Helicopter Safety

Purpose
The purpose of this safe practice is to ensure safe helicopter travel.

Scope
This safe work practice covers Apache facilities and operations. Drilling rigs and other facilities with heliports shall operate under this SWP or equivalent.

Responsibilities
The Person in Charge (PIC), Lead Operator, Consultant or Production Superintendent is responsible for:

Being knowledgeable of this SWP and enforcing the requirements as listed below.

Requirements
When boarding or disembarking a helicopter, observe the following:

- Keep clear of the landing zone (LZ) or helipad until the helicopter has landed.
- Passengers will not stand on the heliport until the pilot has given the signal that the aircraft has safely landed and it is ready to be safely approached and boarded by passengers.
- Under no circumstances may a passenger or any personnel walk under the tail rotor or tail boom of the helicopter.
- Do not touch any exterior part of the helicopter except door handles.
- Bend over when approaching or departing the helicopter. Beware of the large main rotor. Embark or disembark all medium and large helicopters from the side.
- Keep a firm grip on hand-carried articles when approaching or leaving the helicopter.
- Instructions from the pilot must be followed.
- Enter aircraft using only the step provided. Take care not to damage floats or skids. DO NOT step on the floats at any time.
- Prior to leaving the helicopter, pass the seatbelt through the neck of the life jacket and buckle the seatbelt.
- When disembarking the helicopter ensure that all loose articles (ear muffs, baggage, paper, etc) are secure.
- After closing the doors to the aircraft ensure that no loose articles are hanging out of the doors.
At all times observe the following:

- Never throw anything out of the helicopter. This can cause damage to the rotor systems.
- Do not distract the pilot with unnecessary conversation or actions.
- Wear hearing protection during helicopter flights, including boarding or disembarking.
- Wear safety glasses with approved side shields when boarding or disembarking the helicopter.
- As a front-seat passenger, you will assist the pilot in watching for other aircraft. Do not sleep or read.
- Never lift or raise anything above your head while in proximity of the rotor blade.

During specific helicopter operations, observe the following:

- A proper flight manifest shall be completed and all personnel along with baggage, tools, equipment, etc. shall be weighed on a scale and documented on the manifest. This will be required for offshore departures as well as departures from shorebases.
- During refueling operations, passengers will not be in the aircraft. All passengers will stand on the deck below the heliport until the refueling operations are complete, and the pilot gives the okay to board.
- Only the pilot or trained personnel will refuel the helicopter.
- Helicopters will not land on offshore facilities that are operating under radio silence.
- All cargo will be secured in the baggage compartment of the aircraft or be tied down before takeoff.
- Do not operate cranes when a helicopter is landing at your location. The crane operator should secure the load, boom down when possible, then exit the crane cab and/or controls and signal the pilot that the crane is secure.
- Hard hats / ball caps shall not be worn while boarding or disembarking the helicopter.
- Tool boxes are not allowed to remain on heliport.
- Refer to the Apache Waste Management and Hazardous Material Shipping guidelines for proper cargo packaging, manifesting or any restrictions on aircrafts.

**Helicopter Fuel Systems**

- If the offshore facility has a helicopter fueling system on board, the fuel tank must be sumped **daily** and must adhere to specific fuel system maintenance procedures and helicopter fueling operations established by the helicopter company.
Helicopter Fuel Transfer

- Helicopter fuel transporters shall be stored in a designated area on the facility, which is painted red and separated from other totes, with chains and/or handrails. Fuel transporters shall be kept in this area whether full or empty. No other container shall be stored in this area. This is to help prevent picking up a transporter containing anything other than helicopter fuel.

- Helicopter fuel transporters shall be clearly marked with a red decal on top of the tank which can be clearly seen by the crane operator. The decal shall read “JET A FUEL”. If this sign can not be clearly seen by the crane operator, he/she shall cease making the lift and investigate the contents of the transporter.

- Special couplings are installed on each transporter to prevent connecting a contaminated hose when dumping fuel to the bulk tank. If the tank and/or hose do not have this connection, operations will be ceased until the supervisor is consulted. See below picture of connection.

