SECRETARY OF THE NAVY

WASHINGTON

June 3, 1941

Sirs:

Reference is made to Supplemental Contract NOd-1538, dated September 9, 1940 for the acquisition and installation of special additional plant equipment and facilities required to expedite the National Defense Program, at a total estimated cost of $5,500,000.

By letter dated December 16, 1940 an order was placed with you for construction of six additional destroyers Nos. DD618 to DD623 inclusive and a change in Supplemental Contract NOd-1538 was authorized to provide further special plant facilities at a cost not to exceed $2,250,000.

Pursuant to this authorization, a general review of the facilities required by the Contractor for its Naval construction work has disclosed that several of the items appearing in Exhibit I of Supplemental Contract NOd-1538, originally regarded as necessary, may be dispensed with. The funds thereby released together with the additional funds for facilities authorized by letter of December 16, 1940 will be used to construct a shipway and outfitting basin. These additional facilities are required in the interest of expediting the construction of the additional destroyers without delaying the building program for cruisers now under construction by you.

In view of the foregoing and because of the necessity of overtime and shift work and other increased costs in the performance of supplemental contract NOd-1538, not contemplated at the time the original estimates were made, the Secretary of the Navy hereby authorizes the following changes in that Supplemental Contract and the Exhibit forming part thereof:

<u>Supplemental Contract - Page 1</u>

In the first recital, on the first vacant line under the words "DD505 and DD506 under Contract NOd-1505" insert the words "DD618-623, inclusive, under Contract NOd-1642".

/L24(410102-7)P
Mihw

Exhibit I. Page 1

Bureau of Ships No. 2, in the column under "Estimated cost", delete "$750,000" and substitute therefor - $813,000 -.

Bureau of Ships No. 3, in the column under "Item", delete "#11" and "#12" and substitute therefor - #9 and #10 - respectively.

Bureau of Ships No. 3, in the column under "Estimated Cost", delete "$360,000" and substitute therefor - $393,000 -.

Bureau of Ships letter A*, in the column under "Item", delete "Extension of Shipways Including Cranes and Accessories" and substitute therefor - Construction of Shipway #11 and North Outfitting Basin, including Shipway and Wharf Cranes, Accessories and Dredging - Including Purchase and Installation of Shipway Crane and Runway between Ways #9 and #10 -.

Bureau of Ships letter A*, in the column under "Estimated Cost", delete "$535,000" and substitute therefor - $3,383,000 -.

Bureau of Ships letter B*, in the column under "Item", delete "Extension of Wet Basin including Cranes and Accessories" and substitute therefor - Extension to South Outfitting Basin Crane Runway.

Bureau of Ships letter B*, in the column under "Estimated Cost", delete "$750,000" and substitute therefor - $50,000 -.

Bureau of Ships letter C*, delete this item in its entirety.

Bureau of Ships letter D*, in the column under "Item", delete "and Other Buildings," and substitute therefor - Extensions, Miscellaneous Yard Buildings -

Bureau of Ships letter D*, in the column under "Estimated Cost", delete "$733,000" and substitute therefor - $1,605,000 -.

Bureau of Ships letter E*, in the column under "Estimated Cost" delete "$1,037,000" and substitute therefor - $1,170,000.

Bureau of Ships letter F*, in the column under "Estimated Cost", delete "$322,000" and substitute therefor - $118,000 -.

In the column under "Estimated Cost" and opposite "TOTAL ESTIMATED COST" delete "$5,500,000." and substitute therefor $8,500,000.

There is enclosed herewith a copy of Exhibit I revised in accordance with the above mentioned changes.

The foregoing changes involve an increase of $3,000,000 in the total estimated cost, instead of $2,250,000 as previously authorized by the Secretary of the Navy's letter of December 16, 1940 (No. DD618/L4(401260)).

Respectfully,

James Forrestal
Acting Secretary of the Navy

Federal Shipbuilding and Dry Dock Company
Kearny, New Jersey

C: CNO
BuShips
CompBd (3)
BuS&A (Appropriation Div.)
SupShip(Kearny)
GAO(Audit Div.)

