# FAQ'S HOS ACHIEVER



# Service with Energy®

# RESUMÉ

#### WHAT ARE SOME OF THE MAJOR PROJECTS/FACILITIES THE HOS ACHIEVER HAS SUPPORTED?

	Facility/Project	<u>Client</u>	<u>Location</u>	<u>POB</u>
1.	Perdido	Shell	U.S. GoM	290
2.	Maloob	Technip/Global	Mexico	150
3.	Maloob	Permaducto	Mexico	150
4.	Nakika	BP	U.S. GoM	130
5.	Mad Dog	BP	U.S. GoM	110
6.	Gulfstar One	Hess	U.S. GoM	267
7.	Thunder Horse	BP	U.S. GoM	267

# **VESSEL DELIVERY & HISTORY**

The vessel was originally delivered from the shipyard in late 2008, and performed its first large-scale "flotel" project with Shell during the hookup and commissioning of the Perdido spar in 2009. In 2013, the vessel was selected by Chevron to provide accommodation support for the hookup and commissioning of the Big Foot tension leg platform. During this time, a motion compensated gangway was added to the vessel and berthing was expanded from 150 persons to 267 persons. Helicopter restart and refueling capabilities were also added. In late 2015, following a project that required the vessel to remain offshore at a facility with uninterrupted service for more than a year, the vessel returned to the shipyard for major enhancements focused on passenger comfort, including a state-of-the-art fitness center and smoking lounge.

# **DP-3 CLASSIFICATION**

# WHAT IS THE SIGNIFICANCE OF THE HOS ACHIEVER'S DP-3 CLASSIFICATION?

Dynamic positioning (DP) systems are capable of automatically holding a vessel's position and heading under specific environmental conditions. DP classification refers to the level of redundancy built into the DP system should a system fault occur.

For example, on a DP-2 vessel, a loss of position should not occur from a single failure of an active component or system, such as generators, thruster, switchboards, remote controlled valves, etc.

A DP-3 vessel also has to withstand fire or flood in any one compartment without the system failing. This is accomplished through a separation of machinery spaces, including a separate emergency positioning control system, and the ability to isolate a compartment in the event of a fire or flood.

DP-3 is the highest available classification and indicates that loss of position should not occur from any single failure, including a complete loss of a compartment due to fire or flood.

# **MOTION SICKNESS**

#### DOES THE SHIP HAVE ANY FEATURES THAT REDUCE THE CAUSES OF MOTION SICKNESS?

Yes. The HOS Achiever features active and passive roll damping that reduces the roll motion of the ship.

# FUEL STORAGE & CONSUMPTION

# WHAT IS THE FUEL STORAGE CAPACITY AND FUEL CONSUMPTION OF THE SHIP?

Approximately 319,000 gallons (1,200 m<sup>3</sup>) of ship's fuel.

Fuel consumption can be impacted by a number of environmental variables. Approximate fuel consumption is:

Underway	6,480 gal (25 m³) per day
DP [inside 500 m]	3,400 gal (13 m³) per day
DP [outside 500 m]	2,928 gal (11 m³) per day

#### WATER CONSUMPTION AND CAPACITY

Accommodated passengers typically require 65 to 85 gallons of potable water per person, per day.

The ship has approximately 145,000 gallons of potable water storage capacity, and is capable of making up to 35,000 gallons of water per day.

#### **RE-PROVISIONING**

#### HOW OFTEN DOES THE SHIP NEED TO BE RE-PROVISIONED ONCE IT IS OFFSHORE?

Re-provisioning of the ship will depend on the number of passengers on board. Typically, the ship is re-provisioned every two weeks primarily for perishable groceries.

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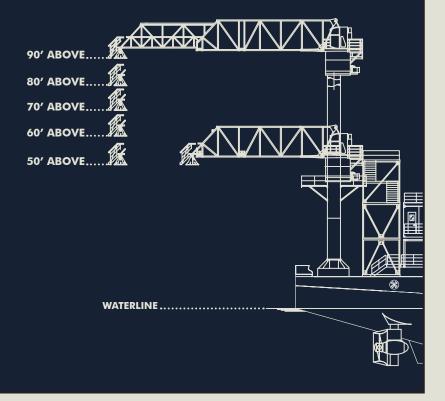
# **GANGWAY / WALK-TO-WORK**

#### WHAT ARE THE PRIMARY BENEFITS OF A "WALK-TO-WORK" GANGWAY?

A motion compensated gangway can provide a safer and more efficient means of transferring personnel between an offshore facility and an accommodation vessel. This solution has been very effective during maintenance projects, as well as hookup and commission of floating production systems.

