Regulations of 18 March 2021 No. 815 on helicopter decks on mobile offshore units

Legal basis: Laid down by the Norwegian Maritime Authority on 18 March 2021 under the Act of 16 February 2007 No. 9 relating to ship safety and security (Ship Safety and Security Act) sections 2, 6, 9, 11, 14, 15, 21, 45 and 47, cf. Formal Delegation of 16 February 2007 No. 171 and Formal Delegation of 31 May 2007 No. 590.
The EFTA Surveillance Authority (ESA) has been notified of the Regulations pursuant to the requirements of Act of 17 December 2004 No. 101 on European notification of technical rules, etc. (EEA Hearing Act) and the EEA Agreement Annex II Chapter XIX point 1 (Directive 98/34/EC as amended by Directive 98/48/EC).
Amendment: Amended by Regulations of 31 October 2023 No. 1753, 26 June 2025 No. 1372.

Chapter 1
Common and introductory provisions

Section 1. *Scope of application*

These Regulations apply to Norwegian mobile offshore units.

Section 2. *Definitions*

For the purpose of these Regulations, the following definitions shall apply:

a. *helicopter operator* means a legal person engaged in aviation;
b. *D* means the largest overall dimension of the helicopter when the rotors are turning;
c. *periphery circle* means the largest circle that can theoretically be drawn around the centre of the helideck within its periphery;
d. D_H means the diameter of the helideck measured inside the periphery circle when all requirements of the Regulations are met.

Chapter 2
Documentation

Section 3. *Documentation, risk assessment and training*

(1) It shall be stated which helicopter types that may use the helideck.
(2) The following documentation shall be made available to the helicopter operator:

a. procedures for normal operation, abnormal situations, emergencies and accidents;
b. training programmes for helideck crew, passenger-handling personnel, luggage and cargo, and other personnel involved in helicopter calls;
c. procedures for training and periodic exercises and drills during normal operation, abnormal situations, emergencies and accidents;
d. procedures to ensure that helidecks that are temporarily or permanently closed for normal flights are marked in a way that does not pose a danger in the event of an emergency landing;
e. a maintenance and spare parts system for the helideck;
f. meteorological services.

Section 4. *Record-keeping*

The shipping company shall keep records of the operation and use of the helideck.

Section 5. *Helideck data, etc.*

(1) The shipping company is responsible for the documentation and maintenance of data on the helideck and other data relevant to aviation safety. Such documentation shall be available to the helicopter operator.

(2) If the unit has access to an aeronautical information publication service, the shipping company shall:

a. send helicopter deck data in a form and of a quality decided by the information publication service;
b. monitor the published helideck data and ensure that necessary changes are made so that the helideck data are correct at all times.

Section 6. *Helideck report*

The shipping company shall send an updated helideck report to the helicopter operator prior to the flight.

Chapter 3
Helideck crew

Section 7. *Roles and tasks of the helideck crew*

(1) A helideck crew shall be established. The Helicopter Landing Officer (HLO) forms part of the helideck crew.

(2) During take-off and landing during normal operation, the helideck crew shall consist of at least three persons. The HLO may be one of the three persons. At least one helideck crew member shall wear fire protection equipment and stand next to the helideck's foam monitor which is most appropriately positioned for use under the prevailing weather conditions.

(3) When there is reason to believe that a dangerous situation may arise during take-off or landing, all members of the helideck crew shall wear fire protection equipment.

(4) The HLO is in charge of the day-to-day supervision of work on the helideck during helicopter calls. Prior to helicopter arrival, the HLO must:

a. inform the helicopter crew whether the helideck is clear for landing;
b. at the earliest possible opportunity, inform the helicopter crew of any changes to the information reported in the helideck report, for example the status of moving obstacles, weather conditions and deck movements;
c. maintain radio contact with the helicopter crew from before landing until after departure;
d. inform the helicopter crew immediately of any abnormal situations.

(5) The HLO must ensure that passengers are guided during embarkation and disembarkation.

(6) The HLO is responsible for keeping the platform manager informed of the status of the helideck, equipment and services.

Section 8. *Training*

The company shall establish and maintain procedures for identifying all training which may be required for the helideck crew, cf. section 7, and ensure that such training is provided for all personnel concerned. The company's training system and qualification requirements for the helideck crew shall be part of the company's safety management system.

Chapter 4
Helideck design, etc.

Section 9. *Location of helideck*

(1) The helideck shall be so located that the obstacle-free approach and take-off sector has the most favourable direction, given the prevailing wind conditions.

(2) The helideck shall be located so as to minimise the effect of any turbulence or gas emissions in the approach, take-off and landing areas. If the helideck is positioned so that turbulence can be generated from an underlying compact part of the unit, sufficient separation shall be provided to enable air to flow freely between the helideck and the underlying structure. The minimum distance shall be 1 metre.

(3) Wind and turbulence conditions and gas emissions shall be documented by wind tunnel tests or use of computational fluid dynamics analysis.

Section 10. *Design and construction*

(1) The helideck shall be constructed of suitable anti-corrosive material.

(2) The helideck shall be constructed so that water does not collect on the deck, but the slope shall not exceed 2 %.

(3) The helideck shall be leakproof and designed to maintain ground effect.

Section 11. *Size*

The helideck shall have a minimum diameter (D_H) corresponding to 1.25 times the D-value of the helicopter that is to use the helideck.

Section 12. *Loads*

(1) The dimensioning of the helideck shall be based on the presumption that any point on the deck may be subjected to a single load of 75% of the total weight of the heaviest helicopter used. The single load is considered to be evenly distributed across the contact area. The contact area between the helicopter's landing gear and the helideck shall be determined in accordance with specifications from the helicopter manufacturer.

(2) The load bearing structures beneath the helideck shall be dimensioned to carry a static load equal to 3 times the take-off weight of the heaviest helicopter used, with the normal weight distribution on the landing gear for this type of helicopter. The helicopter is presumed to be in the most adverse position on the deck.

(3) With the loads of the helicopter indicated in the first and second paragraphs, plus the mass of the structure and the wind forces, the stresses allowed are equal to the yield stress of the material, but not exceeding 2/3 of the minimum tensile strength.

Section 13. *Non-slip surface*

(1) The helideck shall be provided with a surface skid-resistant to both helicopters and personnel.

(2) The company shall identify and monitor all factors affecting the helideck surface characteristics and have procedures and measures in place to ensure adequate non-slip protection.

Section 14. *Landing net*

(1) The helideck shall be equipped with a landing net in the landing area.
(2) The size of the landing net shall be determined by the helicopter types to be used. The minimum size shall be:
   a. small net: 9 x 9 m or 9 m diameter
   b. medium net: 12 x 12 m or 12 m diameter;
   c. large net: 15 x 15 m or 15 m diameter.

(3) The mesh of the landing net shall be designed to prevent the net from snagging on the helicopter. The landing net shall be fastened at intervals of 1.5 m. To ensure that the landing net is kept sufficiently taut, at least half of the fastenings shall be equipped with tightening mechanisms.

(4) Non-moving helidecks with adequate skid-resistance may be used without a landing net. The same applies to moving helidecks with permanent friction arrangements that prevents the helicopter from skidding in all directions. A landing net must nonetheless be installed if there is a risk of snow or ice on the helideck.

Section 15. *Paint*

Paint used on or in the immediate vicinity of the helideck shall be certified low flame-spread paint.

Section 16. *Safety kerb*

(1) The edge of the helideck shall be fitted with an approximately 5 cm high safety kerb.

(2) The kerb shall not prevent effective drainage to the gutter.

(3) A safety kerb does not have to be installed if measures have been established to ensure that firefighting foam and water are led into the gutter.

Section 17. *Gutter*

(1) The helideck shall be surrounded by a gutter that collects liquids in an efficient manner. The gutter shall be designed to resist burning fuel and have a minimum dimension of 20 x 20 cm.

(2) The drainage system shall be effective and lead directly to the sea at the angles of heel at which helicopters may land.

Section 18. *Safety net*

(1) The helideck shall be surrounded by a safety net capable of catching anyone who falls off the edge of the helideck. Parts of the helideck perimeter where other structures provide sufficient fall protection along the outer edge of the helideck do not need to be equipped with a safety net.

(2) The safety net shall have a minimum of 1.5 m from the outer edge of the gutter, and it must be capable of catching anyone who falls into it without inflicting injuries. The safety net shall be made of a flexible corrosion and fire-resistant material. The safety net and the gutter shall not extend further than 2 m from the outer edge of the helideck. The mesh of the safety net shall not exceed 10 cm square. The safety net shall be fastened below the helideck and have an upward slope of approximately 10° so that its outer edge is level with the helideck.

(3) On helidecks installed on the unit prior to 1 April 2020, the outer edge of the safety net may be up to 25 cm above the level of the helideck.

(4) Instead of a safety net, a lowered gangway may be used around the helideck. The gangway shall extend a minimum of 1.5 metres from the outer edge of the gutter. The combined width of the gangway and the gutter shall not exceed 2 m from the edge of the helideck.

(5) Where necessary due to access points and the placement of equipment for helideck operations, the combined width of the gangway and projections may nonetheless be up to 3.0 m from the edge of the helideck.

Section 19. *Access points*

(1) In addition to the main access to the helideck there shall be at least two other access points, which insofar as it is possible must be located at an angle of 120° in relation to the main access. For amidship helidecks, these access arrangements may be placed in accordance with a recognised standard.