- Full transporters shall have a seal on the hatch cover. This seal shall remain until the fuel is dumped into the bulk tank. If a transporter arrives at your platform without a seal, notify your supervisor.

- Fuel transporters are to be used for helicopter fuel only. **Never use them to ship or transport any other product.**

- Hoses being used to transfer helicopter fuel shall **always** be attached to the bulk fuel tank and never removed. The connection between the hose and facility bulk tank shall
possess an unbroken seal. The transporter end of the hose should have a quick connect plug on the end. This plug should only be removed when transferring fuel.

- In addition to the safeguards that have been put into place, a JSA and a completed Helicopter Fuel Transfer Checklist (HFTC) is required for all transfers of helicopter fuel. The JSA and HFTC are to be prepared by the person in charge (PIC) and will include the serial number of each transporter being emptied and the signature of the PIC. Transfer will be under the direction of the PIC to assure that all safety measures are followed.

**Helicopter Landing - Green Deck Policy**

The following information is the requirements mandating a “Green Deck” prior to helicopter landings, takeoffs, and start-ups on manned offshore platform locations.

- The “Green Deck” designation means that the heliport has no obstructions which would pose a hazard to landing, and all crane operations have ceased and the crane operator is outside the cab, with the boom in a safe location.

**For Apache Field Helicopters (equipped with field radio communications)**

- All incoming field helicopters shall make every effort to contact the facility by radio within enough time to receive relayed instructions and obtain a “Green Deck Deck” clearance.
- A Green Deck approval is not required if a diligent effort to contact facility personnel has been made and a thorough reconnaissance (such as, but not limited to, a “fly by”) of the landing area is undertaken and all precautions are executed prior to landing.

**For Non-Apache Field Helicopters (without field radio communications)**

- Green Deck approval is not required for Non-Apache field helicopters so long as a thorough reconnaissance (such as, but not limited to, a “fly by”) of the landing area is undertaken and all precautions are executed prior to landing.

**NOTE:** Special precautions and guidelines for landing 2 aircraft on the same helideck must be followed. Please see the chart below and accompanying instructions.
Policy and Procedure for Landing two helicopters on a helideck:

Parked Aircraft

<table>
<thead>
<tr>
<th>Landing Aircraft</th>
<th>BH 206B</th>
<th>BH 206L</th>
<th>BO-105 Blade Tie at 45°</th>
<th>1 Blade Straight Ahead</th>
<th>1 Blade at 90°</th>
<th>BH 407</th>
<th>BH 230</th>
<th>BH 212</th>
<th>BH 412 Blade Tie at 45°</th>
<th>S 76 Blade Tie at 45°</th>
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INSTRUCTIONS:

To find the minimum heliport size on which a helicopter can land when another aircraft is parked on the heliport and tied down:

1.) Select the landing aircraft in the left column.
2.) Move horizontally across the chart to the box below the "Parked Aircraft" in the top column
3.) Determine if your heliport size can accommodate these two helicopters.

ADDITIONAL INFORMATION:

1.) The above chart is a guideline based on the Helicopter Safety Advisory Conference-Recommended Practice No. 93-3 and does not encompass every Helicopter flying in the Gulf of Mexico. Recommended Practice 93-3 calls for a minimum of one-third rotor diameter clearance between the tips of the turning rotor and the closest part of a parked and secured helicopter (rotors stopped and tied down).
2.) The RP also requires that helicopters, operating on offshore helidecks, must land or park the helicopter with a skid/wheel assembly no closer than 3 feet from the helideck edge.
3.) Pilots in command of the aircraft will be responsible for complying with HSAC Recommended Practice 93-3 and must verify safe landing room before approaching helideck to land.
4.) The Person in Charge (PIC) or personnel assigned to heliport duties are responsible for identifying platform helideck size and determining limitations based on the above chart and HSAC RP 93-3. When in doubt as to the size of rotor diameter and limits of unfamiliar aircraft, DO NOT allow or give a "green deck" for the second aircraft to land. Notify your supervisor or the EHS Department for clarification.