OPNAV INSTRUCTION 9420.1C

From: Chief of Naval Operations

Subj: POSITIONING, NAVIGATION AND TIMING POLICY

Ref: (a) CJCSI 6130.01G
(b) DoD Instruction 4650.06 of 16 June 2016
(c) DoD Instruction 4650.08 of 27 December 2018
(e) OPNAVINST 9420.2A of 31 October 2014
(f) 10 U.S.C. §2279b
(g) Deputy Secretary of Defense Classified Memorandum on Navigation Warfare Implementation Guidance of 17 Nov 2004 (NOTAL)

1. Purpose

   a. To provide Navy policy governing positioning, navigation, and timing (PNT) and navigation warfare (NAVWAR) matters per reference (a) and implementation of guidance described in references (b) through (h).

   b. To assign PNT responsibility to specific Navy organizations for requirements development, acquisition, installation, testing, certification, training, sustainment, and operational use of PNT and NAVWAR systems at sea and ashore.

   c. This revision affirms established and newly established policies, more clearly defines the pillars of PNT – to include renewed interest and recapitalization for celestial navigation – and delineates the relationships and responsibilities to specific Navy organizations for more assured PNT navigational standardization and superiority. This instruction is a major revision and should be reviewed in its entirety.

2. Cancellation. OPNAVINST 9420.1B and OPNAVINST 3530.3B.

3. Background

   a. Embedded at all levels of war, PNT information is critical to every aspect of evolving naval and joint operations in the 21st century. It is the fundamental element for accurate
operational maneuver, assured command and control, and optimum weapons and sensor employment. It is vital to enabling a competitive advantage across the full spectrum of naval operations.

b. Under reference (a), the Joint Chiefs of Staff provide overarching guidance and procedures for the planning, operational use, and management of the Department of Defense (DoD) PNT systems either owned or contracted for use to meet operational warfighter requirements.

c. Reference (b) implements policy, assigns responsibilities, and prescribes procedures for PNT through the DoD PNT enterprise and its Oversight Council. The DoD PNT Oversight Council, through the PNT Executive Management Board, is the forum for all DoD PNT matters and provides overall management, supervision and decision processes for the DoD PNT enterprise. As the primary advisory body to the Secretary of Defense, the PNT Oversight Council coordinates and provides recommended DoD positions to the Deputy Secretary of Defense as a co-chair of the National Executive Committee for Space-Based PNT, as described in reference (c). The Department of the Navy is represented at the PNT Oversight Council by representatives from the Office of the Secretary of the Navy, the Chief of Naval Operations (CNO), and the Commandant of the Marine Corps.

d. The Navigator of the Navy (OPNAV N2N6E) serves as the CNO’s senior PNT policy and standards advisor and is the principal for the Navy to synchronize policy, resources, and requirements, as assigned by the CNO Executive Board Decision Memorandum, Navigator of the Navy (27 Nov 2000).

e. Per references (a) and (d), the Navigational Satellite Timing and Ranging (NAVSTAR) Global Positioning System (GPS) is the primary source of PNT information for the DoD and U.S. Navy. Adversarial threats to military GPS have increasingly evolved and improved, expanding their capacity and complexity to deny, degrade, and disrupt GPS signals. Resilient PNT services and system integrity of the highest possible confidence are essential to meet mission requirements. Reference (c) establishes policy and assigns responsibilities for the security of PNT information related to the development, acquisition, and operational use of PNT information sources and PNT information-dependent systems.

f. The recapitalization of celestial navigation provides an alternate means to determine position. Navy Regulations, chapter 8, sections 0845 and 0846, the requirement to maintain record books of all observations and computations made for the purpose of navigating a U.S. Navy commissioned vessel as part of the vessel’s official record, remain valid. OPNAV 3530/1 U.S. Navy Navigation Workbook and OPNAV 3530/2 U.S. Navy Standard Bearing Book are aligned to this instruction.
4. **Applicability**

   a. This policy applies to all U.S. Navy commissioned vessels, non-commissioned vessels (e.g., United States Naval Ship), Naval Expeditionary Combat Command vessels (e.g., patrol boats, rigid-hulled inflatable boat, etc.) and other small watercraft, aircraft, unmanned systems, guided munitions, expeditionary forces, and ashore organizations that support the development, acquisition, testing, installation, training, certification, operation, and sustainment of fleet PNT systems to include sensors, tools, and platforms. Fleet PNT systems provide information critical to naval operations, increase platform protection, maintain and acquire signals (i.e., communications), improve situational awareness, and synchronize advanced combat and weapons systems for network-centric, effects-based unified execution of mission.

