



DEPARTMENT OF THE NAVY

NAVAL SEA SYSTEMS COMMAND
WASHINGTON, DC 20362-5101

NAVSEA INST ^{IN REPLY REFER TO} 9091.1A
OPR 91
Ser 09/540
3 Oct 1986

NAVSEA INSTRUCTION 9091.1A

From: Commander, Naval Sea Systems Command

Subj: CERTIFICATION OF AVIATION FACILITIES IN NAVAL SHIPS
OPERATING AIRCRAFT

Ref: (a) OPNAVINST 3120.28A
(b) NAVAIRENGCEN Air Capable Ship Aviation Facilities
Bulletin No. 1F of 17 May 85 (NOTAL)
(c) NAVAIRENGCEN Amphibious Assault Ship Aviation
Facilities Bulletin No. 1 of 30 Mar 82 (NOTAL)

Encl: (1) Shipboard Aviation Facility Certification Program

1. Purpose. To establish responsibilities and procedures for:

a. Review of shipboard design requirements affecting
shipboard aviation facilities.

b. Formal inspection and certification of aviation facilities
in naval ships operating aircraft.

2. Cancellation. NAVSEA Instruction 9091.1 of 15 September 1978.

3. Scope

a. This instruction applies to all ships whose mission
includes the conduct of flight operations which require the
installation of an afloat aviation facility. There are three
distinct categories of afloat aviation facilities: Aviation Ships
(CV/CVN), Amphibious Aviation Ships (LPH/LHA) and Air Capable
Ships (all other ships from which aircraft can take off, land, or
routinely receive and transfer logistic support).

b. Formalized aviation facility certification requirements
have been implemented for Air Capable Ships and Amphibious
Aviation Ships. Certification requirements for Aviation Ships,
which currently exist in separate bulletins for individual
equipments, are being combined into a single bulletin. (R)

4. Background. Reference (a) requires that naval ships which
operate aircraft be formally inspected and certified. NAVMAT-INST (R)

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3120.1C (under revision by NAVAIR) assigns joint responsibility for the certification program to Naval Air Systems Command (NAVAIR) and Naval Sea Systems Command (NAVSEA), sets forth program procedures, assigns Lead Systems Command responsibility to NAVAIR, assigns coordinating responsibilities regarding shipboard installations to NAVSEA, and requires NAVSEA to issue suitable instructions for implementing the certification process. Chief of Naval Operations (CNO) ltr 3700 Ser 551G/6U404462 designates NAVAIR the configuration control manager for Primary Flight Control, Flight Deck Control, and the Landing Signal Officer Platform, thereby assigning NAVAIR final design approval for these spaces and the equipment contained therein. References (c) and (d) set forth certification requirements for Air Capable Ships and Amphibious Aviation Ships, respectively. Certification follows a formal inspection which verifies and documents that all aviation facilities necessary for the proper, adequate and safe conduct of flight operations are installed and operational. The inspection function is conducted by NAVAIR through the Naval Air Engineering Center (NAVAIRENGCEN). Certifications are issued by NAVAIRENGCEN and remain in effect until a ship's next overhaul, unless recinded earlier by NAVAIRENGCEN. Recertification following overhaul, or at any other time, is granted by means of a formal NAVAIRENGCEN inspection.

5. Certification. In the certification process, aviation facility systems, equipments, accessories and hardware are examined, tested and certified through a series of inspections leading to the formal inspection from which certification is granted. Requests for these inspections are submitted directly to NAVAIRENGCEN and should be scheduled, as applicable, to permit correction of deficiencies. These inspections are as follows:

a. Pre-Overhaul Advisory Inspection. Conducted to assist in the preparation of a work package prior to a ship undergoing overhaul. This should be conducted as part of the Pre-Overhaul Test and Inspection (POT&I) Program. These inspections are requested by either the Type Commander or the Planning and Engineering for Repairs and Alterations (PERA) Activity.

b. Pre-Certification Advisory Inspection (Technical Assist)

(1) Requested by Type Commander to ascertain condition of the shipboard aviation facility to identify and assist in correction of deficiencies necessary to obtain certification.

(2) Requested by Naval Shipyard or Supervisor of Shipbuilding (SUPSHIP) during the course of overhaul, new construction or conversion to assist in ascertaining if installation requirements necessary for certification are being properly implemented.

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c. Certification Inspection

(R)

(1) Inspection from which certification results is required:

(a) After initial installation.

(b) After completion of an alteration to the shipboard aviation facility.

(c) At the close of an overhaul or extended availability, but prior to departure of the ship from the shipyard.

(2) Requested inspection is conducted:

(a) When requested by NAVSEA, NAVAIR, SUPSHIP, or a naval shipyard.

