OPNAV INSTRUCTION 3100.8B

From: Chief of Naval Operations

Subj: DECK LANDING OPERATIONS BY CIVILIAN HELICOPTERS WITH CIVILIAN PILOTS ON U.S. NAVY VESSELS

Ref: (a) SECNAVINST 5820.7C
(b) DoD Instruction 4500.53 of 20 October 2008
(c) OPNAVINST 3120.28C
(d) NAVAIRINST 3120.1C
(e) NAEC-ENG-7576 (NOTAL)
(f) NATO APP 2(F) (NOTAL)
(g) STANAG 1435 (NOTAL)
(h) NAVAIR 00-80T-105 (NOTAL)
(i) NAVAIR 00-80T-106 (NOTAL)
(j) NAVAIR 00-80T-122 (NOTAL)
(k) NAVAIR 17-1-537 (NOTAL)
(l) OPNAVINST 3710.7U
(m) JAGINST 5800.7F
(n) OPNAVINST 3750.6R

Encl: (1) Civilian Helicopter Equipment Requirements
(2) Civilian Helicopter Aircrew Training Requirements
(3) Civilian Helicopter Aircrew Equipment Requirements
(4) Landing Facility Requirements

1. Purpose. To provide policy, procedural guidance, equipment requirements, and pilot qualification standards for commercially-operated civilian helicopters flown by civilian pilots on U.S. Navy vessels per references (a) through (n).

2. Cancellation. OPNAVINST 3100.8A.

3. Background. The Navy has identified requirements for civilian owned and operated helicopter support on and around U.S. Navy vessels for non-tactical tasking, including passenger and cargo transportation, external load operations, and research, development, test and evaluation missions. The dedicated support provided by these commercial operators has significantly reduced sea trial time requirements, increased
range scheduling flexibility, and facilitated improved usage efficiency of scarce Navy resources. To accomplish these missions safely and effectively, minimum standards of equipment and training must be maintained.

4. **Scope**

   a. The provisions of this instruction apply to all civilian helicopter take-offs, landings, external load operations, and hoist transfers on U.S. Navy vessels with exceptions as described in paragraph 4b below. For the purpose of this instruction, “U.S. Navy vessels” include aviation ships (carrier vessel nuclear (CVN)), amphibious assault ships (general purpose (LHA) and multipurpose (LHD)), and all air capable ships (all other ships from which helicopters can take-off, land, or routinely receive and transfer logistic support) whose mission includes the conduct of flight operations in the following categories:

   (1) Commissioned ships.

   (2) Government-owned or government-chartered ships operated by Military Sealift Command (MSC), the Maritime Administration, and or the National Oceanographic and Atmospheric Agency.

   (3) Ships under construction for the U.S. Navy under U.S. Government contracts which are executed after the effective date of this instruction.

   (4) Navy vessels undergoing overhaul, conversion, repair, preservation, or storage regardless of their commissioned status.

   (5) Ships owned by private companies and on lease or contracted to the U.S. Government.

   b. Exceptions:

   (1) Civilian helicopters providing radar tracking and other ship services for which there is no intent for landing or hovering are not subject to the provisions of this instruction.
(2) Paragraphs 5a, 5g, 5h, 5j, 5k, 5l, 5m, and 5o do not apply to foreign government-operated, foreign government-contracted, or U.S. Government-operated civilian helicopters. Examples of foreign-government civilian helicopters include civilian search and rescue, helicopters taken up from trade, and Coast Guard helicopters. Examples of U.S. Government-operated civilian helicopters include helicopters from the Drug Enforcement Agency, Federal Bureau of Investigation, U.S. Customs and Border Protection, and State and local law enforcement, fire department, and emergency services. Naval component and fleet commanders are responsible for establishing operational procedures for rendering assistance to and embarking U.S. civilian law enforcement aircraft and personnel per reference (a).

