

Social Distancing on Offshore Helicopter Flights - ALARP determination factors

This document has been prepared by the IOGP Aviation Subcommittee with support from the IOGP-IPIECA Health Committee.

The decision to implement social distancing for normal (non-medevac) offshore helicopter flights is an ALARP determination for individual Oil & Gas companies and Business Units, based on the following:

- The business/platform/vessel criticality driving the numbers and frequency of passengers to be flown.
- The numbers and type of aircraft available.
- The risk of exposure to COVID-19.
- The measures available and practicable to mitigate that risk.
- The potential cost and increased flight exposure for the range of social distancing implemented.

This document aims to detail the factors and risk reduction measures to inform that ALARP discussion and enable a consistent application for both Oil & Gas and Helicopter companies.

Health Factors

The following is referenced from the World Health Organisation's (WHO) COVID-19 Pandemic Website and the US Centers for Disease Control and Prevention, supplemented by the IOGP Health Committee Chair and other health professionals.

How does COVID-19 spread and what protective measures can we take?

- In the helicopter scenario, people can catch COVID-19 from others who have the virus:
 - The disease can spread directly from person to person through small droplets from the nose or mouth, which are spread when a person with COVID-19 coughs, sneezes or exhales droplets while talking.
 - These droplets can also land on objects and surfaces around the person and other people can then catch COVID-19 by touching these objects or surfaces, then touching their eyes, nose or mouth.
 - The risk of catching COVID-19 from someone with no symptoms (either asymptomatic, or pre-symptomatic carriers) is very low, but possible.

These are the primary hazards of COVID-19 in the context of an offshore helicopter passenger cabin. The following sections detail factors that can be applied to mitigate the hazards.

General Protection Measures

The following WHO “Basic protective measures against coronavirus” are now commonly applied in all areas and should be replicated at both ends of the flight, in terminals and offshore, with visual reminders prominently displayed and the necessary equipment made available.

- Wash your hands frequently (at each end of the flight);
- Avoid touching eyes, nose and mouth;
- If you have a fever, cough and difficulty breathing, stay at home, do not come to work and seek medical care early;
- Practice respiratory hygiene: cough or sneeze into a tissue or an elbow, dispose the tissue in the nearest waste receptacle after use and wash or sanitize your hands;
- Maintain Social Distancing: Maintain at least 1 metre (3 feet) distance between yourself and anyone who is coughing or sneezing. (National guidelines vary between 1m and 2m).
- Stay informed and follow advice given by your healthcare provider.

Passenger pre-screening, isolation, screening and travel-bans

- Passenger screening applied through the booking process prior to arrival at the heliport/embarkation point. Normally applied by detailed questionnaires and self-reporting. Where possible, include this in computerized passenger management systems.
- Some companies are also applying isolation measures for offshore workers for 7-14-days prior to flight. The ability to implement this will depend on many non-aviation related factors.
- Where not possible through the booking process, screening should occur as soon as possible in the heliport departure process, prior to an individual mixing with other groups of people.
- Additional screening as part of the check-in process, including questionnaires and temperature measurements. Temperature testing has not been proven to be effective, but is a common process required by many national authorities.
- Any passengers who show symptoms or who fail certain elements of the travel or health history screening will be suspected of being of an “elevated risk” and will generally be denied travel and asked to leave the facility promptly.
- As testing becomes more widely available and practicable (both testing for infection and immunity), this can be incorporated in the screening process, with the possibility of providing a fitness to fly document. However, consideration should be given to availability and other local community priorities.

Physical distancing at heliports and terminals

- To protect staff and passengers in the terminal environment, through the check-in, briefing and departure processes apply physical separation measures (distancing, barriers), avoid physical contact through document exchanges, provide PPE for staff and make available hand sanitizers or other means for handwashing.