(2) Access to foam monitor operators' stations shall be so arranged that it is not necessary to cross parts of the helideck.

Section 20. *Tie-down points*

The helideck and any parking areas shall be equipped with tie-down points to secure parked helicopters. The tie-down points should not be more than 25 mm above the helideck. The tie-down points shall be dimensioned to allow for the use of relevant tie-down equipment. See figure 1 in the appendix.

Chapter 5
Obstacles

Section 21. *210° obstacle-free approach and take-off sector*

(1) The helideck shall have a 210° obstacle-free approach and take-off sector, which shall extend horizontally from the helideck level. The origin of the sector shall be a chosen point on the helideck's periphery circle. The bisector shall normally pass through the centre of the helideck. The angle of the sector may, if necessary, be "swung" by up to 15°. See figure 2 in the appendix.

(2) In the 210° approach and take-off sector, there shall be no obstacles that protrude above helideck level. The following is nonetheless permitted on the helideck:

a. safety curb, cf. section 16;
b. outer edge of the safety net, cf. section 18;
c. foam monitors, signs as referred to in section 30 second paragraph, perimeter lights, floodlights and status lights not exceeding a height of 25 cm above the helideck level;
d. repeater lights not exceeding a height of 25 cm above the helideck level;
e. alternative lighting not exceeding a height of 25 mm above the helideck level, cf. section 31 third paragraph.

Amended by Regulation of 31 October 2023 No. 1753.

Section 21 a. *Obstacles outside the 210° obstacle-free approach and take-off sector*

(1) From the outer edge of the helideck in the 150° sector, the following shall apply:

a. From the outer edge of the helideck extending outwards to a distance of 0.12 D_H, there shall be no obstacles higher than 25 cm.
b. From 0.12 D_H extending outwards to a distance of 0.33 D_H from the outer edge of the helideck, no obstacles shall protrude above a plane that rises at a gradient of 1:2 (height to distance), starting at a height of 0.05 D_H.

See figure 3 in the appendix.

(2) For mobile offshore units that are initially certified or have a building contract entered into prior to 1 April 2021, the following shall apply from the outer edge of the helideck in the 150° sector:

a. From the outer edge of the helideck extending outwards to a distance of 0.12 D, no obstacles higher than 0.05 D are permitted.
b. From 0.12 D extending outwards to a distance of 0.33 D from the outer edge of the helideck, no obstacles are permitted that protrude above a plane that rises at a gradient of 1:2 (height to distance), starting at a height of 0.05 D.

See figure 4 in the appendix.

Added by Regulation of 31 October 2023 No. 1753.

Section 22. *180° obstacle-free sector*

The helideck shall have an obstacle-free sector at a 180° angle through the centre of the heliport identification marking (H), perpendicular to the bisector of the 210° sector in a plane with a fall gradient of 5:1 from the outer edge of the safety net or the gangway down to the sea level. See figure 5 in the appendix.

Section 23. *Obstacle-free sectors on units with hulls*

(1) Amidships helidecks on units with hulls may meet the following alternative requirements for obstacle-free sectors, cf. section 21:

a. The approach and take-off sectors are perpendicular to the centreline.

b. The obstacle-free sectors shall be delimited by a forward and aft 150° sector. The area between the sectors shall be an obstacle-free surface above helideck level. The distance between the sectors, the helideck's D_H value, shall be in compliance with section 11. The 150° sectors shall slope upwards at a gradient of 1:5 from the deck to a width of D_H, where the area above the sector shall be obstacle-free.

(2) Obstacle-free sectors and the helideck size shall be marked in accordance with the provisions of sections 27 and 28.

Chapter 6
Markings and visual aids

Section 24. *Windsock*

(1) On the helideck, one windsock shall be installed to indicate as clearly as possible the wind conditions on the helideck, both direction and speed. The windsock shall be clearly visible.
The windsock shall:

a. be installed so as to minimise exposure to turbulence from nearby structures and rotor downwash;
b. be conical;
c. be of adequate size with a minimum inside diameter of 30 cm, outside diameter of 15 cm and length of 1.2 m;
d. have a single colour: orange or white or two colours: orange and white, red and white or black and white.

(2) A second windsock shall be installed where turbulence generated by certain wind directions may influence the functioning of the primary windsock.

(3) The windsock shall be illuminated for night operations.

(4) A spare windsock shall always be available. The additional windsock shall be stored so that it can be installed before the next helicopter arrival.

Section 25. *Marking of helideck and landing area*

The helideck shall be green or grey in colour and have the following marking:

a. The perimeter shall be marked with a 0.3 m wide white line.
b. A 1 m wide yellow aiming circle for touchdown guidance. The inside diameter of the aiming circle shall correspond to half the D_H value of the helideck. When dictated by special operational circumstances, the centre of the aiming circle may be displaced by up to 0.1 D_H from the centre of the helideck, along the bisector of the 210° angle, towards the outer edge of the helideck. See figure 6 in the appendix.
c. Identity marking in the form of a white "H" in the centre of the aiming circle. The orientation of the letter "H" shall be such that the bar of the letter is parallel to the bisector of the 210° sector. The letter shall measure 3 x 4 m. See figure 7 in the appendix.

Section 26. *Name marking*

The helideck shall be marked with the name of the unit. The name shall be clearly visible from all approach directions. The marking shall as far as possible be placed on the helideck towards the 150° sector, between the aiming circle and the limited obstacle area. The marking shall be white or another appropriate contrasting colour, with a character height of at least 1.2 m.

Section 27. *Marking of obstacle-free sector*

(1) The 210° obstacle-free sector of the helideck shall be marked. The marking shall consist of 10 cm wide black markings along the sector borders that mark the angle where the obstacle-free sector (chevron) starts. The height of the angle shall be equal the width of the helideck's perimeter marking. See figure 8 in the appendix.

(2) For helidecks with alternative arrangements, cf. section 23, the two 150° sectors shall be marked as specified in the first paragraph second and third sentences.

Section 28. *Marking of helideck size and maximum allowable mass*

(1) The helideck shall be marked with the actual D_H value of the helideck in whole metres. The marking shall be in white or another appropriate contrasting colour at 90° intervals in at least three places along the helideck perimeter. For helidecks with alternative arrangements, cf. section 23, the helideck size shall be indicated in two places at 180° intervals.

(2) The helideck shall be marked with the maximum allowable take-off and landing mass, indicated in tonnes to one decimal place, followed by the letter "t". The marking shall be in white or another appropriate contrasting colour and clearly visible from all directions of approach.

(3) The figures shall have a height of approximately 90 cm. See figure 8 in the appendix.

Section 29. *Marking of obstacles*

(1) Fixed obstacles within the 150° sector or along its boundaries, or obstacles that represent a hazard to flight operations shall be marked in a contrasting colour and, if necessary, equipped with steady red obstruction lights with a minimum intensity of 10 candelas.

(2) The highest point of derricks, crane booms, crane cabins, legs on jack-up units or other obstacles that represent a hazard to flight operations shall be marked with steady red obstruction lights, visible from all sides. In addition, derricks, flare stacks, crane booms and legs on jack-up units and other obstacles that represent a hazard to flight operations shall be fitted with steady red obstruction lights in a plane at intervals one-third of their total length, reckoned from the highest point of the obstacle. At least one light in each plane shall be visible from all directions. The luminous intensity shall be minimum 10 candelas. On flare stacks installed at an angle upwards and outwards from the unit, the obstruction lights shall cover at least three-quarters of the overall length of the flare boom.

(3) If obstacles as mentioned in the first and second paragraphs are not located in or near the approach and take-off sector, the obstacle may be illuminated by floodlights covering the whole structure if this provides corresponding visibility.

(4) Obstruction lights and obstacle floodlighting shall be fed from an uninterruptable power supply.

Section 30. *Signs and physical access barriers*

(1) At the helideck access points, there shall be clearly visible signs that prohibit occupying the deck during take-off and landing, and movement on the deck behind a parked helicopter with the rotors turning. The signs shall have English text, as a minimum. It shall be possible to physically bar the access points to the helideck.

(2) Exits from the helideck shall be clearly marked, preferably with signs bearing the text "EXIT", as a minimum. The marking shall be visible at night.

Section 31. *Helideck lighting*

(1) Helidecks to be used for night operations or in conditions of reduced visibility shall have:

a. a floodlighting arrangement that is screened to prevent dazzling of helicopter crew during approach, take-off and landing. The average illuminance shall be minimum 10 lux measured 0.1 m above deck level. The helideck shall be evenly illuminated with an illuminance ratio of 8:1or better, calculated as the average illuminance divided by the minimum illuminance in a circle with a diameter that is 8 m wider than the inside diameter of the aiming circle.
b. Perimeter lights along the helideck perimeter, spaced at intervals of no more than 3 m. The perimeter lights shall emit an omnidirectional steady green light, with a minimum intensity of 30 candelas. The perimeter lights shall not be visible below helideck level.

(2) It shall be possible to switch off floodlighting and perimeter lighting, cf. first paragraph (a) and (b).

(3) The helideck may be equipped with alternative lighting in compliance with a recognised standard if this provides equally good visual references under all conditions.

(4) It shall be ensured that the helideck lights can be easily distinguished from other lights on the unit, and that other nearby lighting does not distract or disturb the helicopter crew.