(3) During humanitarian assistance (HA) and disaster response (DR) operations, civilian helicopters do not need to meet the requirements of paragraphs 5a, 5g, 5h, 5j, 5k, 5l, 5m, and 5o, nor comply with the helicopter equipment, aircrew training, and aircrew equipment requirements per enclosures (1) through (3). Naval component and fleet commanders are responsible for establishing operational procedures for assisting and embarking civilian helicopters during HA and DR operations.

(4) Civilian helicopters providing operational support services which are not transporting Department of Defense personnel or cargo, such as those providing transportation for navigation pilots, do not need to meet the requirements of paragraphs 5a, 5g, 5h, 5j, 5k, 5l, 5m, and 5o. These civilian helicopter contractors shall operate following approved Federal Aviation Administration (FAA) operations specifications and all applicable portions of Federal Aviation Regulations (FAR), title 14, Code of Federal Regulations. The contracting officer shall ensure that articles addressing liability insurance coverage are stipulated in the contract.

(5) Civilian helicopter detachments on contract with MSC supporting U.S. Navy vessels from combat logistic force ships or shore based sites do not need to request approval to operate with U.S. Navy vessels. The MSC contracting officer representative shall ensure compliance with all contract terms and conditions, which require the contractors to meet all
applicable FAA regulations, Commercial Airlift Review Board certification requirements, and all quality and safety criteria outlined in this instruction.

5. **Policy.** U.S. Navy fleet support helicopters shall be used to the maximum extent possible.

   a. Civilian helicopter contractors shall be approved by the Department of Defense Air Carrier Survey and Analysis Office per reference (b), shall be a certified commercial operator or air carrier, and shall operate following approved FAA operations specifications and all applicable portions of FAR, title 14, Code of Federal Regulations, including part 135, Air Taxi Operators and Commercial Operators.

   b. Except for emergency situations (aircraft emergencies, medical evacuation, etc.), U.S. Navy vessels must receive approval (see paragraph 6a) to operate civilian helicopters prior to conducting flight operations.

   c. U.S. Navy vessels conducting civilian helicopter operations shall have certified aviation facilities per references (c) and (d). An aviation facility certification waiver (see paragraph 6b) is required to conduct operations on uncertified flight decks or with a particular type and model aircraft not included in the vessel’s certification.

   d. Only civilian helicopters which have military equivalent model shall be used for operations on U.S. Navy vessels. U.S. military helicopters are listed in reference (e), and North Atlantic Treaty Organization (NATO) or other allied nation military helicopters are listed in reference (f). Additionally, the ship class certification shall include the type of aircraft being operated. The appropriate ship Naval Aviation Training Operating Procedures Standardization general launch and recovery window shall be used for civilian helicopters that do not have specific wind envelopes published for the civilian variant. When conducting contract civilian helicopter operations to U.S. Navy vessels:

       (1) U.S. contract civilians shall adhere to the helicopter equipment requirements per enclosure (1).
(2) NATO and other partner nation civilian helicopters conducting operations to U.S. Navy vessels shall adhere to the maritime operations involving helicopters taken up from trade requirements and procedures per reference (g).

e. Operations shall be conducted per references (h) through (j) and reference (k).

f. Helicopters engaged in flight operations on U.S. Navy vessels shall utilize jet propellant 5 (JP-5), JP-8, or jet fuel A (JET A) fuel.

g. The pilot at the controls for a deck landing evolution shall be deck landing qualified (DLQ) and current per enclosure (2), unless undergoing training.

h. A Navy helicopter aircraft commander or an equivalent civilian pilot shall act as an instructor pilot (IP) for DLQ training flights. The IP shall be current for shipboard landings per enclosure (2).

i. All commercial aviation operations on U.S. Navy vessels shall be coordinated in advance. Direct liaison is authorized (DIRLAUTH) between the ship providing deck services and the agency or command providing the civilian helicopters. For ships not delivered to a government agency, the administrative contracting officer for the government agency shall be responsible for the coordination of aviation operations.

j. In situations where it is more economical to periodically provide refresher training for civilian helicopter pilots between actual support requirements, rather than re-qualify following lapses in currency, the agency sponsoring the pilot qualification is granted DIRLAUTH to identify refresher opportunities. Refresher training requests shall include candidate periods and identify the point of contact with which liaison was conducted.

k. Passenger and cargo transfer operations shall be conducted per references (i) through (l).