#### **GANGWAY LANDING HEIGHT**

The landing height of the gangway can range from 50 to 90 feet above waterline (function of vessel draft). Gangway height is adjustable using mechanical spool pieces as outlined below:

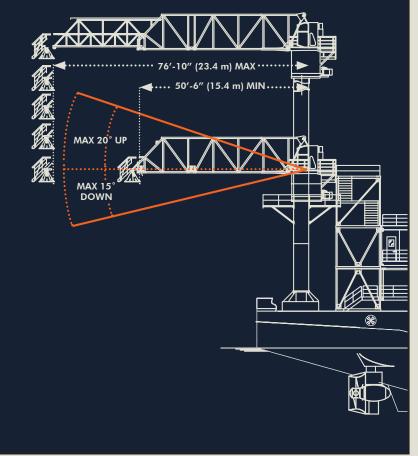


# GANGWAY / WALK-TO-WORK (CONT.)

#### WHAT ARE THE OPERATING LENGTHS AND ANGLES OF THE GANGWAY?

The gangway has an operating length of approximately 19.4 meters (64 ft.) with a telescopic movement of  $^+$ /- 4 meters. The maximum length of the gangway is 23.4 meters (77 ft.) and the minimum length is 15.4 meters (50.5 ft.). The operating angle of the gangway is  $+20^{\circ}$  to  $-15^{\circ}$ .

#### GANGWAY OPERATING ENVELOPE



# GANGWAY / WALK-TO-WORK (CONT.) -

# WHAT ARE THE MOTION COMPENSATION FEATURES OF THE GANGWAY?

The HOS Achiever's gangway has active and passive motion compensation features, and is integrated with the ship's DP system as a primary reference sensor.

When landing the gangway on to the offshore structure, active motion compensation corrects the motions of the gangway to compensate for the HOS Achiever's movement, keeping the end of the gangway stationary in space for landing.

Once the gangway is landed, passive mode enables the gangway to follow all movements between the HOS Achiever and the offshore facility. The gangway has three ranges of motion: it can boom up and down, slew left and right, and retract in and out.

# THE HOS ACHIEVER'S GANGWAY IS INTEGRATED WITH THE SHIP'S DP SYSTEM AS A PRIMARY REFERENCE SENSOR.

# UNDER WHAT WEATHER CONDITIONS CAN GANGWAY TRANSFERS OCCUR?

The gangway's operating envelope includes a sea state of 3-4; however, the primary limiting factor in gangway operations is vessel heave. A 2 meter significant heave is the likely condition where personnel transfers would be suspended.

# DOES THE SHIP HAVE A FAST RESCUE CRAFT (FRC) ON STANDBY DURING GANGWAY TRANSFERS?

Yes.

# GANGWAY / WALK-TO-WORK (CONT.)

# DOES THE GANGWAY REMAIN LANDED ON THE FACILITY AT ALL TIMES?

The gangway can remain landed on the facility for extended periods. While there is no specific system requirement to disengage the gangway from the facility during normal operating conditions, the vessel will typically move away from the facility following the completion of transfers, just like any other vessel that services an offshore asset. This mitigates unnecessary risk, such as unscheduled passenger movements between the assets, and allows any drills, or preventative maintenance on the vessel or gangway, to be performed away from the facility.

# DOES THE GANGWAY REMAIN LANDED UNTIL ALL PASSENGERS ARE TRANSFERRED?

Yes. Once the gangway is landed, it will remain in place until all personnel transfers are complete, in both directions (both to/from the vessel and offshore facility).

This continuous transfer method is efficient and different than other solutions that may require small incremental transfers between the assets and multiple gangway landings during a single crew change.

#### WHAT ARE THE REQUIREMENTS FOR A GANGWAY LANDING AREA ON AN OFFSHORE FACILITY?

The gangway needs a minimum clear landing area of 12 ft. x 12 ft. The gangway landing cone applies an approximate load of 2.6 tons, which approximates to 580 psf over the contact area, and is the preferred platform design criteria. Our inhouse team of engineers can assist in assessing the suitability and locations of preferred, or existing, landing platforms.