   b. For this instruction, PNT includes position determination, point-to-point tracking, asset attitude or orientation determination, arrival prediction and associated timing references. It also encompasses techniques, systems, equipment, and associated operator skills. PNT may require determination of position, heading, roll, pitch, yaw, velocity, acceleration, altitude or depth, and precise time and time interval (PTTI) with respect to the operation of ships, submarines, aircraft, space vehicles and forces ashore. PNT parameters can be absolute or relative, and include determination of rates of change.

   c. The DoD intends to gain and maintain PNT information superiority through the application of NAVWAR without unnecessarily disrupting non-hostile PNT users outside an area of military operations. NAVWAR is defined as “deliberate defensive and offensive action to assure and prevent PNT information through coordinated employment of space, cyberspace, and electronic warfare operations.”


5. **Policy**

   a. **General**

      (1) It is DoD policy to develop, procure, sustain, and modernize PNT systems to meet the full spectrum of military operations. Navy PNT systems will be built to the jointly adopted standards described in references (c) and (d).

      (2) The core capability needed by naval operations forces is 100 percent availability of PNT with defined accuracy to provide four-dimensional information (i.e., x, y, z, and t). This does not refer to what a single technological solution should provide but what a combination of a number of solutions, both technological and operational (e.g., tactics, techniques and procedures), can provide to assure PNT services to PNT users.
(3) Every platform and user with a validated PNT requirement must have both a DoD approved primary means of position and precise time determination and at least one DoD approved alternate means which determines position and precise time from a source independent of the primary PNT source (i.e., GPS-independent). The technical complexity of the solution may vary with the platform or user, but the operational and technical proficiency in both primary and alternate means must be maintained. OPNAV N2N6E may be consulted for determination of whether or not a PNT source is DoD approved.

(4) NAVSTAR GPS is currently the only DoD and U.S. Navy approved primary source for position and precise time.

(5) Alternate position sources include, but are not limited to:

(a) inertial navigation systems,
(b) radio detection and ranging (radar) navigation,
(c) lines of position (e.g., line of sight, electronic bearing line),
(d) celestial navigation,
(e) bathymetric fix, and
(f) signals of opportunity.

(6) Alternate sources for precise time include, but are not limited to:

(a) clocks (e.g., rubidium, cesium),
(b) network time protocol (NTP),
(c) high frequency worldwide voice,
(d) two-way satellite time transfer, and
(e) one-way satellite time transfer.

(7) Per references (a) and (c), the Navy must only use DoD approved PNT sources as the primary means of obtaining PNT information for combat and combat support operations. Reliance on non-DoD approved civil, commercial, or foreign sources as the primary means of obtaining PNT information for combat and combat support is not authorized; however, it is
authorized for combat service support operations subject to the level of PNT integrity required. DoD approved PNT sources for combat, combat support, and combat service support will be certified by the appropriate naval systems command.

(8) PNT system architecture interfaces and protocols must be standardized between systems and platforms to the maximum extent feasible to optimize interoperability. There is an existing and increasing need for systems aboard naval platforms to have accurate PNT data to accomplish their mission. Standardization of interfaces and protocols minimize the incompatibilities PNT data users currently have to accommodate.

(9) PNT systems should be designed to be as resilient as the forces and weapons systems they are designed to support. Navy PNT systems must possess system integrity by utilizing cybersecurity, physical security, hardening, electronic protection mechanisms, and other measures to protect cryptography, ensure the availability of PNT services, and retain the capability to deny hostile use of PNT information when necessary. This includes resistance to countermeasures such as hostile attack (kinetic or non-kinetic), inadvertent or unintentional electromagnetic interference, electromagnetic pulse, or natural disturbances.

(10) NT systems should maintain accuracy and availability that is not excessively degraded by changes in location, altitude, high “G” or other abrupt maneuvers, weather, complex terrain changes, or by time of year or day.

