

DATE OF INSPECTION  
 13 DEC. 1983

TYPE OF INSPECTION  
 A  INTERNAL & EXTERNAL B  INTERNAL & EXTERNAL WITH PRESSURE TEST C  OPERATIONAL

1. FROM **BASE MAINT. OFFICER  
 CAMP LEJEUNE, N. C.**  
 2. TO **NAVFACENCOM  
 NORFOLK, VA**

14. CERTIFICATE ISSUED  YES  NO  
 EXPIRES 7 JUNE 1984

15. BOILER INSPECTOR  
*Thomas L. Lanier*  
 NAVY OR NATIONAL BOARD NO

NAVFAC 239

BOILER DATA  
 3. MANUFACTURER **NATIONAL RADIATOR CORP.**  
 4. PROPERTY NO. **61** 5. MFG. SERIAL NO. **\_\_\_\_\_** 6. MFG. MODEL NO. **\_\_\_\_\_**  
 7. BUILDING NO. **USO** 8. YEAR BUILT **1942** 9. CAPACITY **1,000 LBS/HR.**  
 10. FUEL (Check)  COAL  OIL  GAS 11. PRESSURE  
 DESIGNED **15** psil OPERATING **10** psil TEST \_\_\_\_\_ psil  
 12. FEED WATER TREATMENT  SATISFACTORY  UNSATISFACTORY 13. TYPE  
 WATER TUBE  FIRE TUBE  C. I.

16. REASON FOR NOT ISSUING CERTIFICATE

17. BOILER USE **HEATING**  
 19. COMBUSTION **3.0** % CO<sub>2</sub> \_\_\_\_\_ % EXCESS O<sub>2</sub>

18. COMBUSTION CONTROL (Mfg. Name) **HONEYWELL**  
 20. FLUE GAS TEMPERATURE  
 AFTER BOILER **350** °F ; AFTER HEAT TRAP \_\_\_\_\_ °F

SAFETY DEVICES  
 SAFETY VALVES

21. MANUFACTURER **FARRIS** 22. NUMBER AND SIZE **1-3"** 23. PSI SETTING **15** 24. CONDITION **GOOD**

STEAM PRESSURE GAUGE

25. MANUFACTURER **U.S. GAGE** 26. CORRECTIONS  
 WATER LEG CONSTANT \_\_\_\_\_ psi; OTHER \_\_\_\_\_ psi  
 27. REASON IF NOT TESTED