(b) When specified by NAVAIR, the Type Commander, or Operational Commander.

(c) When requested by an individual ship via the Type Commander.

6. Funding for Certification Inspection. Funding, including NAVSEA and Naval Ship Systems Engineering Station personnel cost, will be borne as follows:

(R)

a. Operational ships will be funded by NAVAIR except for correction of deficiencies resulting from facility degradation between overhauls, which will be funded by the Type Commander.

b. New construction or conversion ships will be funded by NAVSEA via NAVAIR 551.

7. NAVSEA Responsibilities. NAVMATINST 3120.1C (under revision by NAVAIR) assigns the following NAVSEA responsibilities:

a. Provide a point of contact within NAVSEA for all matters relating to the certification program and shipboard aviation facility integration.

b. Prescribe requirements for inclusion in the certification procedures document for NAVSEA cognizant items.

c. Provide copies to NAVAIR and NAVAIRENGCEN of proposed shipboard aviation facility designs to be certified under this program prior to installation.

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d. Establish a budget to fund:

(1) Engineering studies relating to definition of requirements and feasibility of improving the design of NAVSEA cognizant items.

(2) Service evaluations aboard ship of candidate, improved systems.

e. Establish explosive safety requirements for all matters relating to the aviation facility.

f. Provide coordinated review of certification related items submitted by NAVAIR.

8. Action

a. NAVSEA Point of Contact. SEA 91T is the designated point of contact for matters relating to NAVSEA cognizant items required for the shipboard aviation facility and certification requirements. The areas of responsibility include the following:

(1) Liaison with NAVAIR.

(2) Provide NAVAIR those sections of aviation facilities bulletins applying to NAVSEA cognizant items. Provide changes as appropriate.

(3) Adjudication of questions concerning NAVSEA systems and equipments which involve interpretations of requirements in aviation facilities bulletins, including whether installed shipboard capabilities meet requirements.

(4) Act on requests for changes in these requirements for which NAVSEA has jurisdiction.

R) (5) Advise and act as liaison with NAVSEA Ship Logistics Managers (SLMs) and Ship Acquisition Project Managers (SHAPMs) regarding requirements and designs necessary to achieve certification of shipboard aviation facilities. The development, design and shipboard installation of a required capability will be accomplished through existing programs such as:

(a) Fleet Modernization Program (FMP) Ship Alteration (SHIPALT) process for operational ships.

(b) New construction or conversion programs under the jurisdiction of a SHAPM or SLM.

(6) Establish a budget to fund:

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(a) Engineering studies relating to definition of requirements and feasibility of improving design of NAVSEA cognizant items.

(b) Service evaluations aboard ship of candidate or improved systems.

(7) Ensure budgets for new construction or conversion programs include inspections to be conducted by the certification inspection team.

(8) Establish explosive safety requirements for all matters relating to the aviation facility.

(9) Attend, as appropriate, selected shipboard certification inspections.

b. Shipboard Design Coordination. It is essential an aviation facility satisfy approved certification requirements. Therefore, it is necessary that this design be coordinated with NAVAIR (AIR-551). The nature of this design interface is as follows:

(1) Fleet Modernization Program (FMP)

(a) SLM

1 Where a task is authorized to prepare a SHIPALT for the aviation facility, direction should be given to coordinate its development with NAVAIR. The alteration should indicate that a formal inspection is required pursuant to paragraph 5c of this instruction. While this generally relates to an aviation facility requirement, it also relates to other alterations which indirectly affect an aviation facility.

2 Provide SEA 91T a copy of the proposed SHIPALT to determine if a design review with NAVAIR is advisable. The proposal should include the specific certification requirements affected by the alteration.

3 Forward proposed SHIPALT Records (SARs) to NAVAIR for review.

(b) Planning Yard or Expanded Planning Yard. Forward proposed Ship Installation Drawings (SIDs) to NAVAIR (AIR-551) for review. These drawings shall list the authorizing SHIPALT.

(2) New Construction or Conversion

(a) NAVSEA SHAPMs and SLMs are responsible for

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ensuring that all items required for certification, as defined in aviation facilities bulletins, are included in the ship design package. The following documents relating to certification items should be provided by the cognizant SHAPM or SLM to NAVAIR (AIR-551) for review during the design and planning phases:

1 Preliminary contract and guidance drawings and required ship specification sections prior to the scheduled Preliminary Design Review.

2 Final contract documentation required prior to scheduled Contract Design Review.

3 Shipbuilding working drawings required as they become available.

4 Engineering Change Proposals which affect an aviation facility either directly or indirectly prior to action by the NAVSEA SHAPM or SLM Change Control Board.