EXHIBIT I
(Revised June 3, 1941)
forming part of
SUPPLEMENTAL CONTRACT NOd-1538
FEDERAL SHIPBUILDING AND DRY DOCK COMPANY
KEARNY, NEW JERSEY
(Dated September 9, 1940)
for the

Acquisition and Installation of Special
Additional Plant Equipment and Facilities
Required to Expedite the National Defense Program

Item	Estimated Cost
Pipe Shop and Accessories	$ 393,000
Warehouse including Heavy Duty Cranes and Accessories	813,000
Reconstruction of Abandoned Shipways #9 and #10, Purchase and Installation of One (1) Traveling Power Shipyard Crane, One (1) Locomotive Crane, Attendant Crane Tracks, and Staging Towers	393,000
Forty-three (43) Machine Shop Tools	575,000
Construction of Shipway #11 and North Outfitting Basin, including shipway and wharf cranes, accessories and Dredging - Including purchase and installation of Shipway Crane and Runway between Ways #9 and #10	3,383,000
Extension to south Outfitting Basin Crane Runway	50,000
Shop Extensions, Miscellaneous Yard Buildings and accessories	1,605,000
Tools and Equipment	1,170,000
Reserve for Contingencies	118,000
TOTAL ESTIMATED COST	$ 8,500,000

Letter identifications are for reference only.

(Enclosure A)

EXHIBIT [illegible]

[illegible]

SUPPLEMENTAL CONTRACT NO. [illegible]
(Dated September [illegible], 1940)

FOR THE

[illegible]tion and Installation of Special Additional Plant Equipment and Facilities Required to Expedite the National Defense Program

[illegible] number		
1	Pipe Shop and Accessories	[illegible]
2	Warehouse, including Equipment, Cranes and Accessories	750,000
3	Reconstruction of Ways [illegible] of Shipways No. [illegible] and 112, Purchase and Installation of One (1) Traveling Power Shipyard Crane, One (1) Locomotive Crane, Additional Crane Tracks, and Stacking Towers	369,000
4	Forty-three (43) Machine Shop Tools	575,000
A*	Extension of Shipways, including Cranes and Accessories	535,000
B*	Extension of Wet Basin, including Cranes and Accessories	750,000
C*	Dredging	45,000
D*	Shop and Other Buildings and Accessories	733,000
E*	Tools and Equipment	1,037,000
F*	Reserve for Contingencies	322,000
	TOTAL ESTIMATED COST	$5,500,000

[illegible] identifications are for reference [illegible]

[illegible] GOVERNMENT PRINTING OFFICE

[illegible]

[illegible] contract, [illegible] account thereof.

Trials.

Article [illegible]. When the vessel is substantially complete, [illegible] equipped as the contract, [illegible] it may be worked, [illegible] may, in the discretion of the Secretary of the Navy, be [illegible] until after the trial trip, and when the [illegible] shall have made satisfactory performance [illegible] to be reasonably sure of satisfactory performance [illegible] the requirements of this contract, she shall be subjected to trials to test her and her speed. Such trials shall be prescribed by the Secretary of the Navy and shall include the following, viz:

Standardization trials.

(a) A progressive trial over a measured mile course [illegible] Rockland, Maine, for standardizing the screws, extending from a speed of 9 knots to maximum speed; about 60 runs to be made over the course in order to adequately cover the range of speed desired. This progressive trial to be made with the vessel weighted as specified hereinafter. The maximum speed attained must be not less than [illegible] knots at mean trial displacement.

Three consecutive runs must be made at the highest speed attainable, and the mean speed and revolutions for these runs ascertained carefully; and three consecutive runs must be made at each of nine speeds covering the range of speeds from about nine knots to the highest speed, as required by the Trial Board, the mean speed, revolutions, and shaft horsepower for the several groups of runs to be carefully ascertained by the Trial Board, in order to determine the curve of speed and revolutions and the curve of speed and shaft horsepower; the vessel to be so weighted that the middle run at the maximum speed will take place as early as may be possible at the mean trial displacement specified hereinafter.

The board may require runs at one or more additional speeds as necessary or desirable to establish any variation from the smooth curve and to obtain complete standardization data.