FIRING EQUIPMENT

ITEM	IN SERVICE	ALTERNATE
28. MANUFACTURER	<b>HARVEY WHIPPLE</b>	
29. TYPE	<b>NOZZLE SPRAY</b>	
30. FUEL GRADE	<b>#2</b>	

31. INSPECTOR'S COMMENTS

**CONSIDER NEW BURNER/BOILER FOR BETTER EFFICIENCY**

32. ATTACHMENT(S) (Check)  
 COPY OF INSPECTOR'S REPORT  SPECIAL COMMENTS

33. SIGNATURE  
*R.M. Dillon*

BY DIRECTION



DATE OF INSPECTION

4 JAN - 4 JUNE 1985

TYPE OF INSPECTION

A

INTERNAL & EXTERNAL

B

INTERNAL & EXTERNAL WITH PRESSURE TEST

C

OPERATIONAL

1. FROM **BASE MAINT. OFFICER  
CAMP LEJEUNE, N. C.**

2. TO **NAVFACENGCOM  
NORFOLK, VA**

14. CERTIFICATE ISSUED  YES  NO  
 EXPIRES 4 JAN. 1986

15. BOILER INSPECTOR

*Thomas L. Lancia*  
 NAVY OR NATIONAL BOARD NO

NAVFAC 239

16. REASON FOR NOT ISSUING CERTIFICATE

BOILER DATA

3. MANUFACTURER

*BURNHAM*

4. PROPERTY NO

*61*

5. MFG. SERIAL NO.

*15750*

6. MFG. MODEL NO.

*4FW, 92, SPL*

7. BUILDING NO.

*USD*

8. YEAR BUILT

*1984*

9. CAPACITY

*770,000 BTU/HR.*

10. FUEL (Check)

COAL  OIL  GAS

11. PRESSURE

DESIGNED

*30* psi

OPERATING

*15* psi

TEST

*45* psi

12. FEED WATER TREATMENT

SATISFACTORY  UNSATISFACTORY

13. TYPE

WATER TUBE

FIRE TUBE

C. I.

17. BOILER USE

*HEATING*

18. COMBUSTION CONTROL (Mfg. Name)

*FIREYE*

19. COMBUSTION

*12.0* % CO<sub>2</sub>

% EXCESS O<sub>2</sub>

20. FLUE GAS TEMPERATURE

AFTER BOILER *500* °F ; AFTER HEAT TRAP \_\_\_\_\_ °F

SAFETY DEVICES

SAFETY VALVES

21. MANUFACTURER

*WATTS*

22. NUMBER AND SIZE

*1 - 3/4"*

23. PSI SETTING

*30*

24. CONDITION

*GOOD*

STEAM PRESSURE GAUGE

25. MANUFACTURER

*U.S. GAGE*

26. CORRECTIONS

WATER LEG CONSTANT \_\_\_\_\_ psi; OTHER \_\_\_\_\_ psi

27. REASON IF NOT TESTED

FIRING EQUIPMENT

ITEM	IN SERVICE	ALTERNATE
28. MANUFACTURER	<i>POWER FLAME</i>	
29. TYPE	<i>NOZZLE SPRAY</i>	
30. FUEL GRADE	<i>#2</i>	

31. INSPECTOR'S COMMENTS

*NEW Boiler INSTALLED UNDER CONTRACT # 83-5808*

*Will RETAIN SAME PROPERTY NO. AS OLD Boiler.*

32. ATTACHMENT(S) (Check)

COPY OF INSPECTOR'S REPORT

SPECIAL COMMENTS

33. SIGNATURE

*John R. Lantz*

BY DIRECTION



MFGRS. SERIAL NO. <b>15750</b>		MFGRS. MODEL NO. <b>4FW-92-SPL-LB</b>		MANUFACTURER <b>BURNHAM</b>		DATE OF SHEET	
TYPE OF SUPERHEATER <b>N/A</b>		FURNACE VOLUME _____ CU. FT.		OPERATION <input checked="" type="checkbox"/> AUTOMATIC <input type="checkbox"/> SEMI-AUTOMATIC <input type="checkbox"/> MANUAL		USE <input type="checkbox"/> EXPORT <input type="checkbox"/> ELEC. POWER GENERATION <input type="checkbox"/> LAID UP - WET <input type="checkbox"/> LAID UP - DRY <input checked="" type="checkbox"/> <b>HEATING</b>	
TEMPERATURE AT SUPERHEATER OUTLET <b>N/A</b> °F		BOILER <b>86</b>		PRESSURE (psig) <b>30 WATER</b> DESIGN <b>30</b> MAWP <b>15</b> INSTALLED WP		DATE BUILT <b>1984</b>	
NORMAL FEEDWATER TEMPERATURE <b>N/A</b> °F		WATER WALL _____ ECONOMIZER _____ SUPERHEATER _____		CAPACITY _____ _____ _____ <b>270,000</b> BTU/HR.		DATE INSTALLED <b>JAN 1985</b>	
(See Reverse Side for Fittings)		DRUMS NO. _____ DIAMETER _____ IN. LENGTH _____ FT. _____ IN. <input type="checkbox"/> RIVETED <input type="checkbox"/> FORGE WELDED <input type="checkbox"/> FUSION WELDED		AIR HEATER <input type="checkbox"/> NONE <input type="checkbox"/> TUBULAR <input type="checkbox"/> REGENERATIVE <input type="checkbox"/> STEAM		BOILER TYPE <input type="checkbox"/> C.I. <input type="checkbox"/> WATER TUBE <input checked="" type="checkbox"/> FIRE TUBE	
						DRAFT <input type="checkbox"/> NATURAL <input checked="" type="checkbox"/> FORCED <input type="checkbox"/> INDUCED	
						PRODUCES <input type="checkbox"/> STEAM <input checked="" type="checkbox"/> LOW TEMP. WATER <input type="checkbox"/> HIGH TEMP. WATER	
						CIRCULATION <input type="checkbox"/> NATURAL <input checked="" type="checkbox"/> FORCED	