(11) New PNT systems in procurement should have the ability to indicate degradation of service to the operator due to interference (i.e., jamming, multipath, weather, terrain, or spoofing) and provide this information to electronic support efforts to detect, identify, and resolve interference issues. If a new PNT system is unable to comply with this requirement, then they should submit a waiver request to the OPNAV N2N6E for relief. The waiver request will contain why the PNT system is unable to comply and an expected future compliance date.

(12) Current PNT systems must be sustained until follow-on systems have been validated for operational use.

(13) Navy command, control, communications, computers, intelligence, surveillance, and reconnaissance systems that rely on GPS for timing must use only properly keyed GPS precise positioning service (PPS) receivers and incorporate the capability to operate without continuous GPS availability or integrity per reference (a).

b. Positioning

(1) Information that refers to a position on the earth, including submerged operations, must indicate that position in terms of the terrestrial reference frame and epoch defined by the World Geodetic System 1984 as provided by the National Geospatial-Intelligence Agency (NGA).
(2) NAVSTAR GPS is the primary positioning and navigation source for U.S. Navy operations. All Navy PNT users must acquire, train with, and use GPS PPS per references (a) and (d). However, naval aircraft may continue to use the Tactical Air Navigation System as the primary navigation system for enroute and terminal flight in controlled airspace.

(3) GPS PPS systems must always be keyed when operated and used in an operating mode that makes maximum use of the encrypted GPS signals (i.e., limit use of unencrypted GPS signals or “PPS lockout”). “Mixed mode” operation – the continued use of the course and acquisition signal after acquiring and tracking the encrypted precise “P(Y)” code signal – is not authorized.

(4) Keyed operation provides:

(a) access to the PPS;

(b) increased anti-spoofing; and

(c) improved resistance to intentional and unintentional interference (e.g., deliberate radiation, re-radiation, or alteration of electromagnetic energy intended to convey misleading information).

1. Un-keyed operation provides no protection against spoofing or interference in any environment and may result in degraded performance, positional inaccuracy, and maximum result in a mission failure.

2. Systems must indicate an alert to the operator if a GPS PPS receiver is operating “un-keyed.”

(5) Platforms or systems requiring the use of GPS standard positioning service (SPS) receivers must submit an SPS waiver request, per reference (a). While GPS SPS is available for peaceful civil, commercial, and scientific use on a continuous, worldwide basis, free of direct user fees, it is anticipated that adversaries may attempt to use GPS SPS for hostile purposes or may attempt to deny or degrade U.S. and allied use of the same.

(6) An enhanced GPS signal military code (M-Code), separate from the current P(Y) coded signal, is being developed and is mandated by Public Law 111-383 as part of PPS. M-Code provides improved anti-jam and security protection, will improve encrypted coding and spectral protection, as well as allow users easier access to encrypted coding and spectral separation from civil (unencrypted) signals. All procured GPS user equipment starting in Fiscal Year 2018 must be M-Code capable. Resource sponsors must plan and budget for modernization and incorporation of M-Code GPS. Requests for waivers for the procurement of non M-Code GPS receivers must be submitted through the Office of the Deputy Assistant Secretary of the Navy, Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance and Space. Should a waiver be required or if equipment is legacy, reference (a)
requires the use of selective availability anti-spoofing module GPS PPS receivers in all newly fielded systems, as well as systems going through major modifications or upgrades. Existing operational systems with legacy GPS PPS receivers procured prior to 1 October 2006 will not be required to retrofit to selective availability anti-spoofing module for compliance.

(7) Use of commercial GPS receivers must not affect the ability of an individual, unit or platform to employ keyed GPS PPS receivers in order to conduct military operations.

(8) Resource sponsors must ensure that all Navy platforms with a validated PNT requirement are equipped with at least a single operating, keyed GPS PPS receiver following. Additional requirements for supplementary PPS GPS receivers must be coordinated with OPNAV N2N6E and the appropriate platform or system resource sponsor.

(9) All U.S. Navy air, surface, and sub-surface platforms must have a dead reckoning capability and proficiency.

c. Navigation

(1) The CNO directed transition from the use of Standard Nautical Charts to electronic navigational charts (ENC) is moving forward. The Navy should navigate only with charts provided by NGA unless granted a waiver by the OPNAV N2N6E. NGA has delivered a worldwide set of digital nautical charts certified “Safe for Navigation.” Standard nautical charts (i.e., “paper”) will continue to be used on ships without certified electronic navigation systems.