(5) The helideck on offshore drilling units shall have a visual warning system (status light) in compliance with Code for the Construction and Equipment of Mobile Offshore Drilling Units, 2009 (2009 MODU Code) chapter 13.5.26, cf. Res. A.1023(26)).

(6) Floodlighting and perimeter lighting shall be fed from an uninterrupted power supply.

Amended by Regulation of 31 October 2023 No. 1753.

Chapter 7
Operational equipment

Section 32. *Registration of helideck movements*

(1) A moving helideck shall have instruments installed on or near the helideck for continuous registration of:

a. longitudinal movements (pitch);
b. transverse movements (roll);
c. vertical movements (heave rate).

(2) For flight planning, the helicopter crew shall have access to data on helideck movements. The helicopter crew shall also be provided with updated information about the helideck movements immediately prior to landing. Records shall be stored for a minimum of 30 days.

(3) The instruments shall be calibrated and maintained in accordance with the manufacturer’s instructions.

(4) A moving helideck means a helideck, fitted on a unit or ship, that can move in such a way that the pitch and roll movements exceed 1 degree in relation to the horizontal plane, or that the vertical movement exceeds 2 m.

Section 33. *Fuel facility*

If the unit is equipped with a helicopter refuelling facility, the facility, user manuals, instructions for fuel checks and the maintenance system shall be approved by the helicopter operator before any refuelling takes place.

Section 34. *Other equipment*

The unit shall be equipped with all necessary operational equipment at all times, including:

a. wheel chocks or sandbags;
b. equipment for tying down parked helicopters;
c. scales for weighing of baggage and passengers;
d. snow and ice clearing equipment.

Chapter 8
Firefighting and rescue

Section 35. *Connection of fire-extinguishing system*

(1) The helideck's fire-extinguishing system shall be connected to the ring main for fire water supply.

(2) Fire mains, valves and pump systems shall be so arranged that each pump system has the capacity to ensure adequate water supply by making sure that the helideck's fire main pressure is no less than 7 bar when the fire-extinguishing systems referred to in sections 36 and 41 first and second paragraph are used simultaneously. The fire mains shall at all times contain water under pressure all the way to the fire-extinguishing systems.

Section 36. *Foam fire-extinguishing system*

(1) The helideck shall have a foam fire-extinguishing system consisting of three foam monitors or a deck integrated fire-fighting system (DIFFS) with nozzles.

(2) In all operating conditions on the helideck, the foam system shall be capable of:

a. delivering foam within 15 seconds after activation of the system;
b. delivering foam efficiently to the entire helideck surface;
c. delivering foam to all external surfaces of the helicopter.

Section 37. *Minimum capacity of the foam system*

(1) During a 10-minute period of continuous operation, the foam system shall be capable of delivering foam solution at a rate of 6 litres/min/m^2.

(2) The capacity of the foam system shall be calculated based on the area of the helideck within the safety kerb.

(3) For foam systems consisting of foam monitors, each foam monitor shall have a minimum capacity of 1,500 litres/min.

(4) Foam systems with remote-controlled monitors shall comply with the requirement in the first paragraph when using only two foam monitors.

(5) Foam systems with oscillating monitors shall comply with the requirement in the first paragraph when using three monitors simultaneously.

Section 38. *Location of foam monitors*

When the foam system is equipped with foam monitors, these shall:

a. be appropriately placed to be able to extinguish a fire anywhere on the helideck under the least favourable weather conditions in which helicopters can land, also taking into consideration the approach sector of the helicopter. Oscillating foam monitors shall be adjustable to accommodate changing wind conditions, and shall be capable of switching quickly to manual operation;
b. be designed and located so as to direct the water jet towards the helideck surface;
c. have operators' stations situated close to the access ways;
d. capable of being manually operated and be easily accessible.

Section 39. *Operation of the foam system*

(1) The foam system shall be remotely operable from a centrally located and protected place commanding a good view of the helideck.

(2) Pumps and valves shall be manually operable from the individual foam monitor.

(3) All necessary valves shall be manually operable.

Section 40. *Foam concentrate*

(1) The foam concentrate shall be of an appropriate type and possible to use at the lowest operating temperature.

(2) The volume of the foam concentrate shall be calculated based on the dilution percentage according to the recommendations of the supplier.

Section 41. *Other firefighting equipment*

(1) There shall be at least two fire hydrants with hose reels in the immediate vicinity of the helideck.

(2) Tank facilities and areas around the fuel tank shall be protected by a deluge system designed to deliver a minimum of 10 litres/min/m².

(3) The helideck shall be equipped with:

a. a 10 kg CO^2 extinguisher with an attached extension hose and nozzle capable of extinguishing a fire in the helicopter engine. Two equivalent CO^2 extinguishers shall be kept in reserve in the vicinity of the helideck;
b. a combined foam or powder station with hoses and dual-purpose nozzles, capable of extinguishing minor fires in any part of the helideck. The quantity of powder shall be no less than 250 kg, and the system shall have a delivery capacity of between 2 and 3 kg of powder per second. The system shall have a discharge rate of at least 200 litres of foam solution per minute for a minimum of 10 minutes.

Section 42. *Emergency equipment*

The following emergency equipment shall be stored in a safe, clearly visible and readily accessible place in the immediate vicinity of the helideck, preferably in a sealed cabinet or box near the main access. The cabinet or box shall be red and marked "EMERGENCY EQUIPMENT":

a. two fire axes;
b. three stainless harness knives for cutting seat belts;
c. two explosion proof hand torches;
d. one crowbar;
e. one pair of cutting pliers;
f. one hacksaw with spare blade;
g. one hammer;
h. one safety wrecking bar;
i. one sheet metal shears;
j. one bolt cutter;
k. one lightweight ladder (approx. 3 metres);
l. one jack capable of lifting a minimum of 1/2 tonne;
m. one metal hook with an approx. 3 m long metal handle;
n. two fire-resistant blankets.

Section 43. *Safety measures for helidecks with fuelling facilities*

(1) No fuel with a flashpoint of less than 37 °C shall be used.

(2) Transportable fuel tanks shall be securely fixed and protected against mechanical damage and high temperatures caused by a fire in an adjacent area.

(3) Based on technical fire criteria, the fuelling facilities area shall be located at a safe distance from accommodation spaces, evacuation routes and lifeboat stations, isolated from areas where there are sources of ignition.

(4) Transportable fuel tanks shall be protected against any helicopter accident.

(5) Transportable fuel tanks shall be equipped with proper fittings, fixing arrangements and earthing.

(6) Fuel tanks, pump units and refuelling sites shall be arranged with a drip tray of ample dimensions for collecting any leakages. The drip tray shall be effectively drained to a safe place.

(7) Vent arrangements from fuel tanks with a pressure or vacuum valve shall be located at a safe distance from accommodation spaces, etc. Gas from outlets shall not be allowed to enter ventilation systems.

(8) Outlet valves shall be fitted directly to the tank and shall be capable of being closed remotely in the event of fire or other accidents.

(9) The pump system shall be connected to one fuel tank at a time.

(10) All pumps and shut-off valves shall be capable of being operated from the helicopter refuelling facility.

(11) Safety instructions for the filling of fuel shall be posted in the vicinity of the fuelling facilities.

Amended by Regulation of 31 October 2023 No. 1753.

Chapter 9
Concluding provisions

Section 44. *Exemption*

(1) The Norwegian Maritime Authority may exempt a mobile offshore unit from one or more of the requirements of the Regulations if the company applies for an exemption in writing and one of the following conditions is met:

a. it is established that the requirement is not essential, and that the exemption is justifiable in terms of safety;
b. it is established that compensating measures will maintain the same level of safety as the requirement of these Regulations.

(2) A statement from the safety representative(s) shall be attached to the application for exemption.

Section 45. *Transitional provisions*

(1) Mobile offshore units having a building contract entered into or being initially certified prior to 1 April 2021 may as an alternative to sections 3 to 42 comply with appendix II until the next certificate issue.

(2) Marking of the helideck's actual D_H value in whole metres, cf. section 28 first paragraph first sentence, shall be completed by 1 January 2022.

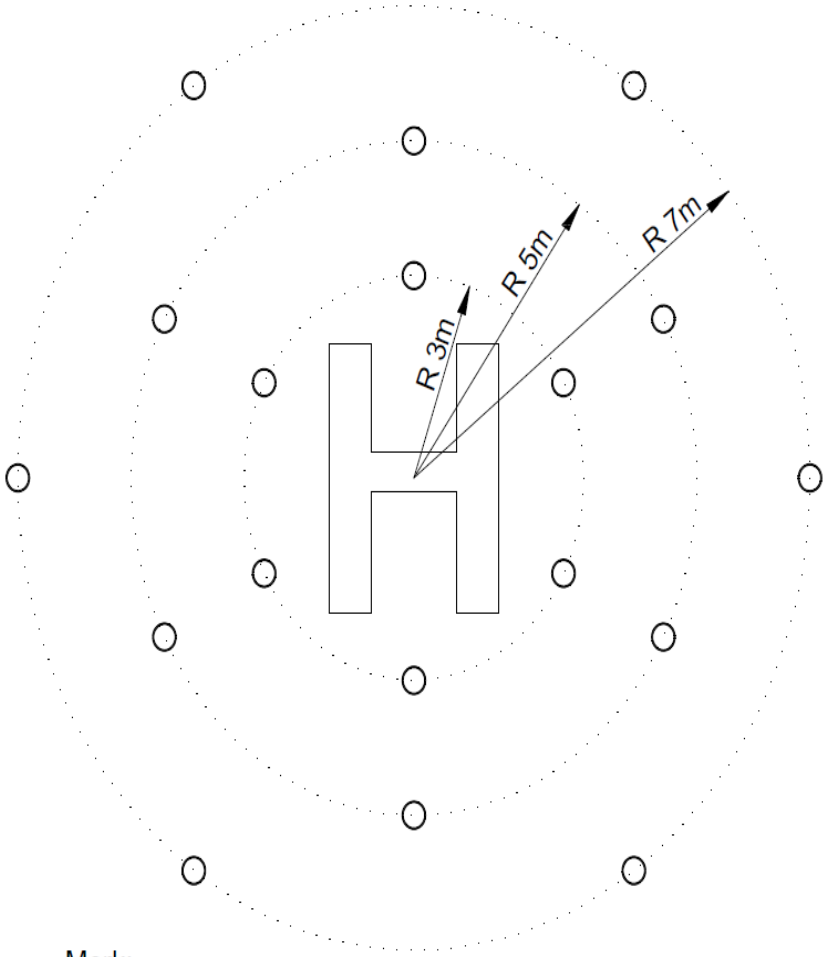
(3) Where the helideck size at the time of entry into force is marked with figures of approximately 60 cm, marking pursuant to section 28 third paragraph shall be completed by 1 January 2022.