(1) A lookout capable of performing internal communications and all assist functions required by the mission shall be carried on all passenger and or external load flights
to and from U.S. Navy vessels per reference (l). The pilot in command (PIC) shall identify and brief the lookout on his or her responsibilities prior to each flight.

(2) Pilots scheduled for external load operations involving shipboard delivery or pick-up without a shipboard landing must be DLQ and current for the ship type involved. Prior to take-off, these pilots shall receive a familiarization briefing on the planned operation from the agency conducting liaison with the helicopter contractor.

1. Helicopter aircrew is defined as any pilot, co-pilot, flight engineer, crew chief, loadmaster, observer, or lookout when assigned to their respective crew position to conduct any flight operations. Minimum equipment requirements for civilian helicopter aircrew working under a Navy contract are listed in enclosure (3). Passenger safety equipment shall conform to reference (l) and either reference (i) or reference (j). It is the PIC’s responsibility to ensure that passengers shall comply with any exposure suit requirements per reference (l).

m. Civilian helicopter aircrew working under a Navy contract shall comply with water survival and physiology training requirements listed in reference (l), section 8.4 and appendix E.

n. Civilian helicopter aircrew and support personnel embarking on U.S. Navy ships must receive ship indoctrination training, addressing ship hazards and their locations, from the ship’s safety department after embarkation. The commanding officer (CO) of the ship has supervisory responsibility for the safety of embarked helicopters and personnel at all times.

o. Any incident involving property damage or personal injury occurring in the operation of a civilian helicopter aboard a U.S. Navy vessel constitutes an “admiralty incident” per reference (m). Admiralty incidents shall be reported immediately to the Admiralty Division, Office of the Judge Advocate General. Subsequent investigation requirements are set forth per reference (m). In addition, a separate safety investigation shall be conducted per reference (n). The CO shall ensure that articles requiring safety investigation compliance are stipulated in the contract.
p. Requests for waivers and exceptions to the training and equipment provisions of this instruction will be considered on a case-by-case basis by Commander, Naval Air Forces (COMNAVAIRFOR) Operations Assistant Chief of Staff (N3).

6. Procedures

a. If fleet support helicopters are unable to provide the required support, requests for authorization to conduct civilian helicopter operations shall be forwarded via the chain of command to the approval authority listed in table 1.

Table 1. Civilian Helicopter Landing Authorization

<table>
<thead>
<tr>
<th>Ship Status</th>
<th>Approval Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commissioned</td>
<td>U.S. Fleet Forces Command (USFLTFORCOM) or Commander, U.S. Pacific Fleet (COMPACFLT)</td>
</tr>
<tr>
<td>New Construction</td>
<td>Program Executive Officer (PEO) Ships or PEO Carriers</td>
</tr>
<tr>
<td>Overhaul/Repair</td>
<td>USFLTFORCOM or COMPACFLT</td>
</tr>
<tr>
<td>Preservation/Storage</td>
<td>USFLTFORCOM, COMPACFLT, PEO Ships, PEO Carriers</td>
</tr>
<tr>
<td>MSC</td>
<td>USFLTFORCOM or COMPACFLT</td>
</tr>
</tbody>
</table>

b. If required, aviation facility certification waiver requests should be submitted via the ship’s or agency’s chain of command to the applicable agency as described below.

(1) For commissioned vessels, aviation facility certification waivers are granted by fleet commanders on a case-by-case basis.

(2) If the approval authority for both landing authorization and aviation facilities waiver is the same, they may be combined into one request. Requests should stipulate the type of support required, desired dates, and location of operations.

