DEPARTMENT OF THE NAVY

NORFOLK NAVAL SHIPYARD
PORTSMOUTH, VIRGINIA

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL # of pages ▸ 7

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263-04-07
SEP 19 2007

From: Commander, Norfolk Naval Shipyard
To: Commander, INACTSHIPMAINTO PHIL PA

Subj: Securing Ex-Saratoga Aircraft Elevators 1, 2, 3, and 4 At The Flight Deck To Keep Platforms Secure and Stable While Relocating Ship And During Removal and Disposal of Wire Ropes on Hydraulic Engines in Machinery Spaces.

Ref: (a) NAVSEA Dwg 1308067E, Airplane Elevator No. 1 General Arrangement of Platform Locking Gear
(b) NAVSEA Dwg 1308068F, Airplane Elevator No. 2 General Arrangement of Platform Locking Gear
(c) NAVSEA Dwg 1323671C, Airplane Elevator No. 3 General Arrangement of Platform Locking Gear
(d) NAVSEA Dwg 1308072D, Airplane Elevator No. 4 General Arrangement of Platform Locking Gear

Encl: (1) WP-1689 CORPORATE WELDING TECHNIQUE SHEET S1-1-1 SMAW

1. Norfolk Naval Shipyard (NAVSHIPYD Norfolk) was tasked to inspect and determine the feasibility of securing and stabilizing aircraft elevator platforms (rest full platform weight on lock bars) at flight deck to support the towing/relocating of the ship and to enable the removal and scrapping of each platforms' main hoisting wire ropes in lieu of cleaning ropes to remove grease. Cleaning the wire ropes has proven to be extremely labor intensive and difficult.

2. Each aircraft elevator platform (see sketch on sheet 6 for aircraft elevator locations) has two lock bars, one fwd and one aft. Lock bars are designed to handle full platform weight and operational load combined (450,000 lbs). Platform alone weighs 340,000 lbs. References (a) through (d) specify that lock bars should have approximately 3-inches of engagement in the mating platform sockets.

3. NAVSHIPYD Norfolk Engineering and Planning Department (EPD) personnel, accompanied by Global contractor personnel, inspected number 2, 3, and 4 aircraft elevators. (Number 1 aircraft elevator was in the lowered position and could not be inspected at time of site visit.) Inspections were performed to determine if lock bar engagement and the structural integrity of each platform and their associated components could satisfactorily support the load of each platform with the wire ropes removed from their respective hydraulic engines. Inspections revealed the structural

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condition of each platform, platform guide rails, guide rail foundations, guide rollers, and lock bar foundations to be satisfactory. Lock bar engagement was inspected/measured and recorded as follows:

(a) Number 2 Aircraft Elevator

Aft Lock Bar Engagement	3 inches
Fwd Lock Bar Engagement	3 inches
Amount Platform Could Shift Aft	1/2 inch
Amount Platform Could Shift Fwd	1/2 inch

(b) Number 3 Aircraft Elevator

Aft Lock Bar Engagement	3 inches
Fwd Lock Bar Engagement	2 1/2 inches
Amount Platform Could Shift Aft	7/8 inch
Amount Platform Could Shift Fwd	1/2 inch

(c) Number 4 Aircraft Elevator

Aft Lock Bar Engagement	3 inches
Fwd Lock Bar Engagement	3 inches
Amount Platform Could Shift Aft	5/8 inch
Amount Platform Could Shift Fwd	5/8 inch

4. Number 2, 3, and 4 aircraft elevator lock bars have adequate engagement to support each platform in a static pier-side condition. However, when the ship is being towed, the platforms and deck will flex and could potentially cause the lock bars to back out and disengage from the platform lock bar mating sockets. If this should occur the platform will drop.

5. To ensure that the lock bars will not potentially back out, and to enable the safe removal of as many wire ropes as possible, NAVSHIPYD Norfolk (EPD) recommends the following measures be accomplished:

5.1 Ensure each respective aircraft elevators' fwd and aft lock bars are extended, (jack to increase engagement if necessary), and has 3" to 3-1/2" of engagement into each respective platform socket. Using OSS material and sketch provided on sheet 4 of this document, fit up and weld spacer and bulkhead plates in place to permanently secure each lock bar in the engaged position. Clean all areas to be welded to bare metal. Welding and visual inspection of completed welds shall be in accordance with MIL-STD-1689. See NNSY Corporate Weld Procedure WP-1689 Welding Technique Sheet (Enclosure 1) for welding guidance. Note: If problems are

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encountered with preheating of ships structure for welding, it is permissible to use 309 filler material (which requires no preheating).