Regular cleaning of common surfaces in the aircraft

- COVID-19 can survive on some surfaces for extended periods, but if it dries on a hard surface, will die relatively quickly.
- Cleaning of aircraft interiors, using approved industry cleaning products, can be a very effective barrier if applied consistently, by trained staff. Helicopter operators are now applying cabin and cockpit cleaning procedures between flights. Air conditioning systems are considered beneficial and do not add an elevated risk. Where possible, air operators should consider installing HEPA filters in the aircraft ventilation system.
- Arrangement should also be made for cleaning of PPE such as lifejackets, ear defenders and survival suits after every flight.
 - It is worth considering an “earplugs” only policy in place of ear defenders, as foam earplugs are generally very effective and can be disposed after the flight.

Face coverings for passengers

- Increasingly, face coverings/masks are being recognized and promoted by health authorities as the means to prevent spreading the virus. They should be considered as a general mitigation and could be considered as a mitigation for not applying social distancing in the cabin or for small aircraft where social distancing is impractical.
- Basic face coverings (including home-made cloth face coverings) will reduce the possibility of spreading the virus by a potential COVID-19 carrier who may have passed the pre-flight screening procedures; especially when worn by all passengers.
- Consideration should be given to the availability of face coverings/masks in a particular location or region and to the prioritisation of supplies for healthcare use, where supplies are limited; home- or self-made face coverings are increasingly seen and promoted as an effective alternative to surgical masks.
- Consideration should also be given to compatibility and instructions for use with passenger emergency breathing systems, if used, and to the disposal of masks and the risk as FOD around operating aircraft.
- Requesting passengers not to talk face to face during the flight, will reduce the risk of that type of transmission if face masks are not worn.

Additional spacing between passengers

- Provided that all other measures are effectively implemented, the probability of transmission in the passenger cabin is low. Where combined with the use of face masks or face coverings, it becomes remote. It is therefore questioned whether the distances that can be achieved in a helicopter will provide any additional benefit.
- Seating configurations can further mitigate transmission if face masks or coverings are not worn. Face to face should be avoided.
- In large, super medium and medium helicopters, reduced capacity will enable a seat to be free between each passenger, but may result in the need for additional flights, imposing greater strain on helicopter operator resources and introducing additional flight exposure.
- Related, flying hours exposure, take-offs and landings could substantially increase and, therefore, increasing overall risk.

Segregation of Flight crew

- Extensive measures have been taken by all helicopter operators to ensure flight crews have no exposure to COVID-19 infected individuals, during their work, training and personal lives.
- The continuing provision of sufficient healthy flight crews is critical to maintaining the offshore flight services.
- Flight crews are subject to higher exposure of transmission from passengers due to conducting multiple flights each day.
- For some aircraft types, operators are now installing physical barriers, including screens, between flight crews and passengers to minimize crew-exposure. In other types the first seat row may be blocked.
- In single engine types, operators may preclude a passenger from occupying the front seat.

Summary

The application of a range of mitigations could significantly reduce the risk of COVID-19 transmission to passengers during a helicopter flight, without the need for additional social distancing/passenger separation, and in some circumstances could be considered an ALARP position. Where additional separation is deemed necessary and practicable, the factors detailed above should be taken into consideration.

Experience to date of COVID-19 has suggested that taking the most thorough and conservative measures early, pays dividends (The China, S Korea, Singapore approach), whereas not applying the lessons of those earliest affected and waiting for an escalation of cases does not (most other countries). All those involved with the transport of offshore passengers are therefore recommended to consider the application of the measures discussed in this document at the earliest opportunity.

References

World Health Organisation; <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>

World Health Organisation; "Getting your Workplace Ready for COVID-19"; 20th March 2020; https://www.who.int/docs/default-source/coronaviruse/getting-workplace-ready-for-covid-19.pdf?sfvrsn=359a81e7_6

U.S. Centers for Disease Control and Prevention; "Use of Cloth Face Coverings to Help Slow the Spread of COVID-19"; 9th April 2020; <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html>