(3) Aviation facility certification waiver recommendations for ships under construction may be granted by Naval Air Systems Command (NAVAIRSYSCOM) in conjunction with references (c) and (d). For single-spot ships under construction, a minimum flight deck certification of level III, class 3 shall be achieved prior to conducting helicopter
operations. For multi-spot ships under construction, every effort shall be made to complete flight deck certification to level III, class 3 prior to conducting helicopter operations. In unique cases where this is not feasible, enclosure (4) provides the minimum requirements for conduct of helicopter operations on new construction multi-spot ships.

7. Responsibilities

a. NAVAIRSYSCOM. Responsible for the following assessments, certifications, clearances, and waivers:

(1) Evaluate U.S. Navy vessels’ aviation facility certification and waiver requests for new construction ships and, as applicable, forwarding waiver recommendations to USFLTFORCOM or COMPACFLT.

(2) Issue flight clearances, inclusive of all approved aircraft ship operating envelopes and procedures.

(3) Assess airworthiness of all aircraft ship operating envelopes and define data requirements to approve the ship and aircraft dynamic interface envelopes. Assess any ship or aircraft changes that may affect published envelopes and requests from civilian and non-U.S. military similar aircraft to use established envelopes.

(4) Define the ship and air vehicle dynamic interface envelopes and evaluate the suitability of the ship and air vehicles for safe and proper operations.

b. USFLTFORCOM and COMPACFLT. USFLTFORCOM or COMPACFLT grant civilian helicopter landing authorizations, as applicable, and exercise aviation facilities certification waiver authority per reference (n). Delegation of approval authority to numbered fleet commander is authorized.

c. COMNAVAIRFOR

(1) Exercise approval authority for civilian helicopter aircrew equipment, training, and currency waiver requests.

(2) Identify and designate units to conduct civilian helicopter pilot training.
d. PEO Ships and PEO Carriers. Responsible for ensuring the provisions of this instruction are addressed in all shipbuilding and construction contracts which will involve civilian helicopter support and, as applicable, grants civilian helicopter landing authorizations.

8. Records Management. Records created as a result of this instruction, regardless of media and format, shall be managed per Secretary of the Navy Manual 5210.1 of January 2012.

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Civilian Helicopter Equipment Requirements

1. Civilian aircraft engaged in flight operations on U.S. Navy vessels shall be equipped following the operator’s FAA certification and operating specifications.
   
a. For all operations, aircraft shall have:

   (1) A standard airworthiness certificate.

   (2) Three-eighths inch steel shackles free of corrosion to facilitate tie-down of the helicopter during shipboard passenger and cargo transfers.

   (3) Emergency equipment required by FAR, title 14.

   (4) Communication equipment capable of supporting two-way communications with the ship.

   (5) One air traffic control transponder and altitude reporting system meeting the requirements of FAR, title 14.

   (6) Avionics systems employed in or on the aircraft, and their installation and maintenance, shall comply with FAA regulations unless specifically authorized otherwise by the ACO for the helicopter service contract.

   (7) Life rafts of sufficient capacity to accommodate passengers and crew.

b. For extended over-water operations outside of 50 nautical miles from land, both the aircraft and ship shall be equipped with an operable tactical air navigation system or the aircraft shall be equipped with Global Positioning System.

2. All equipment utilized for external load transfers to and from U.S. Navy vessels shall be inspected and maintained per NTTP 4-01.4, Underway Replenishment Manual.
Civilian Helicopter Aircrew Training Requirements

1. Training and qualification of civilian helicopter aircrew under Navy contract shall be conducted on a not to interfere basis with Department of the Navy flight training.

2. Ground school training for civilian helicopter aircrew shall include, but not be limited to:

   a. Deck markings.
   b. Landing signals.
   c. Communications and navigation aids.
   d. Fuel and maintenance support procedures.
   e. Electromagnetic interference hazards.
   f. Landing patterns and approaches and ship control zones.
   g. Wind and pitch and roll envelopes and limitations.
   h. External load operations, if applicable.
   i. Aircrew and passenger safety and survival equipment.
   j. Navy physiology and water survival training per reference (1), section 8.4 and appendix E.