5.2 After each lock bar has been secured in place, cut wire ropes in each respective machinery space leaving an adequate length on every other wire rope (i.e., 4 out of 8 wire ropes on fwd and 4 out of 8 wire ropes on aft end of machinery space) to loop around each respective deflection sheave and tie back to themselves. Clamp in accordance with sketch and notes provided on sheet 5 of this document. Cut length of remaining wire ropes (i.e., 4 on fwd end and 4 on aft end of machinery space) to any length desired for ease of handling and scrapping.

6. Number 1 aircraft elevator was in the lowered position and could not be inspected at time of site visit and will require inspection when raised to the flight deck. After inspections are complete the same stabilization action as described for numbers 2, 3, and 4 aircraft elevators will also apply to the number 1 aircraft elevator.

7. Technical points of contact at NAVSHIPYD Norfolk EPD, Code 263, Thomas G. Perry or Oscar G. Jones, commercial (757) 396-5227 or DSN 386-5227.

W. R. Martin

W. R. MARTIN
By direction

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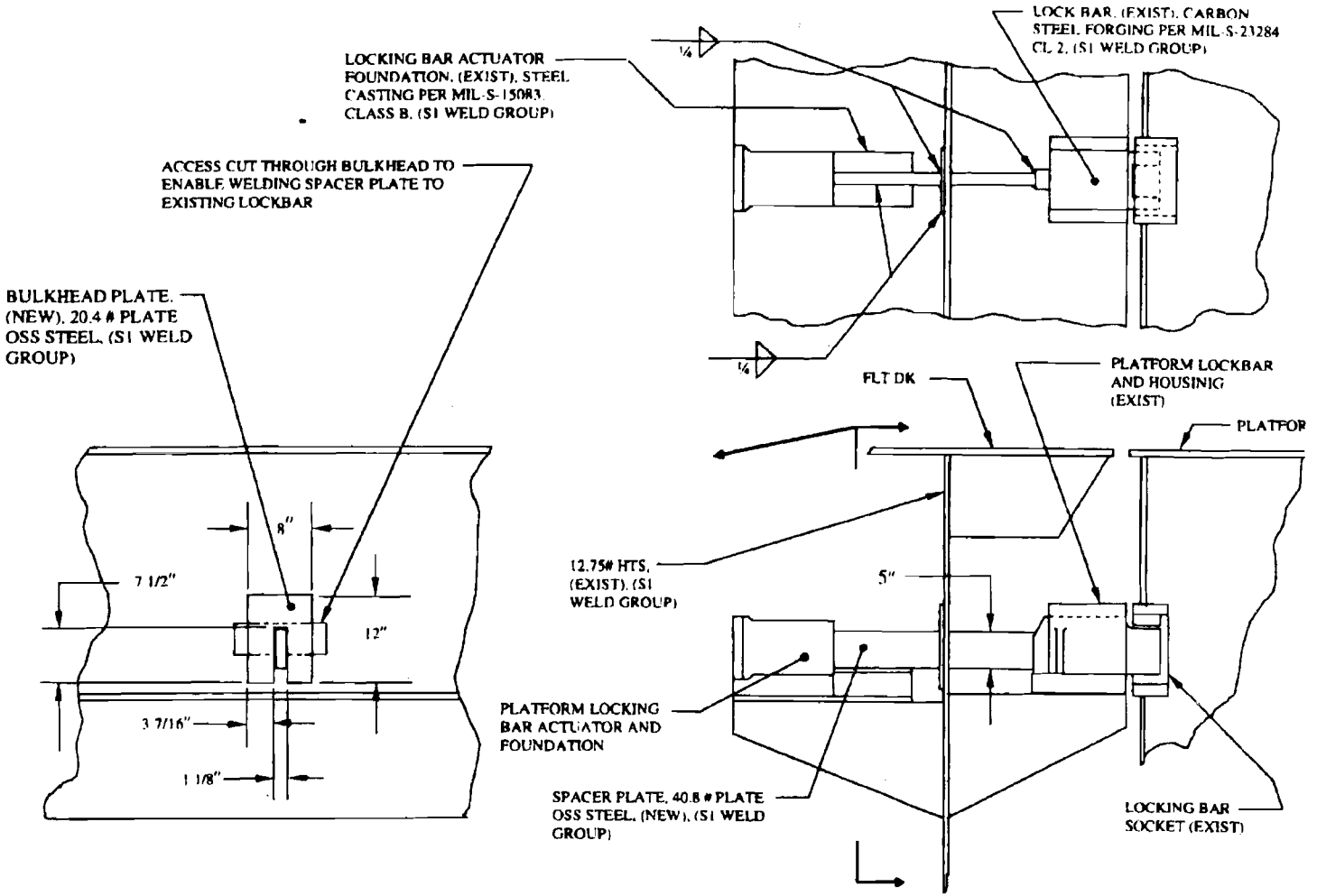
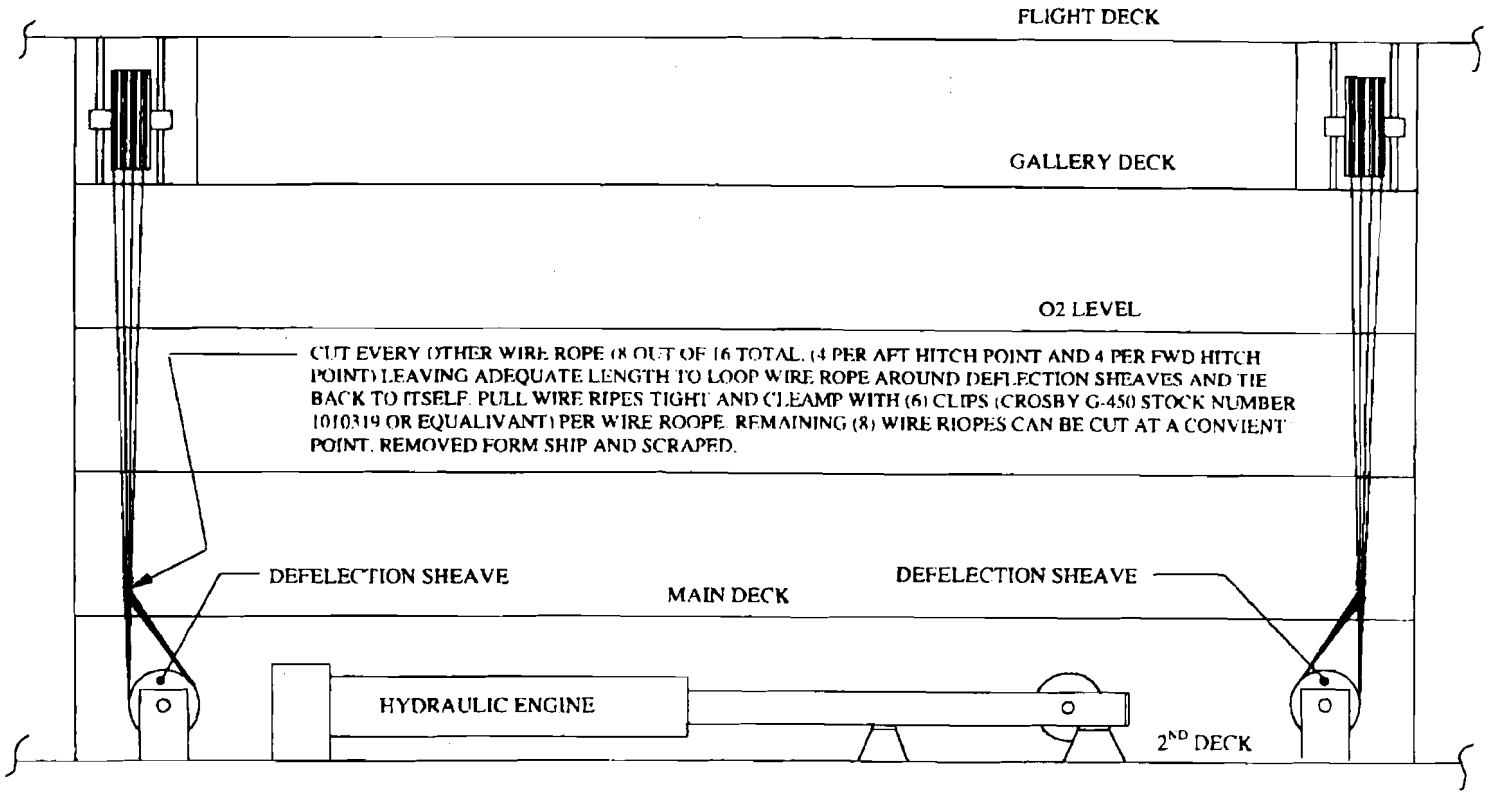
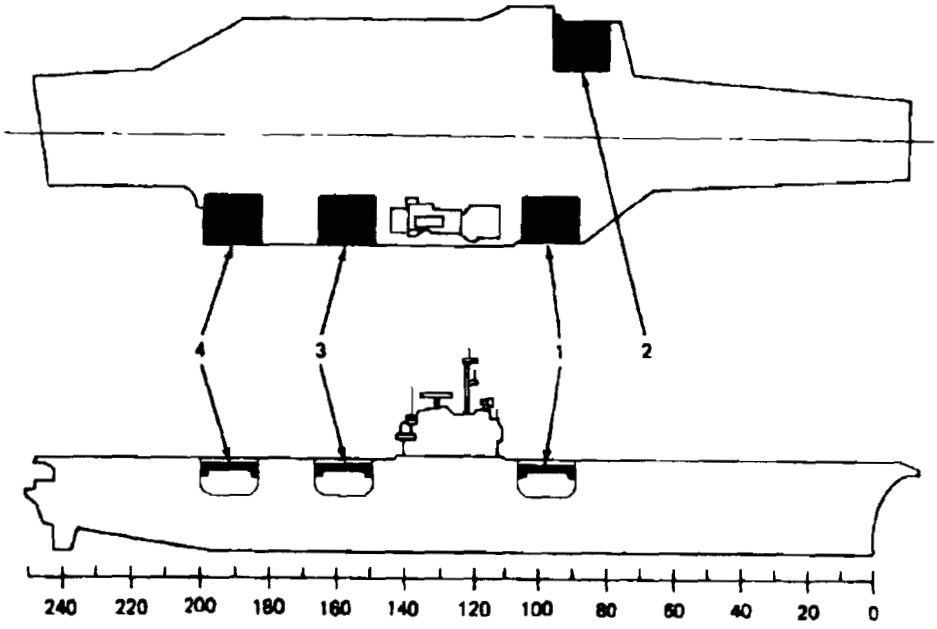