(b) Approval of this design package by NAVAIR will constitute the certification inspection baseline. Installation and operation of shipboard equipment in accordance with this baseline, and with the bulletin used to establish it, will result in ship certification. To ensure that the capability reflects current aviation requirements, once the baseline is established, NAVAIR will review all changes to the aviation facility requirements to determine any impact on the existing design package. Where impact is identified, NAVAIR will submit an Engineering Change Proposal delineating the ship changes required to bring the ship into conformance with the new requirements. NAVAIR correspondence relating to the acceptability of aviation facilities for inspection and survey purposes will be provided by NAVAIR to the Board of Inspection and Survey.

(3) NAVAIR will notify NAVSEA and Type Commanders of any authorized aircraft changes which could impact the shipboard facility design.

9. Inspection Team Coordination

a. An activity requesting inspection shall be responsible for coordination with the inspection team to ensure expeditious conduct of the inspection. These liaison efforts are listed and required to the extent shown in enclosure (1). The extent of the coordination required is dependent on the inspection being conducted. The responsibilities may be delegated if necessary.

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b. Costs for inspection team visits will be funded as follows:

(1) Where aviation facility work has been authorized by SHIPALT, the SHIPALT will fund the visit.

(2) Where no aviation facility work has been authorized, the Type Commander will fund the visit.

c. Responsibility for coordinating specific inspections is as follows:

(1) Pre-Overhaul Advisory Inspection (POT&I) - PERA

(2) Pre-Certification Advisory (Technical Assist) Certification Inspection

(a) FMP. SUPSHIP or naval shipyard, as applicable, unless otherwise expressly assumed by a NAVSEA SLM.

(b) New Construction or Conversion. SUPSHIP or naval shipyard, as applicable, unless otherwise expressly assumed by a NAVSEA SHAPM or SLM.

10. Concurrence. Naval Air Systems Command concurs with this instruction.

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SHIPBOARD AVIATION FACILITY
CERTIFICATION PROGRAM

NAVSEAINST 9091.1A
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Elements of Coordination and Liaison Efforts	INSPECTION			CERTIFICATION	
	Pre-Overhaul Advisory FMP (POT&I) (1)	Pre-Certification Advisory (Tech Assist)		FMP (4)	New Construction Conversion (5)
		FMP (2)	New Construction Conversion (3)		
Request NAVAIRENGCEN perform type of inspection required during period specified.	Required	Required	Required	Required	Required
For new construction or conversion ships, provide data design package indicated in para 8b(2) to Inspection Team which will be used in conjunction with the applicable Aviation Facility Bulletin.	Not Required	Not Required	Required	Not Required	Required
Make arrangements for the Inspection Team to board the ship.	Required	Required	Required	Required	Required
As applicable, ensure availability of installed equipment and systems with personnel to demonstrate operability for the Inspection Team.	Required	Not Required	Not Required	Required	Required
As applicable, ensure availability of stowed items for Inspection Team verification.	Required	Not Required	Not Required	Required	Required
Consolidate and make available as necessary, pertinent test memoranda for the Inspection Team.	Required	Not Required	Not Required	Required	Required
Take inputs on deficiencies provided by the Inspection Team to develop a corrective work list and/or coordinate corrective action. (6)	Required	Required	Required	Required	Required
Request subsequent inspection, as necessary.	Not Required	Required	Required	Required	Required

NOTES (Inspection Responsibility for Elements of Coordination):

- (1) Pre-Overhaul Advisory (FMP) (POT&I): PERA.
- (2) Pre-Certification Advisory (Tech Assist) (FMP):
SUPSHIP or Shipyard, as applicable, unless expressly assumed by a NAVSEA SLM.
- (3) Pre-Certification Advisory (Tech Assist) (New Construction or Conversion):
SUPSHIP or Shipyard, as applicable, unless expressly assumed by a NAVSEA SHAPM or SLM.
- (4) Certification Inspection (FMP):
SUPSHIP or Shipyard, as applicable, unless expressly assumed by a NAVSEA SLM.
- (5) Certification Inspection (New Construction or Conversion):
SUPSHIP or Shipyard, as applicable, unless expressly assumed by a NAVSEA SHAPM or SLM.
- (6) Cost for Correction of Deficiencies:

a. Work Accomplished by SHIPALT:

1. Deficiencies resulting from inadequate SHIPALT design guidance will be funded by NAVSEA Ship Alteration Funds.
2. Deficiencies resulting from defective government-furnished material will be funded by the appropriate material manager.
3. Deficiencies resulting from faulty overhauling activity work will be funded by the overhauling activity under the guarantee clause.

b. Facility Degradation:

1. Deficiencies resulting from facility degradation between overhauls will be funded by the Type Commander.

(R)

Enclosure (1)

9-10