Section 46. *Entry into force*

(1) These Regulations enter into force on 1 April 2021.

(2) As from the same date, the Regulations of 15 January 2008 No. 72 on helicopter decks on mobile offshore units are repealed.

Appendix I:



Merk:
Fortøyningsfester plasseres rundt sentrum av helikopterets referansesirkel.

Figure 1 in section 20. Example of placing of tie-down points.

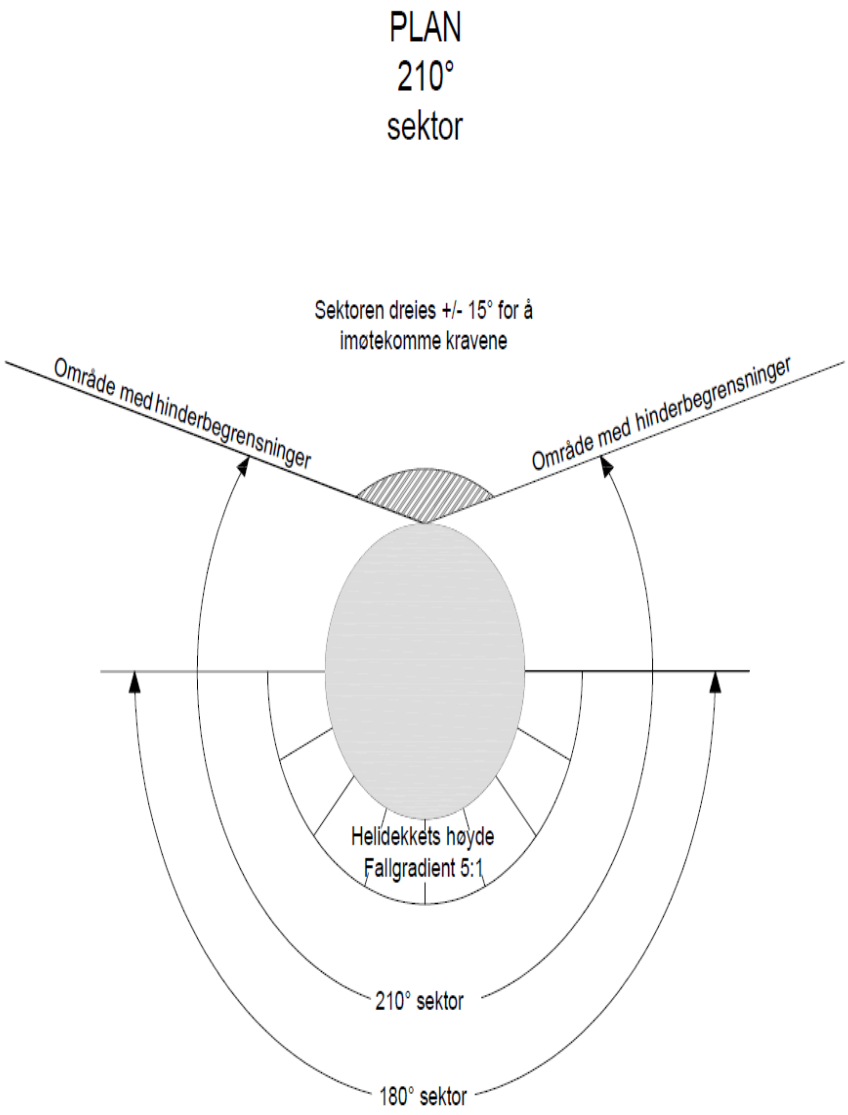


Figure 2 in section 21 first paragraph. Example of 210° obstacle-free approach and take-off sector.

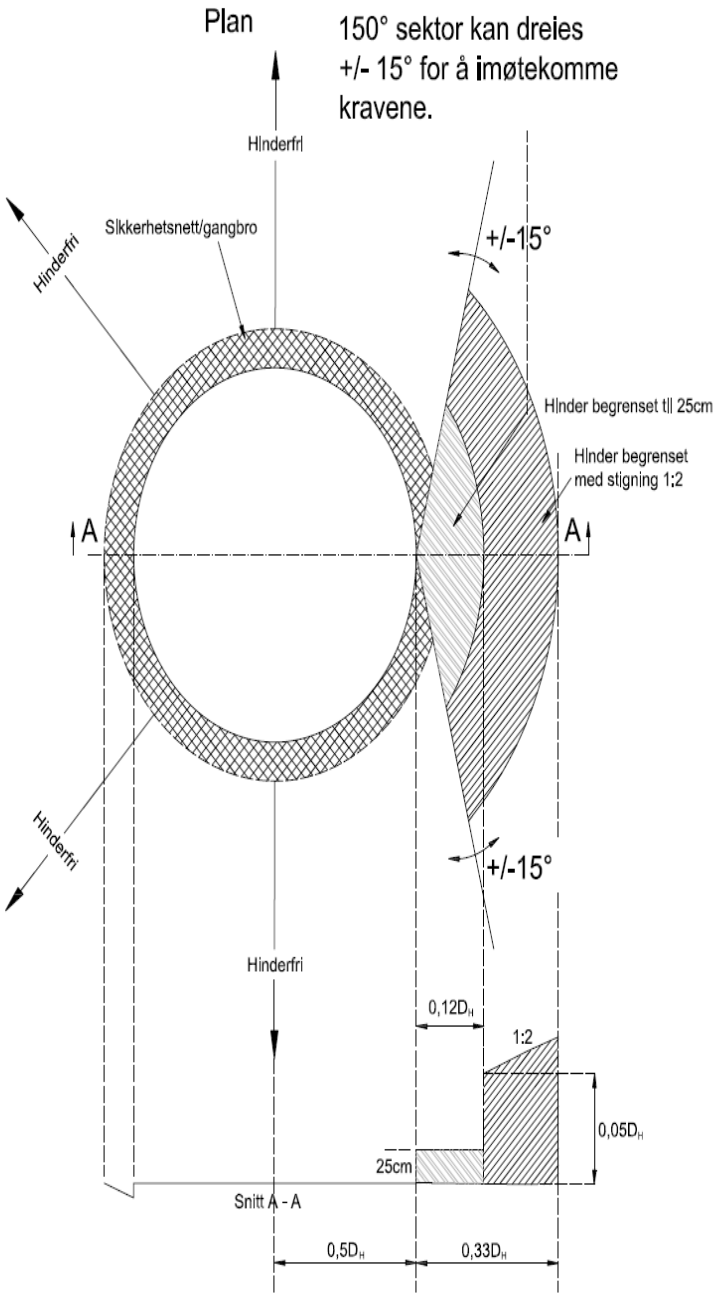


Figure 3 in section 21a first paragraph. Example of obstacles permitted in the 150° sector.