# BERTHING

#### WHAT IS THE TOTAL NUMBER OF BERTHS ON THE SHIP, AND HOW MANY ARE AVAILABLE FOR THE CLIENT?

The HOS Achiever has a total of 267 berths.

We typically offer 200 berths to our clients to ensure adequate berthing for the marine crew and support staff.

It is important to note that the number of berths available for client use is a function of the operating tempo and service levels required by the project. The ship's marine crew, crane and gangway operators, medical personnel, catering staff, security team and clerks must have allocated berthing. This allocation is consistent with a generally accepted ratio of 1 cook / steward for every 10 accommodated passengers. Alternate arrangements can be discussed interactively.

#### WHAT ARE THE TYPICAL ROOM ARRANGEMENTS FOR CLIENT BERTHING?

The HOS Achiever has various room configurations as presented below. Each stateroom is outfitted with a private bath, including shower, and a computer/work desk equipped with Internet and power connections. Each bunk within a stateroom has its own private locker closet and storage.

<u># OF STATEROOMS</u>	PASSENGERS PER ROOM
14	1 person
17	2 persons
29	3 persons
33	4 persons

# **CLIENT OFFICES**

#### HOW MANY CLIENT WORKSTATIONS ARE AVAILABLE ON THE SHIP?

The ship has 46 workstations available for client use.

#### HOW MANY CONFERENCE ROOMS ARE AVAILABLE?

The ship has 3 conference rooms available for client use. Each conference room has seating for 12 people.

#### DO CONFERENCE ROOMS HAVE TELEVISIONS OR OTHER MEANS OF PROJECTING PRESENTATIONS?

Yes.

# ARE CONFERENCE ROOMS OUTFITTED WITH SPEAKER PHONES FOR CONFERENCE CALLS?

Yes.

# CAN CONFERENCE ROOMS MAKE USE OF VIDEO CONFERENCING?

Yes.

# **INTERNET/TELEPHONE ACCESS**

#### IS INTERNET ACCESS AVAILABLE?

Yes. Internet access is available throughout the ship in common areas and living quarters.

# INTERNET/TELEPHONE ACCESS (CONT.) \_

# HOW MUCH SATELLITE BANDWIDTH CAN BE OBTAINED ON THE HOS ACHIEVER?

The maximum bandwith available to the ship is approximately 5 MB upload x 10 MB download. Bandwith may be expanded beyond this with additional hardware.

# CAN CLIENTS ALLOCATE BANDWIDTH BETWEEN BUSINESS AND PERSONAL/CASUAL USE?

Yes. Bandwith can be prioritized, segregated, and password protected for different uses.

# IS WIRELESS INTERNET AVAILABLE IN COMMON AREAS, CONFERENCE ROOMS AND LOUNGES?

Yes. Wireless Internet is available in all common areas.

# HOW MANY TELEPHONES CAN BE SETUP FOR USE BY CLIENT PERSONNEL?

The number of telephone lines is dependent on the bandwith plan chosen by the client. We have provided over 20 direct dial telephones with local area codes for client use on prior projects.

# WHAT TYPE OF TELEPHONE ACCESS CAN BE PROVIDED AND HOW ARE COSTS CONTROLLED?

We can offer designated, separate phone lines where usage is captured and billed according to service rates. Additionally, restrictions can be put in place to limit access to international dialing.

# **PASSENGER AMENITIES**

# ARE THERE LOCKER ROOMS FOR WORKERS TRANSFERRING BETWEEN THE SHIP AND OFFSHORE FACILITY?

Yes. There is both a men's and women's locker room.

#### IS THERE A FITNESS FACILITY AVAILABLE FOR PASSENGERS?

The ship has a 4,000 sq.ft., multi-level fitness center featuring state-of-the-art weight lifting and cardio equipment, wireless Internet, surround sound, large televisions throughout, and men and women's lounges with TV area, showers and saunas.

# PASSENGER LOUNGE AREAS

DECKS 1 & 2:	Gym
DECK 4:	Theater, Recreation Room,
	Coffee & Tea Room
DECK 5:	Indoor Smoking Lounge,
	Internet Café, Quiet Room
DECK 6:	T.V. Room

#### IS SATELLITE TELEVISION AVAILABLE?

Yes.

# ARE THERE VIDEO GAMING CONSOLES OR GAMING TABLES AVAILABLE?

Yes. The Smoking Lounge has two gaming stations outfitted with Xbox consoles, and the Recreation Room on Deck 4 has a ping pong table and a foosball table.