FUEL	FUEL & FIRING EQUIPMENT IN SERVICE				ALTERNATE FUEL & FIRING EQUIPMENT			
	COAL <input type="checkbox"/> ANTHRACITE <input type="checkbox"/> BITUMINOUS  <input type="checkbox"/> NATURAL <input type="checkbox"/> MANUFACTURED		OIL <input type="checkbox"/> COMMERCIAL 1, 2, 4, 5, 6 <input type="checkbox"/> NAVY <input type="checkbox"/> OTHER _____		COAL <input type="checkbox"/> ANTHRACITE <input type="checkbox"/> BITUMINOUS		OIL <input type="checkbox"/> COMMERCIAL 1, 2, 4, 5, 6 <input type="checkbox"/> NAVY SPECIAL <input type="checkbox"/> OTHER _____	
FIRING EQUIPMENT	<input type="checkbox"/> COAL - HAND FIRED <input type="checkbox"/> COAL - STOKER <input type="checkbox"/> UNDERFEED - MULTIPLE RETORT <input type="checkbox"/> UNDERFEED - SINGLE RETORT <input type="checkbox"/> SPREADER - DUMP GRATE <input type="checkbox"/> SPREADER - VIBRATING GRATE <input type="checkbox"/> SPREADER - TRAVELING GRATE <input type="checkbox"/> CHAIN GRATE <input type="checkbox"/> GAS <input type="checkbox"/> GAS RING <input type="checkbox"/> VENTURI TYPE		<input type="checkbox"/> COAL - PULVERIZER <input type="checkbox"/> ATTRITION <input type="checkbox"/> BALL & RACE <input type="checkbox"/> BOWL MILL <input type="checkbox"/> TUBULAR  <input checked="" type="checkbox"/> OIL BURNERS <input checked="" type="checkbox"/> MECHANICAL <input type="checkbox"/> STEAM ATOMIZED <input type="checkbox"/> AIR ATOMIZED <input type="checkbox"/> ROTARY CUP		<input type="checkbox"/> COAL - HAND FIRED <input type="checkbox"/> COAL - STOKER <input type="checkbox"/> UNDERFEED - MULTIPLE RETORT <input type="checkbox"/> UNDERFEED - SINGLE RETORT <input type="checkbox"/> SPREADER - DUMP GRATE <input type="checkbox"/> SPREADER - VIBRATING GRATE <input type="checkbox"/> SPREADER - TRAVELING GRATE <input type="checkbox"/> CHAIN GRATE <input type="checkbox"/> GAS <input type="checkbox"/> GAS RING <input type="checkbox"/> VENTURI TYPE		<input type="checkbox"/> COAL - PULVERIZER <input type="checkbox"/> ATTRITION <input type="checkbox"/> BALL & RACE <input type="checkbox"/> BOWL MILL <input type="checkbox"/> TUBULAR  <input type="checkbox"/> OIL BURNERS <input type="checkbox"/> MECHANICAL <input type="checkbox"/> STEAM ATOMIZED <input type="checkbox"/> AIR ATOMIZED <input type="checkbox"/> ROTARY CUP	

FIRING EQUIPMENT MANUFACTURER <b>POWER FLAME - FIRETYPE 70000</b>	PROPERTY NO. <b>61</b>	BUILDING OR LOCATION <b>USO</b>	ACTIVITY <b>BOILER 61 MCBCL</b>
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DATA RECORD SHEET - BOILERS  
 MAYFAC 9-11014/40 (9-69) Supersedes MAYDOCKS 2509  
 S/N 0105-003-7010

FITTING	NUMBER	SIZE	MANUFACTURER	TYPE	SETTING	RANGE	PRESSURE CLASS
SAFETY VALVES	1	3/4	WATTS		30		
STEAM OUTLET VALVES	1	2"	GRINNELL	GATE		200 WOG	
* DRAIN BLOW-OFF VALVES	1	1"	JENKINS	GATE			125
FEEDWATER VALVES	1	3/4	<del>AMTRON</del> GRINNELL	GATE RED,	15	<del>0-30</del> 0-30	125
WATER COLUMN							
FEEDWATER REGULATOR	1	3/4	AMTRON	RED	15	0-30	
WATER GAGES							
* STEAM GAGES	1	3"	U S GAGE	ALTITUDE		0-50 40-240	
SOOT BLOWERS							
FUSIBLE PLUGS							

