

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8900.461

National Policy

Effective Date:
4/10/18

Cancellation Date:
4/10/19

SUBJ: OpSpec/MSpec/LOA H104, Helicopter Offshore Instrument Operations: Offshore Standard Approach Procedure (OSAP), Airborne Radar Approach (ARA), and Helicopter En Route Descent Area (HEDA) Operations

1. Purpose of This Notice. This notice revises operations specification (OpSpec)/management specification (MSpec) H104 and introduces letter of authorization (LOA) H104 for Title 14 of the Code of Federal Regulations (14 CFR) part 91 operators. It also clarifies guidance for Federal Aviation Administration (FAA) inspectors authorizing and issuing OpSpecs/MSpecs/LOAs H104; H102, Basic Instrument Approach Procedure Authorizations—All Airports; and H112, Instrument Approach Operations Using an Area Navigation System; to operators conducting rotorcraft operations under 14 CFR parts 91, 91 subpart K (part 91K), and 135.

2. Audience. The primary audience for this notice is certificate-holding district offices (CHDO), Flight Standards office principal inspectors (PI), and aviation safety inspectors (ASI). The secondary audience includes all other Flight Standards divisions, branches, and offices, and the Aircraft Certification Service's Rotorcraft Standards Branch (AIR-680).

3. Where You Can Find This Notice. You can find this notice on the MyFAA employee website at https://employees.faa.gov/tools_resources/orders_notices. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at <http://fsims.avs.faa.gov>. Operators can find this notice on the FAA's website at <http://fsims.faa.gov>. This notice is available to the public at http://www.faa.gov/regulations_policies/orders_notices.

4. Background for Helicopter Offshore Operations. This change is necessary for U.S. policy to reflect recent updates to offshore helicopter operations. It is necessary to change the terminology of these offshore helicopter instrument descent maneuvers to "operations" to distinguish them from onshore instrument approach procedures (IAP) authorized through H102 and/or H112. Though these operations include an instrument descent to a minimum descent altitude (MDA), they differ from IAPs by positioning the helicopter at an offset position from the offshore landing site for a visual landing. Additionally, the offshore landing site may be mobile, and the final approach course to be flown changes with wind direction. These dynamic factors make it impractical to apply the same criteria as required for onshore 14 CFR part 97 Standard IAPs (SIAP).

5. Offshore Instrument Operations. This notice amends the H104 templates to accommodate the following operations:

- Offshore Standard Approach Procedure (OSAP),
- Airborne Radar Approach (ARA), and
- Helicopter En Route Descent Area (HEDA).

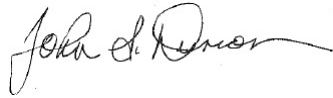
Note: Rapid development of the technology employed in autopilots, flight directors (FD), and/or flight management systems (FMS) is having a major impact on how flightcrews plan and execute approaches to offshore facilities. Manufacturers of aircraft and avionics suites have developed proprietary automated systems that are beyond the scope of the current edition of Advisory Circular (AC) 90-80, Approval of Offshore Standard Approach Procedures, Airborne Radar Approaches, and Helicopter En Route Descent Areas, and OpSpec H104. Aircraft systems approval, proprietary automated systems approval, and training are addressed in OpSpecs/MSpecs/LOAs issued to the operators by their respective Certificate Management Teams (CMT), Flight Standards offices, and principal operations inspectors (POI). In lieu of following the guidance in the current edition of AC 90-80 without deviation, operators may elect to follow an alternative method, provided the alternative method is found to be acceptable by the Performance-Based Flight Systems Branch (AFS-470).

6. Guidance. Detailed guidance for offshore helicopter operations is available in the current edition of AC 90-80. The Flight Technologies and Procedures Division (AFS-400), in conjunction with the Part 135 Air Carrier Operations Branch (AFS-250), developed this notice. This notice contains the following:

- The sample LOA H104 template in Appendix A applies to part 91.
- The sample MSpec H104 template in Appendix B applies to part 91K.
- The sample OpSpec H104 template in Appendix C applies to part 135.
- The sample OpSpec H104 template in Appendix D applies to part 121/135.