(2) Digital nautical charts is an unclassified, vector-based, digital database derived from a portfolio of approximately 5,000 nautical charts and will ultimately provide global marine navigation between 84 degrees North and 81 degrees South latitude and support a variety of geospatial information and services applications. The Navy plans to transition to the next generation of ENC when NGA implements the International Hydrographic Organization product specification standards S-57 and S-100 data format series (currently under development). NGA production of the next generation ENC is estimated to begin in the 2020 timeframe. The new ENC will provide additional capabilities and improve interoperability with other nations.

(3) The policy relating to electronic navigation, to include the implementation and operational use of ENCs on Navy vessels, is set forth in reference (e).

(4) There is a need for continuous, all-weather navigation capability during all phases of marine navigation, especially during harbor and harbor approach transits. Efforts will continue to define and validate requirements to take advantage of modern technology. U.S. Navy vessels will be equipped to make full use of progress in this area. However, traditional piloting methods such as visual and radar navigation must continue to be used to ensure safety of passage. All U.S. Navy surface vessels, excluding small craft of less than 150 tons displacement or 100 feet in length, should have a primary navigational surface search radar and a secondary radar (with a
certified for navigation surface search mode) that operates independent of each other. Independent operation means two completely separate systems (separate power sources, a distribution panels, and antennas) such that failure of any component of one system will not render the other system inoperative, ensuring redundancy for safety of navigation.

(5) Celestial Navigation

(a) The celestial reference frame (CRF) as determined by the United States Naval Observatory (USNO) is the DoD standard. CRF provides a basis for autonomous navigation, very precise intelligence, surveillance, and reconnaissance orientation, and orbit determination for space situational awareness applications.

(b) Celestial navigation proficiency must be maintained by U.S. Navy vessels as one alternate means to ascertain position, including United States Naval Ship vessels and specific aviation platforms as identified by Commander, Naval Air Forces. Naval Expeditionary Forces are exempt from this requirement given their size and nature of their platforms.

(c) USNO provides a variety of astrometry products critical for positioning, navigation, and orientation including optical and infrared image as well as star catalogs. All naval units using celestial navigation and positioning systems must obtain and use only USNO star catalogs, almanacs, and Earth orientation parameters (EOP). There are no exceptions to this policy.

(d) The System to Estimate Latitude and Longitude Astronomically is the only manual celestial navigation software authorized for U.S. Navy surface, maritime vessel navigation. USNO also publishes the annual nautical almanac, which may also be used.

(e) USNO is the sole provider of EOP for DoD. EOP are mathematical relationships between the CRF and terrestrial reference frame derived from very long baseline interferometry. EOP are critical for high-accuracy positioning, targeting, and orientation.

d. Timing

(1) PTTI is critical for most DoD systems. The DoD reference standard for PTTI is Coordinated Universal Time (UTC) as maintained by USNO (UTC(USNO)) per references (a) and (b). Five nanoseconds synchronized clock time is currently the most stringent timing requirement for DoD operational applications.

(2) GPS is the primary means of distributing UTC(USNO) to DoD and other users. It is important that Navy PTTI users who obtain precise time via GPS assure the GPS delivery of UTC(USNO) by using keyed PPS receivers. Alternate sources for receiving PTTI from USNO include:
(a) USNO certified clock, accomplished by providing documentation of traceability to UTC(USNO);

(b) two-way satellite time transfer using geostationary communications (nanosecond accuracy possible);

(c) telephone voice time announcement and time ticks are available (millisecond accuracy possible);

(d) USNO computer NTP synchronization service meeting internet standard RFC-1305 and authenticated NTP services (millisecond accuracy possible); and

(e) USNO may provide direct services (GPS PPS accuracy possible) to select activities as the situation arises.

(3) Platforms and users must monitor and maintain their alternate timing sources (e.g., organic analog or atomic clocks).

e. NAVWAR

(1) Reference (c) describes the elements of U.S. NAVWAR policy.

(a) Assure friendly use of PNT information.

(b) Minimize interference to peaceful civil users of PNT information.

(c) Deny adversary use of PNT information.

(2) NAVWAR is necessary to ensure PNT information is available, accurate, and reliable in electromagnetically contested (denied) and congested (degraded) environments, while also denying PNT information to an adversary. Intentional NAVWAR actions may disrupt GPS SPS signals throughout an area of operations and DoD users who rely on time delivered by SPS will be negatively impacted by denial efforts.