Backing standardization trial.

In addition to the above required standardization trial there shall be a backing standardization trial to determine the revolutions corresponding to a sternway of 16 knots.

Full power trial.

Endurance Trials.

(a) An endurance and fuel-oil consumption trial of 4 hours' duration in the open sea in deep water, at a speed of [illegible] knots as nearly as possible.

(b) An endurance and fuel-oil consumption trial of 4 hours' duration in the open sea in deep water, at a speed of [illegible] knots as nearly as possible.

(c) An endurance and fuel-oil consumption trial of 4 hours' duration in the open sea in deep water, at a speed of 20 knots as nearly as possible.

(d) An endurance and fuel-oil consumption trial of 4 hours' duration in the open sea in deep water, at a speed of 15 knots as nearly as possible.

(e) An endurance and fuel-oil consumption trial of 4 hours' duration in the open sea in deep water, at a speed of 12 knots as nearly as possible.

(f) An endurance and fuel-oil consumption trial of 4 hours' duration in the open sea in deep water, at a speed of 9 knots as nearly as possible.

Speed during trials (c), (d), (e), (f), (g), and (h) will be taken from the speed revolution curve made from the results of progressive trial (a)

[illegible]

(v) [illegible] vessel [illegible] and [illegible] stern [illegible] [illegible] trials.

(l) [illegible] requirements by the detail specifications and by the general specifications both at full speed ahead and astern. Steering speed astern, to show satisfactory operation, strength trials. [illegible] and astern. The diameter of turning circle will be observed for the trials at full speed ahead.

(m) The anchor gear will be tested with the vessel in water of depth greater than 30 fathoms to determine its ability to meet the requirements of the detail specifications and of the general specifications. Anchor windlass Tests.

The Trial Board will arrange the above trials to obtain the data specifically required to determine compliance with the contract and also to obtain, as far as practicable, any useful data desired by the board. Additional runs or tests may be required by the board, if necessary, to determine compliance with the contract.

On trials [illegible] the above trials there shall be [illegible] such [illegible] as may be considered by the board to be of practical interest, including the amount of water required to be used for making up feed on trials (a) to (h) both inclusive.

On trials (c), (d), (e), (f), (g) and (h) the following auxiliaries shall be in operation.

(1) All auxiliary machinery necessary to the main propulsion plant shall be in operation during the prescribed trial. Auxiliaries in the machinery [illegible] shall be operated in the basic manner [illegible] auxiliaries. Auxiliaries in auxiliary machinery installed primarily for port or emergency use shall not be used. Where auxiliary steam and electric auxiliary machinery is installed each shall be operated during one-half of the period of each trial.

(2) Evaporating Plant: The evaporating plant will be in operation making fresh water of less than 0.25 gr in of chlorine per gallon at not less than the rate of 1,200 gallons per hour.

(3) Refrigerating Plant: One machine at rated capacity or as necessary to maintain the temperature required in the refrigerated spaces if two is in place [illegible] automatically controlled.

(4) Electric generating plant: A total load of not less than 700 kilowatts.

(5) The heating system, together with the ventilating blowers which are a part of the heating system, shall be operated throughout the [illegible] as necessary to maintain the temperature of all living compartments [illegible] 70° F. A correction shall be made for outside air temperature by adding to the fuel consumption 3.8 pounds of fuel oil per hour for each degree F. that the average outside air temperature is above 0° F. up to 70° F. If the heating system is not operated, or if the outside temperature is in excess of 70° F., 280 pounds of fuel oil shall be added to that actually used for each hour of the trial under which such condition obtains.

On trial (b) the auxiliaries shall be operated the same as for other trials except that the evaporators shall not be in operation.

The shaft horsepower during the above trials shall be determined by approved torsion meters connected to the shafting aft the reduction gears.

Torsion Meters

Oil returns

Test equipment.

The submitting oil fired on oil trucks shall be in accordance with the United States Navy Fuel Specifications for such oils. The fuel oil to be used shall correspond to the requirements of Navy fuel oil except as to viscosity, which shall be a minimum of 60 seconds, Saybolt Furol at 122°F.