3. Initial pilot landing qualification and currency requirements are as follows:

   a. For air capable ships:

      (1) Initial day qualification consists of:

         (a) Ground school training as outlined above. Flight training conducted with a U.S. Navy DLQ IP or an equivalent civilian pilot who is current on air capable ships.
(b) Six day single-spot ship landings and six night single-spot ship landings. Each landing shall be preceded by a separate approach. Initial night landing qualification shall be preceded by 1 day landing within the prior 6 days.

(2) Currency and recurrency requirements:

(a) Day: four single-spot shipboard landings within the preceding 180 days.

(b) Night: four single-spot shipboard landings within the preceding 90 days.

(c) Pilots whose currency has lapsed more than 1 year shall undergo initial qualification training landing requirements.

b. For CVN and LHA and LHD:

(1) Initial day qualification consists of:

(a) Ground school training as outlined above. Flight training conducted with a U.S. Navy DLQ IP or an equivalent civilian pilot who is current on multi-spot ships.

(b) Two day multi-spot shipboard landings and three night multi-spot shipboard landings. Each landing shall be preceded by a separate approach. Initial night landing qualification shall be preceded by 1 day landing within the prior 6 days.

(2) Currency and recurrency requirements:

(a) Day: two multi-spot shipboard landings within the preceding 12 months.

(b) Night: two multi-spot shipboard landings within the preceding 90 days.

(c) Pilots whose currency has lapsed more than 1 year shall undergo initial qualification training landing requirements.
c. Two non-current IPs may fly together to reestablish currency.

d. Pilots qualified on air capable ships are also qualified on CVN and LHA and LHD ships, but the converse is not true.
Civilian Helicopter Aircrew Equipment Requirements

1. When in a flight duty status, civilian pilots shall have:
   a. FAA commercial pilot certificate with appropriate rotorcraft type rating.
   b. Current FAA medical certificate which shall satisfy the aero medical physical requirements of reference (1), section 8.5.
   c. Evidence of satisfactory completion of an FAA currency flight check within the preceding 12 months, in the type, model, and series aircraft to be flown.
   d. An airplane or helicopter instrument certificate; or an airline transport pilot certificate with category and class rating for the type, model, and series helicopter, not limited to visual flight rules.
   e. Evidence of completion of water survival and physiology training.

2. Minimum aircrew personal protective and survival equipment shall include:
   a. A protective helmet.
   b. Flotation or survival vest.
   c. Personal survival equipment appropriate to the area.
   d. If applicable, an anti-exposure suit for cold weather operations as defined by reference (1).
   e. Emergency location transmitter or a voice capable survival radio.
   f. Two flares for night distress signaling.
   g. Two smoke markers for daytime distress signaling.
Landing Facility Requirements

1. Every effort shall be made to achieve flight deck certification prior to conducting helicopter operations. In unique cases where this is not feasible, the following minimum requirements shall be met prior to requesting an aviation facilities waiver from NAVAIRSYSCOM per references (c) and (d):

   a. A clearly delineated landing area providing a minimum of 15 feet of clearance from the rotor tip path to the nearest obstruction in the landing area.

   b. A helicopter control station with operable:

      (1) Two-way aircraft communications.

      (2) Flight deck communications.

      (3) General announcing system.

      (4) Flight deck crash alarm.

      (5) Wind speed and direction indicator.

   c. Firefighting and damage control equipment including:

      (1) Installed and portable aqueous film forming foam of two hoses.

      (2) Minimum of two portable carbon dioxide fire extinguishers and a minimum of two potassium bicarbonate fire extinguishers.

   d. Deck edge protection, helicopter safety nets, and life lines per ship class drawings.

2. Personnel assigned flight deck responsibilities shall be provided with personal safety equipment as designated per references (i) and (j).