(3) PNT systems and capabilities must be NAVWAR compliant based on the required PNT integrity level, as defined in reference (f), for the operational environment.

6. Responsibilities

a. Navy Requirement and Resource Sponsors

(1) Deputy Chief of Naval Operations for Information Warfare (CNO N2N6) is the requirements sponsor for fleet PNT systems with the exception of fleet ballistic missile
submarines. It is also the resource sponsor for the development, integration, and testing of fleet PNT systems with the exception of guided munitions, and submarine specific development, integration and testing.

(2) Deputy Chief of Naval Operations for Fleet Readiness and Logistics (CNO N4) is the resource sponsor for the procurement, installation, and sustainment of PNT systems for United States Naval Ship vessels.

(3) Deputy Chief of Naval Operations for Warfare Systems (CNO N9) is the resource sponsor for the development, integration, and testing of PNT systems for submarines and guided munitions; and the resource sponsor for the procurement, installation certification, and sustainment of fleet PNT systems for its respective portfolio of platforms.

(4) Navy resource sponsors will coordinate their requirements and technology standards for PNT systems, to include Joint Capabilities Integration Development System documentation, with OPNAV N2N6E.

b. OPNAV N2N6E

(1) Serve as the CNO's senior advisor regarding PNT matters, including policy, technical performance, requirements, and certification standards for navigation, electronic charting systems, Geospatial Information and Services data standards, PTTI, EOP, and CRF.

(2) Serve as the primary Navy principal to the DoD PNT Executive Management Board; serve as the DoD PTTI, EOP, and CRF manager; and provide a qualified individual to serve as the Navy's member to the DoD PNT, NAVWAR, and PTTI working groups.

(3) Approve and forward Navy submissions for reference (a) to the Joint Chief of Staff.

(4) Support the tri-agency biennial review of Joint Capabilities Integration Development System, ensuring changes and revisions are consistent with reference (a). Approve and forward Navy submissions to Office of the Secretary of Defense (OSD).

(5) Serve as the primary U.S. Navy liaison to NGA for safety of navigation products and services.

(6) Validate requirements and coordinate technical standards development and review for PNT systems used by all U.S. Navy commissioned vessels, non-commissioned vessels, aircraft, unmanned systems, guided munitions, expeditionary forces, and ashore organizations to include the development of Joint Capabilities Integration Development System documentation under which PNT systems (to include navigation equipment) will be procured.
(7) Conduct independent analysis and assessment of existing PNT systems and emerging technologies to support programming guidance.

(8) Develop performance standards for PNT systems.

(9) Act as the Navy lead to address PNT assurance capabilities, requirements for NAVWAR, and equipment commonality and standardization as directed by reference (g).

(10) Establish and chair the PNT Systems Integrated Product Team to approve all Navy primary and alternative PNT systems (as described in subparagraph 5a(3)) to be installed in Navy platforms. The Integrated Product Team should be comprised of representatives from the Deputy Assistant Secretary of the Navy Command, Control, Communications, Computers, Intelligence and Space, OPNAV platform sponsor, Director, Innovation, Technology Requirements and Test and Evaluation (OPNAV N94), Operational Test and Evaluation Force, the respective systems command program executive offices, the respective navigation technical warrant holder, U.S. Fleet Forces Command, and platform type commander.

(11) Assign, when tasked by OSD, a qualified individual from within OPNAV N2N6E as the U.S. Representative to the Capability Panel 2 Navigation and Identification Subcommittee of the Consultation, Command, and Control Board of the North Atlantic Treaty Organization.

c. The Deputy Director, Naval Intelligence (OPNAV N2N6I)

(1) Act as the Navy lead to provide Navy requirements for continuing analysis of the evolving NAVWAR threat to the Defense Intelligence Agency.

(2) Support National Security Agency efforts to baseline current NAVWAR electronic surveillance capabilities for all platforms able to support signals intelligence requirements. Ensure NAVWAR electronic surveillance requirements are reflected in appropriate capabilities documentation as directed by reference (g).

d. OPNAV N94

(1) OPNAV N94 is the Navy test and evaluation (T&E) executive and provides Navy T&E policy guidance, T&E working-level integrated product team coordination and dispute adjudication to acquisition programs.