7. Action. POIs should provide this notice to the operators for whom they are responsible, alerting them to updated operating procedures, as well as required pilot knowledge and training. The POI will remove OSAP, ARA, and HEDA authorization from OpSpec/MSpec H102 and OSAP, ARA, and HEDA aircraft and equipment authorizations in OpSpec/MSpec H112 and authorize the OSAP, ARA, and HEDA by issuing H104. Operators should review and incorporate the revised guidance in the current edition of AC 90-80 into their flightcrew procedures and pilot training programs. This revision to H104 is mandatory, with a compliance date of 180 days from the effective date of this notice.

8. Disposition. We will incorporate the information in this notice into FAA Order 8900.1 before this notice expires. Direct questions or comments concerning this notice to AFS-470 at 202-267-8806.

A handwritten signature in black ink, appearing to read "John S. Duncan". The signature is fluid and cursive, with a long horizontal stroke at the end.

John S. Duncan
Executive Director, Flight Standards Service

Appendix A. Sample LOA H104, Helicopter Offshore Instrument Operations: Offshore Standard Approach Procedure (OSAP), Airborne Radar Approach (ARA), and Helicopter En Route Descent Area (HEDA) Operations: 14 CFR Part 91

1. The operator is authorized to conduct the following helicopter offshore instrument operations listed in Table 1 below, in accordance with the conditions and limitations of this letter of authorization (LOA), and must not conduct helicopter offshore instrument operations of any other type.

Table 1 – Authorized Helicopter Offshore Instrument Operations

Rotorcraft			RNAV System/Radar			Offshore Operation	Additional Capabilities	Lowest Authorized Altitude	Lowest Authorized Visibility	Remarks, Limitations, and Conditions
Serial Number	Registration	M/M/S	Make	Model/HW Part	Software Part/Ver. #					
		SK-76-A SK-76-C+ SK-92-A AW-139				OSAP ARA HEDA	OSAP (AUTO)	200 MSL 300 MSL 400 MSL 500 MSL 700 MSL	½ SM ¾ SM 1 SM 2 SM	

2. Conditions and Limitations. This authorization is subject to the following conditions and limitations:
- Descent must be entirely over water.
 - Unless otherwise authorized by this LOA, the operator must not use any other IFR operation.
 - The operator must not use a minimum descent altitude (MDA) or visibility below the authorized values in Table 1 above.

d. Descent below the MDA is not authorized whenever any of the following conditions exist:

(1) Any obstruction within a lateral distance of 0.5 NM from the final approach course of an OSAP.

(2) Any obstruction within a lateral distance of 1 NM from the final approach course of an ARA.

(3) Any obstruction detected in the HEDA by onboard approved equipment, if not visually confirmed.

(4) A radio altimeter (RA) is not installed or is inoperative.

(5) Surface mapping radar is not installed or is inoperative.

e. The lowest altitude used for IFR flight in any HEDA must not be lower than 400 ft above the surface.

f. The airborne navigational equipment required to be used, including RA and weather radar (WX) with a ground mapping mode, must be approved for IFR operations.

g. The required airborne equipment must provide the appropriate levels of availability, accuracy, continuity of function, and integrity for the operation.

h. The operation has an approved source(s) of weather.

i. The helicopter must be equipped with one or more independent navigation system(s) suitable for navigating the helicopter along the route to be flown within the degree of accuracy required for ATC and:

(1) It can be shown that the helicopter is equipped with at least one other independent navigation system suitable, in the event of loss of the navigation capability of the single independent navigation system at any point along the route, for proceeding safely to a landing location and completing an instrument approach or instrument operation; and

(2) The helicopter has sufficient fuel so that the flight may proceed safely to a suitable landing location by use of the remaining navigation system, complete an instrument approach or offshore instrument operation, and land.