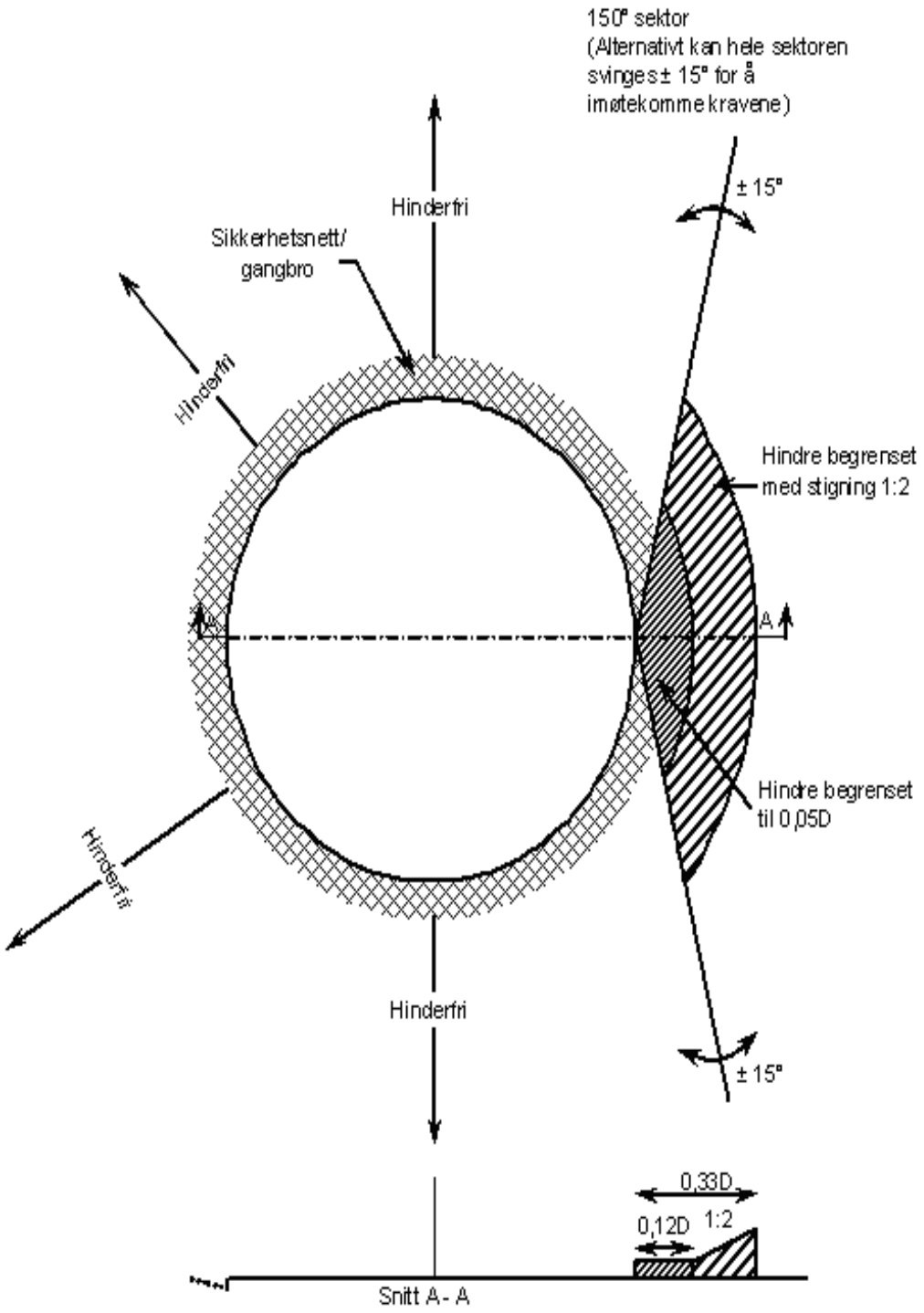


Figure 4 in section 21a second paragraph. Example of obstacles permitted in the 150° sector for units that are initially certified or have a building contract entered into prior to 1 April 2021.

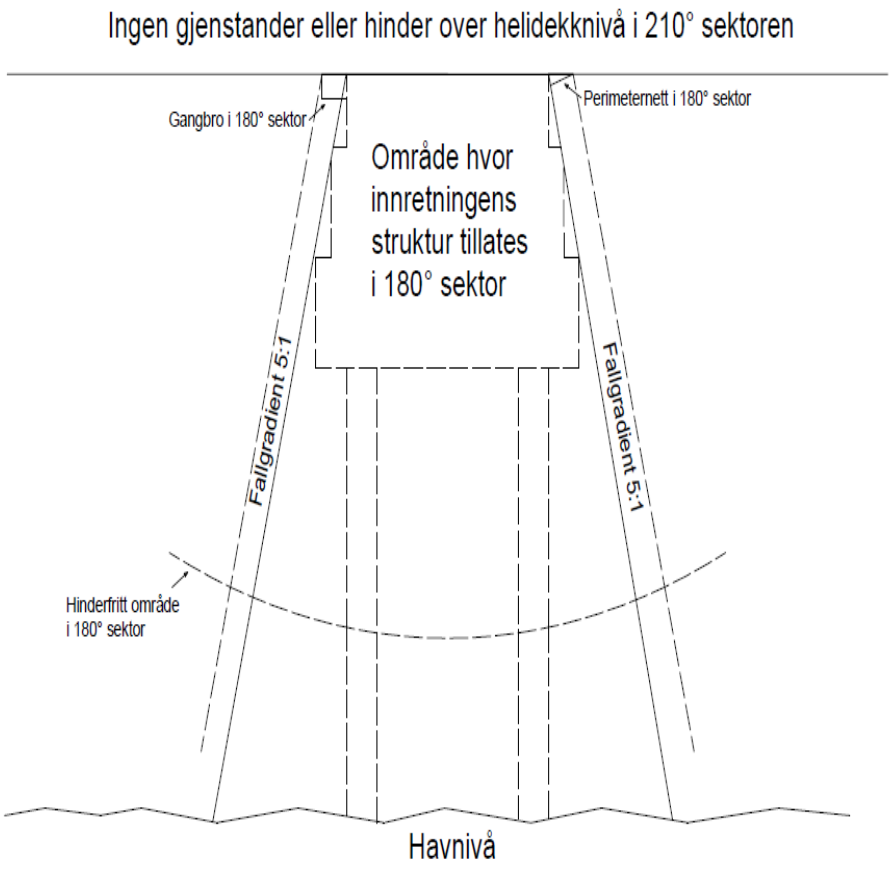


Figure 5 in section 22. Example of 180° obstacle-free sector.

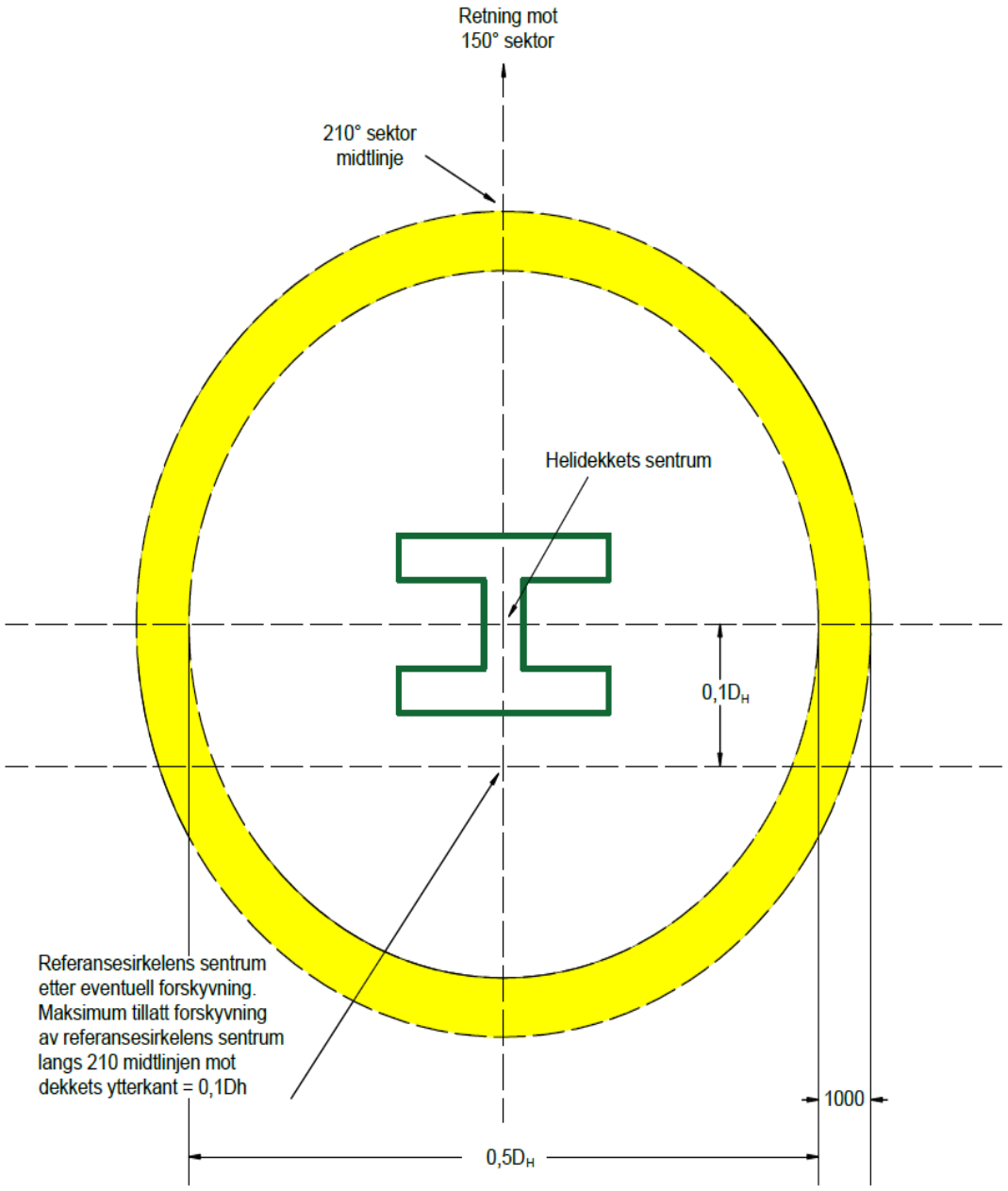


Figure 6 in section 25 (b). Aiming circle.