NB # 15750

COMBUSTION CONTROL - FIREYE TYPE 70D10

MFGRS. SERIAL NO. <b>15750</b>		MFGRS. MODEL NO. <b>4FW-92-SPL-LB</b>		MANUFACTURER <b>BURNHAM</b>		DATE OF SHEET	
TYPE OF SUPERHEATER  <b>N/A</b>		FURNACE VOLUME _____ CU FT		OPERATION <input type="checkbox"/> AUTOMATIC <input type="checkbox"/> SEMI-AUTOMATIC <input type="checkbox"/> MANUAL		USE <input type="checkbox"/> EXPORT <input type="checkbox"/> ELEC. POWER GENERATION <input type="checkbox"/> LAID UP - WET <input type="checkbox"/> LAID UP - DRY	
TEMPERATURE AT SUPERHEATER OUTLET  <b>N/A</b> °F		HEATING SURFACE (SQ. FT.)  <b>86</b>		PRESSURE (psig) <b>.30 water</b> DESIGN <b>30</b> MAWP <b>15</b> INSTALLED WP		<b>X Heating</b>	
NORMAL FEEDWATER TEMPERATURE  <b>N/A</b> °F		BOILER		CAPACITY		DATE BUILT <b>1984</b>	
(See Reverse Side for Fittings)		DRUMS NO. _____ DIAMETER _____ IN. LENGTH _____ FT. _____ IN. <input type="checkbox"/> RIVETED <input type="checkbox"/> FORGE WELDED <input type="checkbox"/> FUSION WELDED		AIR HEATER <input type="checkbox"/> NONE <input type="checkbox"/> TUBULAR <input type="checkbox"/> REGENERATIVE <input type="checkbox"/> STEAM		DATE INSTALLED <b>Jan 1985</b>	
						BOILER TYPE <input type="checkbox"/> C I <input type="checkbox"/> WATER TUBE <input checked="" type="checkbox"/> FIRE TUBE	
						DRAFT <input type="checkbox"/> NATURAL <input checked="" type="checkbox"/> FORCED <input type="checkbox"/> INDUCED	
						PRODUCES <input type="checkbox"/> STEAM <input checked="" type="checkbox"/> LOW TEMP. WATER <input type="checkbox"/> HIGH TEMP. WATER	
						CIRCULATION <input type="checkbox"/> NATURAL <input checked="" type="checkbox"/> FORCED	
						BTU/HR. <b>770,000</b>	

FUEL	FUEL & FIRING EQUIPMENT IN SERVICE				ALTERNATE FUEL & FIRING EQUIPMENT			
	COAL <input type="checkbox"/> ANTHRACITE <input type="checkbox"/> BITUMINOUS  GAS <input type="checkbox"/> NATURAL <input type="checkbox"/> MANUFACTURED		OIL <input type="checkbox"/> COMMERCIAL 1, 2, 4, 5, 6 <input type="checkbox"/> NAVY <input type="checkbox"/> OTHER _____		COAL <input type="checkbox"/> ANTHRACITE <input type="checkbox"/> BITUMINOUS  GAS <input type="checkbox"/> NATURAL <input type="checkbox"/> MANUFACTURED		OIL <input type="checkbox"/> COMMERCIAL 1, 2, 4, 5, 6 <input type="checkbox"/> NAVY SPECIAL <input type="checkbox"/> OTHER _____	
FIRING EQUIPMENT	<input type="checkbox"/> COAL - HAND FIRED <input type="checkbox"/> COAL - STOKER <input type="checkbox"/> UNDERFEED - MULTIPLE RETORT <input type="checkbox"/> UNDERFEED - SINGLE RETORT <input type="checkbox"/> SPREADER - DUMP GRATE <input type="checkbox"/> SPREADER - VIBRATING GRATE <input type="checkbox"/> SPREADER - TRAVELING GRATE <input type="checkbox"/> CHAIN GRATE GAS <input type="checkbox"/> GAS RING <input type="checkbox"/> VENTURI TYPE		COAL - PULVERIZER <input type="checkbox"/> ATTRITION <input type="checkbox"/> BALL & RACE <input type="checkbox"/> BOWL MILL <input type="checkbox"/> TUBULAR  OIL BURNERS <input checked="" type="checkbox"/> MECHANICAL <input type="checkbox"/> STEAM ATOMIZED <input type="checkbox"/> AIR ATOMIZED <input type="checkbox"/> ROTARY CUP		<input type="checkbox"/> COAL - HAND FIRED <input type="checkbox"/> COAL - STOKER <input type="checkbox"/> UNDERFEED - MULTIPLE RETORT <input type="checkbox"/> UNDERFEED - SINGLE RETORT <input type="checkbox"/> SPREADER - DUMP GRATE <input type="checkbox"/> SPREADER - VIBRATING GRATE <input type="checkbox"/> SPREADER - TRAVELING GRATE <input type="checkbox"/> CHAIN GRATE GAS <input type="checkbox"/> GAS RING <input type="checkbox"/> VENTURI TYPE		COAL - PULVERIZER <input type="checkbox"/> ATTRITION <input type="checkbox"/> BALL & RACE <input type="checkbox"/> BOWL MILL <input type="checkbox"/> TUBULAR  OIL BURNERS <input type="checkbox"/> MECHANICAL <input type="checkbox"/> STEAM ATOMIZED <input type="checkbox"/> AIR ATOMIZED <input type="checkbox"/> ROTARY CUP	
	FIRING EQUIPMENT MANUFACTURER		POWER FLAME					