3. Aircraft Proprietary Automated System. Use of an aircraft proprietary automated system is authorized contingent upon the following conditions:

a. The operator's helicopters are properly modified in accordance with means approved by the FAA.

b. The operator has made revisions to its General Maintenance Manual (GMM), inspections covering respective regulatory maintenance, and inspection programs to capture instructions for continued airworthiness (ICA) requirements.

c. The operator has made revisions to its accepted training program to establish a training and testing program for pilots that will be using the new system.

d. The operator will establish a means for the flightcrew to readily identify before flight which helicopters have the enhanced proprietary system capability.

e. The operator has made revisions to the General Operations Manual (GOM) and flight deck checklist covering any procedural changes when using the automated approach system.

4. Responsible Person. The responsible person for crew operations may be either an agent for service (who must be a U.S. citizen) or a person who is a U.S. citizen or who holds a U.S. pilot certificate and accepts responsibility for complying with the stated regulations by signing this document.

a. If the responsible person signing this LOA relinquishes responsibility, this LOA becomes invalid.

b. The name, email address, and telephone number of the responsible person signing this LOA are listed in Table 2.

Table 2 – Responsible Person

Name	Email Address	Telephone

**Appendix B. Sample MSPEC H104, Helicopter Offshore Instrument Operations:
Offshore Standard Approach Procedure (OSAP), Airborne Radar Approach (ARA),
and Helicopter En Route Descent Area (HEDA) Operations: 14 CFR Part 91K**

a. The program manager is authorized to conduct the following helicopter offshore instrument operations listed in Table 1 below, in accordance with the conditions and limitations of this management specification, and must not conduct helicopter offshore instrument operations of any other type.

Table 1 – Authorized Helicopter Offshore Instrument Operations

Rotorcraft	RNAV System/Radar			Offshore Operation	Additional Capabilities	Lowest Authorized Altitude	Lowest Authorized Visibility	Remarks, Limitations, and Conditions
M/M/S	Make	Model/ HW Part	Software Part/Ver. #					
SK-76-A SK-76-C+ SK-92-A AW-139				OSAP ARA HEDA	OSAP (AUTO)	200 MSL 300 MSL 400 MSL 500 MSL 700 MSL	½ SM ¾ SM 1 SM 2 SM	

b. Conditions and Limitations. This authorization is subject to the following conditions and limitations:

(1) Descent must be entirely over water.

(2) Unless otherwise authorized by this management specification, the program manager must not use any other IFR operation.

(3) The program manager must not use a minimum descent altitude (MDA) or visibility below the authorized values in Table 1 above.

(4) Descent below the MDA is not authorized whenever any of the following conditions exist:

(a) Any obstruction within a lateral distance of 0.5 NM from the final approach course of an OSAP.

(b) Any obstruction within a lateral distance of 1 NM from the final approach course of an ARA.

(c) Any obstruction detected in the HEDA by onboard approved equipment, if not visually confirmed.

(d) A radio altimeter (RA) is not installed or is inoperative.

(e) Surface mapping radar is not installed or is inoperative.

(5) The lowest altitude used for IFR flight in any HEDA must not be lower than 400 ft above the surface.

(6) The airborne navigational equipment required to be used, including RA and weather radar (WX) with a ground mapping mode, must be approved for IFR operations.

(7) The required airborne equipment must provide the appropriate levels of availability, accuracy, continuity of function, and integrity for the operation.

(8) The operation has an approved source(s) of weather.

(9) The helicopter must be equipped with one or more independent navigation system(s) suitable for navigating the helicopter along the route to be flown within the degree of accuracy required for ATC and:

(a) It can be shown that the helicopter is equipped with at least one other independent navigation system suitable, in the event of loss of the navigation capability of the single independent navigation system at any point along the route, for proceeding safely to a landing location and completing an instrument approach or instrument operation; and

(b) The helicopter has sufficient fuel so that the flight may proceed safely to a suitable landing location by use of the remaining navigation system, complete an instrument approach or offshore instrument operation, and land.

c. Aircraft Proprietary Automated System. Use of an aircraft proprietary automated system is authorized contingent upon the following conditions:

(1) The program manager's helicopters are properly modified in accordance with means approved by the FAA.