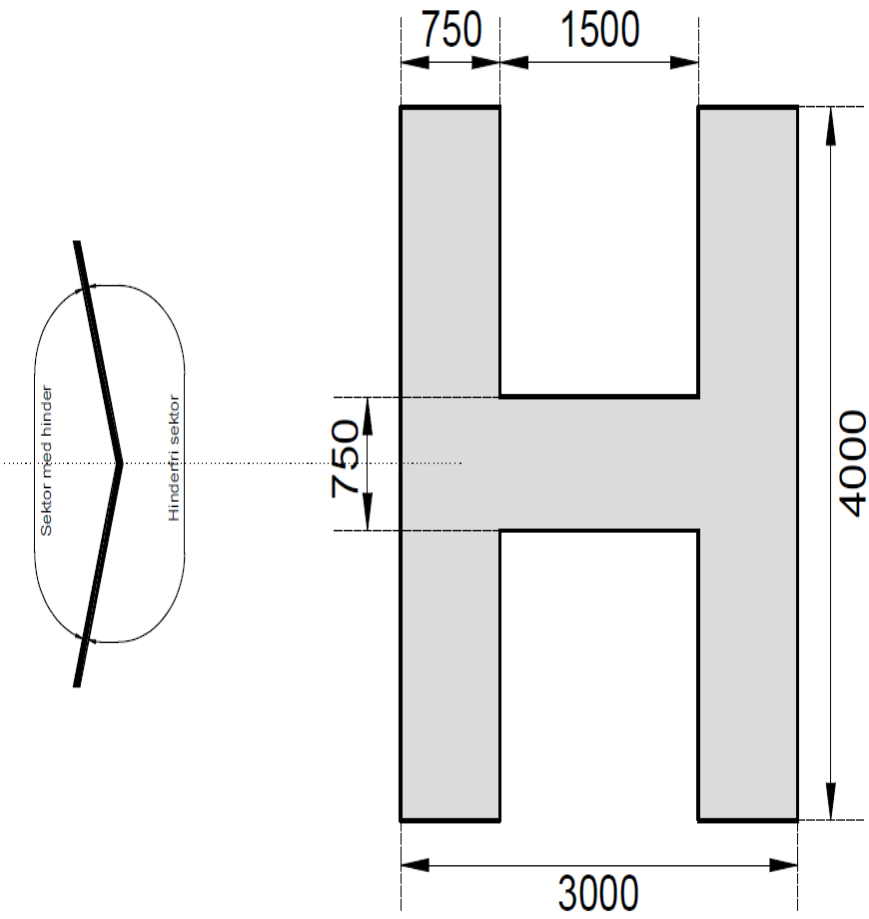


Figure 7 in section 25 (c). Identification marking (measurements in mm).

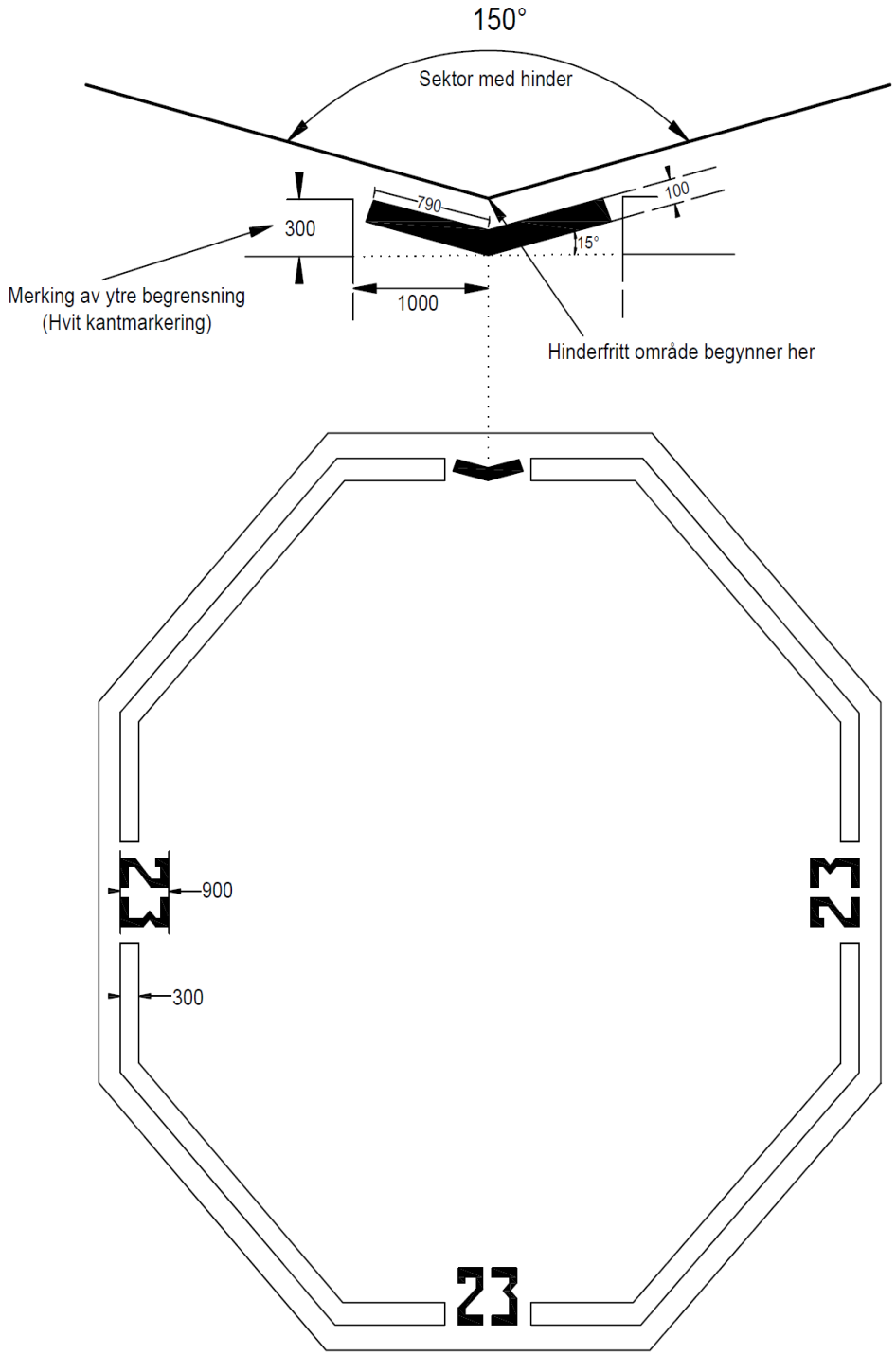


Figure 8 in section 27 first paragraph and in section 28 third paragraph. Marking of obstacle-free sector and D_H value (measurements in mm).

Amended by Regulation of 31 October 2023 No. 1753.

Appendix II:

(With reference to section 45 of the Regulations, Appendix I contains excerpts from the Regulations of 15 January 2008 No. 72 on deck cranes, etc. on mobile offshore units. The appendix to the Regulations containing drawings and helideck data has not been included. The Helicopter Deck Regulations from 2008 were repealed on 1 April 2021. The numbering in Appendix II corresponds to the numbering of the sections of the repealed Regulations.)

6. *Location*

(1) The helideck shall be located so that the obstacle-free take-off and approach sector has the most favourable direction in relation to the prevailing wind conditions, in order to minimise the effect of turbulence from structures on the take-off and approach area and the touchdown area. High temperatures from turbine exhausts and other gas discharges on board shall also be taken into consideration.

(2) If the helideck is to be located on a compact part of a unit, such as a living quarter module, a separation shall be provided which enables air to flow freely between the deck and the subjacent structure. The minimum distance shall be 1 metre.

(3) Turbulence conditions shall be documented by wind tunnel tests or simulation models.

7. *Construction*

(1) The helideck shall be made of an appropriate corrosion resistant material, and be designed in such a way that the ground effect is maintained.

(2) The deck shall be constructed so that water will not accumulate on the deck.

(3) The deck slope must not exceed 2%.

8. *Size*

The helideck shall have a minimum dimension corresponding to a circle with a diameter of 1.25 x “D”.

9. *Load*

(1) The dimensioning of the helideck shall be based on the presumption that any point on the deck may be subjected to a single load of 75% of the total weight of the heaviest helicopter used. The single load is considered to be evenly distributed across the contact area. The contact area between the helicopter's landing gear and the helideck shall be determined in accordance with specifications from the helicopter manufacturer.

(2) The load bearing structures beneath the helideck shall be dimensioned to carry a static load equal to 3 times the take-off weight of the heaviest helicopter used, with the weight distribution on the undercarriage which is normal for this helicopter. The helicopter is presumed to be located in the most adverse position on the deck.

(3) With the loads of the helicopter as stated in the first and second paragraphs plus the mass of the structure and the wind forces, the stresses will be equal to the yield stress of the material, and not exceeding 2/3 of the minimum tensile strength.

10. *Obstacle-free take-off and approach sector*

(1) The helideck shall have a 210° obstacle-free sector for take-off and approach. The sector shall extend from the level of the helideck, in its horizontal plane, except over a 180° angle through the centre of the helideck, perpendicular to the bisector of the 210° sector. This section of the obstacle-free approach and take-off sector shall extend in a plane with a slope gradient of 5:1 from the outer edge of the safety net or the gangway down to the sea level.

(2) The bisector of the angle shall normally pass through the centre of the helideck (circle or square). The sector may be “swung” up to 15°.