PROPERTY NO. <b>61</b>	BUILDING OR LOCATION <b>USO</b>	ACTIVITY <b>BOILER 61 MCBCL</b>
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ATA RECORD SHEET - BOILERS  
 WPAO 9-11-11-12 (Rev. 1-1-83) ENGINEERING MATERIALS

TR

MEGRS. SERIAL NO.

15750

MEGRS. MODEL NO.

4FW-92-SPL-LB

MANUFACTURER

BURNHAM

DATE OF SHEET

TYPE OF SUPERHEATER

N/A

FURNACE VOLUME

CU. FT.

HEATING SURFACE (SQ. FT.)

BOILER 86

WATER WALL

ECONOMIZER

SUPERHEATER

DRUMS

NO.

DIAMETER IN.

LENGTH FT. IN.

 RIVETED FORGE WELDED FUSION WELDED

OPERATION

 AUTOMATIC  
 SEMI-AUTOMATIC  
 MANUAL

PRESSURE (psig)

30 water DESIGN

30 MAWP

15 INSTALLED WP

AIR HEATER

 NONE  
 TUBULAR  
 REGENERATIVE  
 STEAM

USE

 EXPORT  
 ELEC. POWER GENERATION  
 LAID UP - WET  
 LAID UP - DRY Heating

CAPACITY

HP

LB. HR.

EDR

770,000 BTU/HR.

DATE BUILT

1984

DATE INSTALLED

Jan 1985

BOILER

TYPE

 C.I.  
 WATER TUBE  
 FIRE TUBE

DRAFT

 NATURAL  
 FORCED  
 INDUCED

PRODUCES

 STEAM  
 LOW TEMP. WATER  
 HIGH TEMP. WATER

CIRCULATION

 NATURAL  
 FORCED

## FUEL &amp; FIRING EQUIPMENT IN SERVICE

COAL

 ANTHRACITE  
 BITUMINOUS

OIL

 COMMERCIAL 1, (2) 4, 5, 6  
 NAVY  
 OTHER

GAS

 NATURAL  
 MANUFACTURED

FUEL

## ALTERNATE FUEL &amp; FIRING EQUIPMENT

COAL

 ANTHRACITE  
 BITUMINOUS

OIL

 COMMERCIAL 1, 2, 4, 5, 6  
 NAVY SPECIAL  
 OTHER

GAS

 NATURAL  
 MANUFACTURED

FIRING EQUIPMENT

 COAL - HAND FIRED  
 COAL - STOKER UNDERFEED - MULTIPLE RETORT  
 UNDERFEED - SINGLE RETORT  
 SPREADER - DUMP GRATE  
 SPREADER - VIBRATING GRATE  
 SPREADER - TRAVELING GRATE  
 CHAIN GRATE