(2) The program manager has made revisions to its General Maintenance Manual (GMM), inspections covering respective regulatory maintenance, and inspection programs to capture instructions for continued airworthiness (ICA) requirements.

(3) The program manager has made revisions to its approved training program to establish a training and testing program for pilots that will be using the new system.

(4) The program manager will establish a means for the flightcrew to readily identify before flight which helicopters have the enhanced proprietary system capability.

(5) The program manager has made revisions to the General Operations Manual (GOM) and flight deck checklist covering any procedural changes when using the automated approach system.

**Appendix C. Sample OpSpec H104, Helicopter Offshore Instrument Operations:
Offshore Standard Approach Procedure (OSAP), Airborne Radar Approach (ARA),
and Helicopter En Route Descent Area (HEDA) Operations: 14 CFR Part 135**

a. The certificate holder is authorized to conduct the following helicopter offshore instrument operations listed in Table 1 below, in accordance with the conditions and limitations of this operations specification, and must not conduct helicopter offshore instrument operations of any other type.

Table 1 – Authorized Helicopter Offshore Instrument Operations

Rotorcraft	RNAV System/Radar			Offshore Operation	Additional Capabilities	Lowest Authorized Altitude	Lowest Authorized Visibility	Remarks, Limitations, and Conditions
M/M/S	Make	Model/ HW Part	Software Part/Ver. #					
SK-76-A SK-76-C+ SK-92-A AW-139				OSAP ARA HEDA	OSAP (AUTO)	200 MSL 300 MSL 400 MSL 500 MSL 700 MSL	½ SM ¾ SM 1 SM 2 SM	

b. Conditions and Limitations. This authorization is subject to the following conditions and limitations:

(1) Descent must be entirely over water.

(2) Unless otherwise authorized by this operations specification, the certificate holder must not use any other IFR operation.

(3) The certificate holder must not use a minimum descent altitude (MDA) or visibility below the authorized values in Table 1 above.

(4) Descent below the MDA is not authorized whenever any of the following conditions exist:

(a) Any obstruction within a lateral distance of 0.5 NM from the final approach course of an OSAP.

(b) Any obstruction within a lateral distance of 1 NM from the final approach course of an ARA.

(c) Any obstruction detected in the HEDA by onboard approved equipment, if not visually confirmed.

(d) A radio altimeter (RA) is not installed or is inoperative.

(e) Surface mapping radar is not installed or is inoperative.

(5) The lowest altitude used for IFR flight in any HEDA must not be lower than 400 ft above the surface.

(6) The airborne navigational equipment required to be used, including RA and weather radar (WX) with a ground mapping mode, must be approved for IFR operations.

(7) The required airborne equipment must provide the appropriate levels of availability, accuracy, continuity of function, and integrity for the operation.

(8) The operation has an approved source(s) of weather.

(9) The helicopter must be equipped with one or more independent navigation system(s) suitable for navigating the helicopter along the route to be flown within the degree of accuracy required for ATC and:

(a) It can be shown that the helicopter is equipped with at least one other independent navigation system suitable, in the event of loss of the navigation capability of the single independent navigation system at any point along the route, for proceeding safely to a landing location and completing an instrument approach or instrument operation; and

(b) The helicopter has sufficient fuel so that the flight may proceed safely to a suitable landing location by use of the remaining navigation system, complete an instrument approach or offshore instrument operation, and land.

c. Aircraft Proprietary Automated System. Use of an aircraft proprietary automated system is authorized contingent upon the following conditions:

(1) The certificate holder's helicopters are properly modified in accordance with means approved by the FAA.

(2) The certificate holder has made revisions to its General Maintenance Manual (GMM), inspections covering respective regulatory maintenance, and inspection programs to capture instructions for continued airworthiness (ICA) requirements.