11. *Obstacles in the approach and take-off sector*

(1) In the 210° approach and take-off sector on or in the immediate vicinity of the deck, there shall be no obstacles protruding above deck level. Exemptions are:

a. safety kerb (cf. section 18);
b. perimeter lights and floodlights no higher than 25 cm above helideck level (cf. section 27);
c. outer edge of the safety net (cf. section 15);
d. single obstacles necessary for the operation of the helideck (exit handrails, foam monitors, etc.) not higher than 25 cm above helideck level.

(2) The horizontal extent of the sector is calculated based on the performance requirements for the most critical helicopter type used.

12. *Obstacles outside the approach and take-off sector*

In a sector of 150° from the outer edge of the helideck outwards to a distance of 0.12 D, no obstacles higher than 0.05 D are permitted. From 0.12 D outwards to a distance of 0.33 D from the outer edge of the helideck, no obstacles protruding above a plane on a gradient of 1 unit (vertically) to 2 units (horizontally), with a starting point at the inside edge at an altitude of 0.05D, are permitted.

13. *Friction*

(1) The helideck shall have a surface to prevent the helicopter from skidding, even if the deck is wet or moist. The friction coefficient shall be at least 0.40.

(2) The helideck shall be equipped with rope net, in addition to the requirement of the first paragraph.

(3) The size of the rope net shall be determined by the largest helicopter to be used. Minimum size shall be:

a. small helicopter: 6 x 6 metres or 6 metres in diameter;
b. medium helicopter: 12 x 12 metres or 12 metres in diameter;
c. large helicopter: 15 x 15 metres or 15 metres in diameter.

(4) The net mesh shall be dimensioned to prevent snagging on the helicopter.

(5) The rope net shall be fastened at 1.5 metres intervals. To ensure that the rope net is kept tautly stretched, at least 50% of the fastenings shall be equipped with a tightening device.

(6) Rope nets are not required on units where the surface of the helideck consists of single profiles with particular friction arrangements, provided that the deck is maintained in such a way that it has a satisfactory friction.

14. *Paint*

Paint used on or in the vicinity of the helideck shall be of a fire-retardant type.

15. *Safety net*

(1) The helideck shall be surrounded by a safety net of 1.5 metres width to reduce the risk of accidents for persons on deck. The net shall be made of a corrosion and fire-resistant material. The mesh shall have a size not exceeding 10 cm square. The safety net shall be sufficiently strong to support a load of at least 200 kg/m^2. The net must be fastened below the helideck and have an upward slope of approximately 10° to make its outer edge level with the surface of the helideck.

(2) When constructional considerations dictate, the outer edge of the safety net may protrude up to 25 cm above the level of the deck. Projections may be made in the safety net for the installation of fire-fighting equipment/additional access routes, to a width of up to 3 metres from the outer edge of the helideck.

(3) A lowered gangway around the helideck perimeter may replace the safety net.

16. *Access points*

(1) In addition to the main access to the helideck, there shall be at least two alternative access routes, preferably located at approximately 120° from the main access.

(2) Access to foam monitor operators' stations shall be so arranged that it is not necessary to cross parts of the helideck.

17. *Tie-down points*

The helideck and any helicopter parking areas shall be equipped with recessed tie-down points to secure parked helicopters.

18. *Safety kerb*

(1) There shall be a safety kerb of approximately 5 cm height along the outer edge of the helideck to prevent personnel and material from sliding off the deck. Furthermore, the kerb shall ensure that all foam is kept on the deck for fire containment and for cooling down the deck in the event of a fire. (2) The safety kerb shall allow for effective drainage into a gutter.

19. *Gutter*

The helideck shall be leakproof and surrounded by a gutter resistant to burning fuel. The gutter and the drain shall be dimensioned compared to the calculated maximum simultaneous water usage on the deck. The cross section of the gutter shall be a minimum of 200 x 200 mm. The drainage shall be effective and lead directly to the sea at the angles of heel at which helicopters can land.

20. *Windsock*

(1) A clearly visible windsock shall be installed in a position where it will be least affected by turbulence from nearby structures. The windsock shall be solid-coloured (orange) or two-coloured: orange/white, red/white or black/white. The windsock shall be conical and have at least the following dimensions: inside diameter 30 cm, outside diameter 15 cm, length 1.2 m.

(2) An additional windsock shall be installed if turbulence in certain wind directions may influence the functioning of the primary windsock.

(3) The windsock shall be able to be illuminated for night operations.

21. *Marking*

(1) The helideck shall be green or grey coloured.

(2) The identity marking of the helideck shall consist of a white letter “H” in the centre of the aiming circle. The letter “H” shall be oriented so that the centre bar of the letter is parallel to the bisector of the 210° sector. The letter “H” shall measure 3 x 4 m.

(3) The helideck shall have marking indicating the maximum allowable weight (maximum take-off and landing mass of the largest helicopter for which the deck was designed). The marking shall be in a contrasting colour, clearly visible from any approach direction. The marking shall specify tonnes and display mass with one decimal, followed by the letter “t”.

(4) The perimeter of the helideck shall be marked with a white edge line, 0.3 m wide.

(5) The helideck shall be marked with a yellow, 1 metre wide aiming circle for touchdown guidance.

(6) The inside diameter of the aiming circle shall correspond to half the “D” value of the helideck. but not less than 6 metres and not more than 12 metres. When dictated by operational circumstances, the centre of the aiming circle may be displaced by up to 0.1 D from the centre of the helideck, along the bisector of the 210° angle, towards the outer edge of the deck.

22. *Name marking*

The helideck shall be marked with the name of the unit, clearly visible from any approach direction above helideck level. The marking shall preferably be placed on the helideck towards the 150° sector, between the aiming circle and the limited obstacle area. The marking shall be in contrasting colour with a letter height of at least 1.2 m.

23. *Marking of obstacle-free sector*

The 210° obstacle-free sector of the helideck shall be marked. The marking shall consist of a 10 cm wide black leg along each sector border, so that they form the sector angle where the obstacle-free sector starts. The height of the angle shall be equal to the width of the perimeter marking of the helideck.

24. *Marking of the helideck size*

The helideck shall be marked with the D value for the largest helicopter that can use the deck. The D value in whole metres shall be displayed in a contrasting colour in at least three positions (at 90° intervals) on the helideck perimeter marking. The figures shall have a height of approximately 60 cm.

25. *Marking of obstacles*

Fixed obstacles located within the 150° sector or along its boundaries and/or obstacles that may be hazardous to fly operations shall be marked with contrasting colours and, if necessary, fitted with warning lights of a luminous intensity of at least 10 candelas (cf. section 27).

26. *Signs by access routes*

(1) By the access routes to the helideck, there shall be clearly visible signs prohibiting presence on the deck during take-off and landing and prohibiting movement on the deck behind a parked helicopter with rotors turning.

(2) Exits from the helideck shall be clearly marked with “EXIT” and “UTGANG”, which shall be sufficiently visible in the dark.

27. *Lighting*

(1) Helidecks to be used for night operations and/or in conditions of reduced visibility shall have:

a. A floodlighting arrangement that is sufficiently screened to prevent the crew from being dazzled during approach and landing. Where a dual-purpose lighting system (perimeter lights and floodlights) are in place, the average luminous intensity shall be at least 10 lux. The illumination of the deck shall be even, with contrasts not exceeding an 8:1 ratio.

b. Perimeter lights along the outer edge of the helideck uniformly spaced at intervals of no more than 3 metres. Perimeter lights shall emit omnidirectional, constant green light, and the luminous intensity shall be at least 25 candelas. Light fixtures shall not protrude more than 25 cm above the helideck level. Perimeter lights shall not be visible below the level of the helideck.

(2) Floodlights and perimeter lights shall be provided with an emergency power supply, and the switching time shall not exceed 10 seconds.

(3) The highest point of the derrick, crane arm, crane driver cabin or other obstacles that may represent a hazard to flight operations shall be marked with a red warning light, visible from any angle. In addition, the derrick and crane arm shall be fitted with red lights at intervals corresponding to one-third of their total length, calculated from the highest point of the derrick or crane arm. At least one light in each plane shall be visible from any direction. The luminous intensity shall be 10 candelas or more. Alternatively, the obstacles may be floodlighted.

(4) It shall be ensured that the helideck lights can easily be distinguished from other lights on the unit, and that illumination from nearby areas cannot distract or disturb the helicopter crew.

28. *General*

For regulations concerning meteorological information and equipment, reference is made to section 31 of the Regulation of 26 October 2007 No. 1181 governing continental shelf operations – commercial air traffic to and from helidecks on offshore installations and vessels and Regulations of 28 January 2008 No. 81 relating to meteorological services for aviation.

32. *Registration of helideck movements*

(1) The unit shall have instruments for continuous registration of longitudinal (pitch), transverse (roll) and vertical movements (heave rate). It shall be possible to present readings to the helicopter crew in a way that is adequate to the flight planning, and to inform the helicopter crew immediately before landing.

(2) The instruments shall be calibrated and maintained in accordance with the manufacturer's instructions. The records shall be stored for a minimum of 30 days.

35. *Fuelling facility*

(1) If the unit is equipped with a helicopter refuelling facility, the facility, user manuals and instructions for fuel checks shall be approved by the aviation company before any refuelling takes place.

(2) Reference is made to sections 37 and 38 of these Regulations concerning fire preparedness for such units.

36. *Other equipment*

The helideck shall at all times have all required operational equipment, including:

a. wheel chocks;
b. equipment to tie down parked helicopters;
c. a scale for the weighing of baggage/passengers; and
d. snow and ice clearing equipment.