GAS

 GAS RING  
 VENTURI TYPE

COAL - PULVERIZER

 ATTRITION  
 BALL & RACE  
 BOWL MILL  
 TUBULAR

OIL BURNERS

 MECHANICAL  
 STEAM ATOMIZED  
 AIR ATOMIZED  
 ROTARY CUP COAL - HAND FIRED  
 COAL - STOKER UNDERFEED - MULTIPLE RETORT  
 UNDERFEED - SINGLE RETORT  
 SPREADER - DUMP GRATE  
 SPREADER - VIBRATING GRATE  
 SPREADER - TRAVELING GRATE

CHAIN GRATE

GAS

 GAS RING  
 VENTURI TYPE

COAL - PULVERIZER

 ATTRITION  
 BALL & RACE  
 BOWL MILL  
 TUBULAR

OIL BURNERS

 MECHANICAL  
 STEAM ATOMIZED  
 AIR ATOMIZED  
 ROTARY CUPFIRING EQUIPMENT  
MANUFACTURER

POWER FLAME

PROPERTY NO.

61

BUILDING OR LOCATION

USO

ACTIVITY

BOILER 61

MCBCL



BOILER INSPECTION CHECK LIST

83-5808

LOCATION		BLDG NO.	BOILER NO.	DATE
450		450	41	6 JUN 85 25 JUNE
BOILER MFG. BURNHAM			CAP.	
SERIAL NO. 15750	MODEL NO. 4FW-92-SPL-LB		H.B. NO. 15750	
BURNER MFG. POWER FLAME		FIRING RATE: <sup>270</sup> 462,000 BTU		
STEAM GAGE NAME: U.S. GAGE 60°-240°		PRESS. 0-50	TEST 45	
SVI MFG WATTS	CAP 925,000 BTU	NO. 1	SIZE 3/4	
NO. 1	SET 30 #740	OPEN 33	CLOSE	
NO. 2	SET	OPEN	CLOSE	
NO. 3	SET	OPEN	CLOSE	
CO2% 12	02%	STACK TEMP 555-57.500	COMB. EFF. 81.25	FORCE TIE
NO. 1 FIREYE C/O	OK L/O ALARM (3 SEC.)	A/L		
NO. 2 FIREYE C/O		A/L		
HI-STEAM TEMP. C/O	OK @ 180	A/L		
EXCESS STEAM TEMP. C/O	OK @ 190	A/L		
HI OIL TEMP. C/O		A/L		
HI OIL PRESS. C/O		A/L		
LO OIL TEMP. C/O		A/L		
LO OIL PRESS. C/O	OK @ 200 PSI	A/L		
LO ATCH AIR/STEAM C/O		A/L		
NO. 1 LW C/O	OK LIGHT-DRAIN BOILER WATER	A/L		
NO. 2 LW C/O		A/L		
LO FURNACE DRAFT C/O	COMBUSTION AIR - OK	A/L		
LO FIRE START C/O	- OK	A/L		
TYPE OF FUEL #2		A/L		
PURGE SWI-				

REMARKS:

NEED 385 SQ. IN. LUVER FOR COMBUSTION AIR. (SIZE 20" X 20")  
 WEATHER SITAT CUT CIRC PUMP & BOILER OUT (OUTSIDE TEMP 38°)  
 FIREYE CONTROL PROGRAMER - WRONG MODEL #

NB # 15750  
MANP STM - 15 PSI  
WATER - 30

HEATING  
SURFACE 86 SQ FT.

770,000 BTU/HR

YEAR - 1984

SER # 15750

OIL BURNER  
MFG - POWER FLAME  
MODEL # GR1.0  
S/N # 128430948

BURNER TIP SIZE 3.5 GPH 80°

@ 250 PSI = 5.5 GPH.

RETURN OIL PRESS @ 140 PSI

$$\begin{array}{r} 3.5 \\ .2 \\ \hline 245 \\ 35 \\ \hline 3.9 \end{array}$$

CONTROL  
FIREYE TYPE 70D20

(HI-FIRE PURGE CYCLE - NEED 70D10 AS PER  
SPECIFICATION SHEET - CONTROL CHASSIS  
WE HAVE 70D20)

6 JUNE 85

PROGRAMMER CHANGED TO 70D10

1. OIL LEAK IN SUPPLY LINE BEFORE FILTER