(3) The certificate holder has made revisions to its approved training program to establish a training and testing program for pilots that will be using the new system.

(4) The certificate holder will establish a means for the flightcrew to readily identify before flight which helicopters have the enhanced proprietary system capability.

(5) The certificate holder has made revisions to the General Operations Manual (GOM) and flight deck checklist covering any procedural changes when using the automated approach system.

Appendix D. Sample OpSpec H104, Helicopter Offshore Instrument Operation: Offshore Standard Approach Procedure (OSAP), Airborne Radar Approach (ARA), and Helicopter En Route Descent Area (HEDA) Operations: 14 CFR Part 121/135

a. The certificate holder is authorized to conduct the following helicopter offshore instrument operations listed in Table 1 below, in accordance with the conditions and limitations of this operations specification, and must not conduct helicopter offshore instrument operations of any other type.

Table 1 – Authorized Helicopter Offshore Instrument Operations

Rotorcraft	RNAV System/Radar			Offshore Operation	Additional Capabilities	Lowest Authorized Altitude	Lowest Authorized Visibility	Remarks, Limitations, and Conditions
	Make	Model/ HW Part	Software Part/Ver. #					
SK-76-A SK-76-C+ SK-92-A AW-139				OSAP ARA HEDA	OSAP (AUTO)	200 MSL 300 MSL 400 MSL 500 MSL 700 MSL	½ SM ¾ SM 1 SM 2 SM	

b. Conditions and Limitations. This authorization is subject to the following conditions and limitations:

(1) Descent must be entirely over water.

(2) Unless otherwise authorized by this operations specification, the certificate holder must not use any other IFR operation.

(3) The certificate holder must not use a minimum descent altitude (MDA) or visibility below the authorized values in Table 1 above.

(4) Descent below the MDA is not authorized whenever any of the following conditions exist:

(a) Any obstruction within a lateral distance of 0.5 NM from the final approach course of an OSAP.

(b) Any obstruction within a lateral distance of 1 NM from the final approach course of an ARA.

(c) Any obstruction detected in the HEDA by onboard approved equipment, if not visually confirmed.

(d) A radio altimeter (RA) is not installed or is inoperative.

(e) Surface mapping radar is not installed or is inoperative.

(5) The lowest altitude used for IFR flight in any HEDA must not be lower than 400 ft above the surface.

(6) The airborne navigational equipment required to be used, including RA and weather radar (WX) with a ground mapping mode, must be approved for IFR operations.

(7) The required airborne equipment must provide the appropriate levels of availability, accuracy, continuity of function, and integrity for the operation.

(8) The operation has an approved source(s) of weather.

(9) The helicopter must be equipped with one or more independent navigation system(s) suitable for navigating the helicopter along the route to be flown within the degree of accuracy required for ATC and:

(a) It can be shown that the helicopter is equipped with at least one other independent navigation system suitable, in the event of loss of the navigation capability of the single independent navigation system at any point along the route, for proceeding safely to a landing location and completing an instrument approach or instrument operation; and

(b) The helicopter has sufficient fuel so that the flight may proceed safely to a suitable landing location by use of the remaining navigation system, complete an instrument approach or offshore instrument operation, and land.

c. Aircraft Proprietary Automated System. Use of an aircraft proprietary automated system is authorized contingent upon the following conditions:

(1) The certificate holder's helicopters are properly modified in accordance with means approved by the FAA.

(2) The certificate holder has made revisions to its General Maintenance Manual (GMM), inspections covering respective regulatory maintenance, and inspection programs to capture instructions for continued airworthiness (ICA) requirements.

(3) The certificate holder has made revisions to its approved training program to establish a training and testing program for pilots that will be using the new system.

(4) The certificate holder will establish a means for the flightcrew to readily identify before flight which helicopters have the enhanced proprietary system capability.

(5) The certificate holder has made revisions to the General Operations Manual (GOM) and flight deck checklist covering any procedural changes when using the automated approach system.