DETAILS FOR SECURING AIRCRAFT ELEVATOR 1, 2, 3, AND 4 FWD AND AFT LOCKBARS IN THE ENGAGED POSITION FOR TOWING SHIP. MINOR DEVIATIONS TO ACCESS CUTS AND INSTALLATION OF LOCKBAR SPACER AHD BULKHEAD PLATE IS PERMISSABLE PORVIDED RESULTS YIELD AS GOOD OR BETTER PERMENANT SECURING OF LOCKBARS.



DETAILS FOR CUTTING AND TYING OFF AIRCRAFT ELEVATOR PLATFOM WITH HALF OF EXISTING WIRE ROPES AND CUTTING/SCRAPPING REMAINING WIRE ROPES. APPLIES TO 1, 2, 3, AND 4 AIRCRAFTE ELEVATORS



Deck Edge Aircraft Elevator Locations On CV-60

WP-1689 CORP REV: ORIGINAL
LOCAL CH: ORIGINAL

WP-1689 CORPORATE WELDING TECHNIQUE SHEET

S1-1-1
SMAW
(1 of 1)

APPLICATION	
Base Material Group	**S-1 (carbon steel) to S-1 (carbon steel)**
Thickness Range	***3/16" and greater***
Process	Shielded Metal Arc Welding (SMAW), *DCRP, DCEP*
Welder Qualification	**1-11 or 11-11**
Joint Design	Applicable to all joint designs of Appendix J and repair, build-up, plug and tack welds

WELDING DATA	
Welding Position	All (See Note 1)
Preheat (min.)	See Note 2
Interpass (max.)	No maximum
Filler Metal Type	**MIL-7018-M**
Heat Input	Not controlled
Welding Equipment	See Section 3 of this procedure
Filler Metal Size (dia.) (in)	Welding Amperage (See Note 3) DCRP
3/32	60-110
1/8	90-150
5/32	120-200
3/16 (See Note 1)	170-275

Notes to Welding Data:

1. 3/16" diameter electrode shall only be used for welding in the flat position and for welding horizontal fillets only.

2. Minimum preheat shall be 175°F for materials listed in the TWD having carbon content greater than 0.30% and thickness greater than 1". Minimum preheat shall be 60°F for materials with carbon content equal to or less than 0.30%. *Carbon steel with a carbon content >0.35% shall not be welded with out welding engineering (Code 138) approval. When performing weld repairs of corroded structure, corroded welds or fabrication scars in HTS over 3/4" thick the minimum preheat shall be 150°F.*

3. Welding current ranges specified are recommendations only; actual welding current shall be dependent on welder skill and configuration and position of the weldment.

S1-1-1
SMAW
(1 of 1)

ENCL 1
Sheet 1 of 1