37. *General requirements*

(1) There shall be open airspace under the helideck so that efficient firefighting also can be carried out on the underside. See also section 6.

(2) During take-off and landing, the helideck crew shall consist of at least 2 persons. The HLO can be one of the two persons. At least one person, wearing fire protection equipment, shall be posted at the helideck's foam monitor which is most appropriate under the prevailing weather conditions.

(3) Fire protection equipment shall be worn by all helideck crew members during take-off and landing if there is reason to suspect that a contingency may occur on the helideck.

(4) The HLO is responsible for the day-to-day supervision of work on the helideck during helicopter calls, and for supplying the platform manager with weekly information in writing concerning the status of the helideck, equipment and services. The HLO has a particular duty to ensure that:

a. necessary steps are taken to prevent unauthorised persons on the helideck before take-off and landing,
b. the deck is clear of loose objects, snow and ice, flammable substances, etc.
c. essential personnel is available and on standby,
d. crane operations in the helideck area have ended,
e. all equipment and instruments are available, working and ready for use.

(5) The HLO shall have direct communication with the helicopter crew from before landing until after take-off. Before landing, the HLO shall provide information on whether or not the deck is clear for landing. The HLO shall inform the helicopter crew immediately if any abnormal situations occur.

(6) The HLO shall ensure that passengers are guided during passenger embarkation and disembarkation.

38. *Fire-fighting equipment*

(1) Foam fire-extinguishing systems are mandatory on helidecks. The system may consist of 3 foam monitors or a branch pipe system with nozzles to supply foam to the entire helideck and all parts of the helicopter surface in an efficient manner. The foam monitors shall be so designed and located that they are capable of directing the water jet straight down against the surface of the deck.

(2) The foam monitors shall be appropriately placed to be able to extinguish a fire anywhere on the helideck under the least favourable weather conditions in which helicopters can land. The operators' stations shall be situated close to one of the access ways (see section 16) while also taking into consideration the approach area of the helicopter.

(3) All foam monitors shall have panels to remotely operate necessary pumps and valves. It shall also be possible to operate these pumps and valves manually (locally). The foam system shall be possible to operate from a central and protected location commanding a clear view of the helideck.

(4) The foam extinguishing system shall be capable of delivering a minimum of 5.5 litres of foam solution (water+foam concentrate) per minute per m^2 of the helideck area, cf. section 8. The foam extinguishing system shall supply foam not later than 15 seconds after the system has been activated. When foam monitors are used, every monitor must be capable of delivering a minimum of 1500 litres per minute. If one alone is not capable of complying with the capacity requirement for the foam extinguishing system, it shall be possible to use 2 monitors simultaneously capable of a joint delivery of a minimum of the required foam solution per minute.

(5) The foam concentrate shall be of suitable type in compliance with recognised international standards. The foam container volume (foam tank) shall be calculated based on:

- A minimum of 10 minutes of continuous foam production
- The dilution percentage shall be according to the recommendation of the supplier or greater.

(6) There shall be at least two fire hydrants with hose reels in the vicinity of the helideck.

(7) Tank facilities and areas around the fuel tank(s) shall be protected by a deluge system with a capacity of at least 10 litres per minute per m^2.

(8) The extinguishing systems mentioned in the fourth, sixth and seventh paragraphs shall be connected to two separate pump systems out of which one shall be connected to the unit's emergency switchboard. Fire mains, valves and pump systems shall be so arranged that each pump system has the capacity to ensure adequate water supply (capacity and pressure) when the extinguishing systems (fourth, sixth and seventh paragraphs) are being used at the same time. The pressure of the fire mains by the helideck shall be no less than 7 bar. The fire mains shall at all times be filled with water and pressurised up to the fire-extinguishing systems mentioned in this section.

(9) For the extinguishing of fire in the helicopter engines there shall be provided a 10 kg CO^2 extinguisher with an extension hose and nozzle capable of reaching the engine of those helicopter types that can land on the deck. Two equivalent CO^2 extinguishers shall be kept in reserve in the vicinity of the helideck.

(10) For the extinguishing of smaller fires on the helideck there shall be provided a combined foam or powder station with hoses and dual-purpose nozzles, capable of extinguishing any part of the helideck. The quantity of powder shall be no less than 250 kg, and the capacity of the system shall be between 2 and 3 kg of powder per second. The system shall have a minimum of 250 litres of foam concentrate and be capable of delivering a minimum of 200 litres of foam solution per minute.

(11) Two sets of firefighter's outfits and two fire-resistant blankets shall be kept in the vicinity of the helideck, cf. Regulations of 31 January 1984 No. 227 on precautionary measures against fire and explosion sections 13, 14 and 15 concerning the scopezzzzzzzzz of the firefighter's outfits etc.

(12) The following emergency equipment shall be kept in the vicinity of the helideck, preferably in the vicinity of the operator's station (foam monitor) by the main access:

2 fire axes

3 stainless harness knives (for cutting seat belts)

2 hand torches (explosion proof)

1 crowbar

1 pair of cutting pliers

1 hacksaw with spare blade

1 hammer

1 safety wrecking bar

1 pair of sheet metal shears

1 bolt cutter

1 lightweight ladder (approx. 3 metres)

1 jack capable of lifting a minimum of 1/2 tonne

1 metal hook with an approx. 3 m long metal handle.

(13) The equipment shall be stored in a safe, clearly visible and readily accessible place, preferably in a sealed cabinet or box. The cabinet or box shall be capable of being locked with a key, and the key shall be placed behind a window of breakable material. The cabinet or box shall be red-coloured and marked with "NØDUTSTYR" and "EMERGENCY EQUIPMENT".

39. *Safety measures for helideck with fuelling facility*

(1) The use of fuel with a flashpoint of less than 37 °C is not permitted at fuelling facilities.

(2) The fuel storage tank area shall be located at a safe distance from accommodation spaces, evacuation routes and lifeboat stations. It shall be kept away from areas with sources of ignition. Fuel storage tanks shall be protected against any helicopter accident.

(3) The storage tanks shall be securely fixed and protected against mechanical damage and high temperatures from any fire occurring in adjacent areas.

(4) Transportable tanks shall be designed in accordance with the IMDG Code and equipped with proper fittings, fixing arrangements earthing. Inspection routines for portable tanks shall be included in the operations manual. These inspection routines shall be maintained for all storage tanks.

(5) Storage tanks, pump units and refuelling sites shall be arranged with a drip tray of ample dimensions for collecting possible leakages. The drip tray shall be effectively drained to a safe place.

(6) Vent arrangements from storage tanks with a pressure/vacuum valve shall be located at a safe distance from accommodation spaces, etc. It shall not be possible for gas from outlets to enter into ventilation systems.

(7) Outlet valves shall be fitted directly to the tank and shall be capable of being remotely closed in the event of fire.

(8) Pump systems shall be connected to one tank at a time, and pipes between tanks and pump units shall be made of steel or equivalent material. Short flexible connections made from oil- and fire-resistant material may be used. Pipes shall be protected against mechanical damage.

(9) The electrical pump system with accessories shall comply with the applicable regulations relating to maritime electrical installations and the Regulations on electrical equipment laid down by the Norwegian Directorate for Civil Protection.

(10) All pumps and shut-off valves shall be capable of being operated from the helicopter refuelling facility.

(11) All pump systems shall have arrangements to prevent excessive hose pressure.

(12) Safety instructions for filling fuel, including "No smoking" signs to be posted in the vicinity of the fuelling facility.

40. *Maintenance and spare part system*

The company shall have a maintenance and spare part system for the helideck, described in the documentation/manual for the operation of the unit.

41. *Operation and emergency documentation*

(1) An operation and emergency manual shall be prepared. In the instructions, account shall be taken of the relevant requirements of these Regulations and requirements from the aviation company and aviation authorities, as well as relevant design and operational limitations for systems and equipment associated with the helideck.

(2) A record shall be kept for the operation of the helideck.

(3) The emergency manual shall set out planned measures and procedures necessary to prevent dangerous situations and regain safe operation of the helideck, as well as necessary measures to reduce the damage in the event of an accidents on the helideck.

42. *Crew / training system*

(1) The company shall appoint the necessary manning for the operation of the helideck, including Helicopter Landing Officer (HLO), cf. the third paragraph and section 37 second paragraph.

(2) The company shall have a training system covering the share of the employees responsible for the operation of the helideck. The training shall cover all areas of importance for the safe operation of the helideck, including being able to document training in the use of the helideck's firefighting equipment.

(3) Helicopter Landing Officer/HLO:
In order to serve as HLO the person in question must document the following:

a. training in the use of firefighting equipment, cf. the second paragraph;
b. knowledge of helideck requirements and operation of the deck under normal circumstances and emergency situations;
c. knowledge of helicopter types and knowledge of refuelling of aircraft;
d. carriage of dangerous goods on aircraft;
e. loading/unloading, binding and securing requirements for cargo on aircraft;
f. Regulations of 29 April 2010 No. 613 relating to conduct of petroleum activities (Activities Regulations), as well as other relevant legislation;
g. general information about flights on the continental shelf;
h. aviation terminology training;
i. any additional training required by the shipping/aviation company.

(4) The Norwegian Maritime Authority may impose additional requirements on the personnel involved in the operation of the helideck.

Amended by Regulation of 26 June 2025 No. 1372.