# SMOKING AREAS \_\_\_\_\_

# WHAT INDOOR AND OUTDOOR SMOKING AREAS ARE AVAILABLE ON THE SHIP?

There is an 830 Sq.ft. indoor Smoking Lounge, and a covered outdoor smoking area with tables and seating.

# CATERING \_\_\_\_\_

# HOW MANY SEATS ARE AVAILABLE DURING A SPECIFIC MEAL PERIOD?

The Main House Mess Hall has seating for 88 people. The Annex House Mess Hall has seating for 80 people.

#### WE TYPICALLY PROVIDE 4 MEALS A DAY TO ACCOMMODATE DIFFERENT WORK SHIFTS:

- Breakfast
- Dinner
- Lunch
- Midnight Meal

# WHAT LEVEL OF STAFFING IS GENERALLY OFFERED TO SUPPORT CATERING AND HOTEL SERVICES?

We typically provide 1 catering staff member for every 10 accommodated passengers.

# CAN MEALS BE PACKAGED AND SENT TO THE OFFSHORE FACILITY?

Yes.

# HOUSEKEEPING \_\_\_\_\_

#### HOW MANY LAUNDRY ROOMS ARE INSTALLED ON THE SHIP?

The HOS Achiever has 2 laundry facilities onboard the ship with a total of 17 washer and dryer units.

#### WHAT ARE THE TYPICAL LAUNDRY CYCLES?

Laundry services are provided by the catering staff. Towels are collected daily for washing. Laundry cycles for personnel clothing will depend on client requirements and the number of persons on board.

#### HOW OFTEN ARE CABINS & BATHROOMS CLEANED?

Typically once per week.

#### HOW OFTEN ARE LINENS TYPICALLY CHANGED?

Typically once per week.

# - HELO OPERATIONS \_\_\_\_\_

#### WHAT IS THE HOS ACHIEVER'S HELIDECK RATING?

Sikorsky S-92, (12 Tons).

# WHAT OTHER FEATURES ARE AVAILABLE TO SUPPORT HELICOPTER OPERATIONS?

Helo restart and re-fueling is available.

# SAFETY/SECURITY -

#### WHAT TYPE OF SECURITY TEAM IS ON THE SHIP?

We typically have a 4 person security team on the ship to ensure there are 2 security officers on duty per watch.

# HOW MANY SECURITY CAMERAS ARE ON THE SHIP, AND WHAT LEVEL OF MONITORING OCCURS?

For the safety and security of all passengers aboard the HOS Achiever, we have installed multiple security camera systems consisting of nearly 100 cameras throughout the vessel that record live feeds 24-hours a day. These cameras cover interior and exterior passageways, common areas, vessel entry points, critical machinery spaces, the bridge, and exterior views of the vessel to aid in maneuvering.

Video output is fed directly to monitors located throughout the vessel, and live feeds are monitored by the security team and the vessel crew.

# HOW ARE PASSENGERS ACCOUNTED FOR AS THEY MOVE BETWEEN THE VESSEL AND THE FACILITY?

The HOS Achiever utilizes an A-Pass<sup>®</sup> electronic personnel tracking system designed to effectively and efficiently track passenger movement, as well as help facilitate emergency response procedures, through the use of portable, handheld card readers that track and record passenger movements instantaneously.

These portable card readers work with a Vessel Photo ID Card that is issued to passengers during the check-in process.

# SAFETY/SECURITY (CONT.)

Real-time passenger location, security photo, and other pertinent information is stored in the system and is accessible at any time.

The system is crucial for identifying people and knowing who is on or off ship as well as accounting for them during drills and life boat tendering.

#### **GANGWAY ACCESS CONTROL**

Passenger embarking and debarking is fast, accurate and secure. Portable card readers scan passengers on/off ship and provide instant photo ID verification.



# SAFETY/SECURITY (CONT.) \_

# MUSTER STATION OPERATIONS

System will show how many people are assigned to a particular muster station and give a running total to show who has checked in and who has not.

Assigned And Accounted For Ac	This Location	
3%		
Assigned: (To This Location And Embarked)	119	
Checked In: (By This Unit)	3	
(By All Units At Location)	3	-
Missing: (From Assigned)	116	
Capacity:	150	

# REAL-TIME INFORMATION

