

SLPD 101

5094101

LPD9&10/9410  
Ser 641B-642

From: Chief, Bureau of Ships  
To: Supervisor of Shipbuilding, U S. Navy, Seattle

Subj: LPD9 and 10, NObs-4660, propulsion turbine; throttle control diagram, comments on

23 JUL 1965

Ref: (a) GE ltr Ser 438-81750/T10 of Apr 9, 1965  
(b) GE Dwg. 815D559, Rev. A - "Control Diagram"  
(c) MIL-T-17600B

1. Reference (a) forwarded reference (b) as an enclosure to the Bureau in accordance with MIL-T-17600B, Table VII. This plan has been reviewed and the following comments are offered to the Supervisor for guidance during approval action:

2. At Loc D-8/9, the words "View of Valve to Open" are not clear or clearly located. It is recommended this notation be relocated and reworded to indicate valve lift sequence (if such is the present intention).

3. At Loc. D-7/9, after "1st-----6th" add "valve cracking points".

cc  
529

F.R. HOCK  
By direction

Prepared by E.H. Olds, Ext. 66466  
Typed by F. Gallagher 7/19/65

EMB