(2) OPNAV N94 is also the primary interface between OSD T&E oversight organizations and Navy activities on testing matters. Program offices and Commander, Operational Test and Evaluation Force should keep OPNAV N94 informed of all correspondence and coordination with OSD T&E Oversight organizations. OPNAV N94 approves the T&E master plan for the CNO.
e. The USNO Superintendent

(1) Per reference (b), serve as the deputy DoD PTTI, EOP, and CRF manager. In coordination with OPNAV N2N6E, derive, maintain, and distribute the DoD reference standard for PTTI, EOP, and CRF.

(a) Provide advice and recommendations to resource sponsors and operational commanders regarding the technical specifications, acceptability, and certification of proposed timing systems.

(b) Provide advice on all policy decisions involving timing and input to Navy, Defense, and Joint planning documents.

(c) Chair the DoD PTTI Working Group and provide a qualified individual to serve as USNO’s member to the DoD PNT and NAVWAR working groups.

(d) Act as the functional area manager for all U.S. Navy systems, applications, and services involving PTTI, CRF, and EOP.

(2) Establish, maintain, and distribute high-precision CRF and EOP. NAVOBSY must coordinate those activities with OPNAV N2N6E.

(a) Advise resource sponsors and warfare commanders regarding the technical specifications, acceptability, and certification of proposed celestial navigation systems.

(b) Provide operational astrometry products and services for the Navy and DoD, to include star catalogs, almanacs, and software applications for celestial navigation, platform attitude or orientation. Support future system development related to automated celestial navigation and space situational awareness. Per section 7396 of Title 10, U.S. Code, the work intended for the use of navigators must be able to be computed without foreign cooperation.

f. Commander, United States Fleet Forces Command

(1) Identify fleet PNT capability gaps and readiness wholeness issues and provide recommendations to OPNAV resource sponsors in support of program objective memorandum planning and programming.

(2) Submit new fleet PNT operational requirements to the OPNAV N2N6E and the appropriate platform resource sponsor.
(3) Commander, Naval Warfare Development Command, under the oversight of Commander, United States Fleet Forces Command, develop PNT concepts of operations, doctrine, and tactics, techniques and procedures development for naval forces to operate in a GPS denied or degraded environment.

g. Naval Systems Commands, PEOs, or Direct Reporting Program Managers

(1) Ensure the development and acquisition of platform and systems requiring PNT adhere to the guidance and requirements within this instruction.

(2) Establish or reaffirm responsibilities, procedures, and technical guidelines for the mandatory certification of fleet PNT systems and interfaces within their respective portfolios and authorities. Fleet PNT systems and interfaces will be certified compliant to design prior to fielding and then as-installed on the platform by the appropriate certification authority.

(3) Coordinate with designated Navy resource sponsor and the fleet to minimize the number of PNT system variations to maximize user interoperability and facilitate version control.

(4) Have an approved, documented GPS waiver per subparagraphs 5b(5) and 5b(6).

7. Records Management

a. Records created as a result of this instruction, regardless of format or media, must be maintained and dispositioned per the records disposition schedules located on the Department of the Navy/Assistant for Administration, Directives and Records Management Division portal page at https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/Records-and-Information-Management/Approved%20Record%20Schedules/Forms/AllItems.aspx.

b. For questions concerning the management of records related to this instruction or the records disposition schedules, please contact the local records manager or the Department of the Navy/Assistant for Administration, Directives and Records Management Division program office.

8. Review and Effective Date. Per OPNAVINST 5215.17A, OPNAV N2N6E will review this instruction annually around the anniversary of its issuance date to ensure applicability, currency, and consistency with Federal, DoD, Secretary of the Navy, and Navy policy and statutory authority using OPNAV 5215/40 Review of Instruction. This instruction will be in effect for 10 years, unless revised or cancelled in the interim, and will be reissued by the 10-year anniversary date if it is still required, unless it meets one of the exceptions in OPNAVINST 5215.17A, paragraph 9. Otherwise, if the instruction is no longer required, it will be processed for cancellation as soon as the need for cancellation is known following the guidance in OPNAV Manual 5215.1 of May 2016.

![Signature]

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Releasability and distribution:  
This instruction is cleared for public release and is available electronically only via Department of the Navy Issuances Web site, [http://www.secnav.navy.mil/doni](http://www.secnav.navy.mil/doni)