

Procedure for the Shipment of Dangerous Goods from Offshore Installations & Vessels to Onshore by Helicopter

Introduction

Dangerous Goods are articles or substances, which are capable of posing a risk to health, safety, property or the environment. They can be safely transported by helicopter providing certain principles are strictly followed. The procedures detailed below aim to set out the requirements to achieve this.

Please note however that whilst the legislation governing the carriage of Dangerous Goods is laid down in the “ICAO Technical Instructions for the Carriage of Dangerous Goods by Air” it is recognised that the great majority of shippers use the “IATA Dangerous Goods Regulations” as their working document; for this reason the procedures detailed below refer only to the Dangerous Goods Regulations (DGR’s). The DGR’s contain all the requirements of the Technical Instructions and also include additional requirements, which may be more restrictive than the Technical Instructions or reflect industry standard practices.

For all helicopter operations in support of the Oil & Gas industry on the UKCS, the shipment of all Dangerous Goods by Air is carried on a **Prior Permission Only** basis.

Documentation required:

The following books and documentation are required:

- Up-to-date copy of IATA Dangerous Goods Regulations
- Copies of the Shippers Declaration.
- Copies of the checklists for both non-radioactive & radioactive shipments
- Copies of the Notification to Captains (NOTOC)
- Sufficient Dangerous Goods labels.

In addition to the above, the installation should make provision, in the appropriate procedures manual, for:

- The storage & security of packages, prior to loading/after unloading, from the helicopter.
- The emergency response steps required in the event of a damaged or leaking package being discovered.
- Retention of the paperwork as per DGR 9.8

Division of Responsibilities & Training required

The legislation governing the carriage of Dangerous Goods by Air requires that all staff involved with this process, be properly trained. DGR Chapter 1.5 details the training required according to the specific duties of the staff involved. Onshore, the shipper delivers his consignment to the airline operator, who double checks (using an appropriate checklist) that the article has been properly packaged; all the requirements of the DGRs have been complied with and the package is in all respects fit to fly. Offshore, the same procedure must be followed to avoid undeclared or mis-declared dangerous goods being loaded on the helicopter. This ‘check’ is a legal requirement placed on all aircraft operators. For practical purposes offshore, employees or contractors of the offshore installation may carry out these checks. There are 3 main areas that need to be addressed in the offshore environment. These are:

Procedure for the Shipment of Dangerous Goods from Offshore Installations & Vessels to Onshore by Helicopter

- **The Shipper's duties.** Who is the Shipper and is he/she qualified to pack the shipment and sign the declaration?
- **The Acceptance staff.** Who is accepting the package for carriage on behalf of the helicopter operator and is he/she qualified to sign the checklist?
- **The Loading staff.** Who will be loading the shipment onto the helicopter and is he/she qualified to sign the NOTOC.

Due to the limitations on manpower offshore, the same person may carry out some, or all of these functions. Consequently there is a greater risk of undeclared or mis-declared dangerous goods packages being loaded on the helicopter. Therefore, **for the purposes of these procedures only**, the responsibilities of the offshore staff are broken down as follows:

- **The SHIPPER and ACCEPTANCE STAFF** is regarded as the Store man, Materials Coordinator or other nominated person, for packing and presenting the package for transport and signing the shipper's declaration and the checklist on behalf of the helicopter operator.
- The **LOADING Staff** are deemed to be the HLO and Helideck crew.

The minimum training requirements will be as follows:

- **SHIPPERS / ACCEPTANCE STAFF** (Storemen/Materials Controllers etc): Shall undergo 'Full' Dangerous Goods Training as detailed in DGR Chapter 1.5 for Shippers and Acceptance staff. Such training shall be conducted at a CAA approved Dangerous Goods Training School and will include certification that the student has passed an examination to assess his/her level of knowledge in the subject. He/She will hold ultimate responsibility for ensuring that all packages for shipment by air are packed, marked and labelled i.a.w the DGRs. He/she will be available to advise the helideck crew as required.
- **LOADERS** (HLOs, HDA's, Heli-Admin & Baggage Searchers): Shall undergo 'awareness' training appropriate to the 'Loading' of said packages in an offshore helicopter. Such training will include an element of Emergency Response to equip helideck crews with sufficient knowledge to deal with damaged or leaking packages found, either in the helicopter hold, or prior to loading.

Wherever possible at least one member of the loading team will be trained to "**check**" the packages and the shipper's declaration, using an approved checklist to ensure that they comply with the requirements. This recognises the difficulties in the Shipper checking his own work and instils a 'best practice culture' when shipping Dangerous Goods.

*Note: DGR Chapter 1.5, requires that, staff accepting cargo **other than Dangerous Goods** and those handling, storing and loading of cargo and baggage; also require training to be able to recognise dangerous goods packages. Thus all offshore personnel interacting with passengers, baggage and/or freight require training regardless of whether their installation intends to ship dangerous goods by air or not.*

Facilities Required

Procedure for the Shipment of Dangerous Goods from Offshore Installations & Vessels to Onshore by Helicopter

It is not acceptable to leave dangerous goods packages on the helideck or on access routes to/from the helideck where they could contribute to any incident on the helideck; present a tripping hazard on access stairs or be exposed to damage by the weather. Therefore provision should be made for the **'temporary storage'** of all dangerous goods packages, prior to loading and after unloading, from helicopters. Where temporary storage is not provided arrangements should be made for the immediate removal of dangerous goods packages from the helideck area.

In addition, a **'spill kit'** is to be made available to HLO's to deal with the unlikely event of a damaged and leaking package being discovered either on the helicopter or immediately before loading.

Procedure for shipping Dangerous Goods

1. The shipment must be packaged and documented in the normal way in accordance with the IATA Dangerous Goods Regulations.
2. Notification of intention to ship dangerous goods must be e-mailed to the helicopter operator at least **24hrs in advance of the requested shipment time**. The notification must include:
 - The Proper Shipping name of the dangerous goods
 - The UN Number
 - The Packing Group
 - The net quantity
 - The gross weight and dimensions of the package.
 - The current certificates of those staff involved in the shipment of the dangerous goods.

The helicopter operator will acknowledge receipt of this notification. This acknowledgement does NOT constitute ACCEPTANCE of the Dangerous Goods, but merely indicates that appropriate staff will be ready to receive the goods on arrival at the heliport.

3. The package and documentation must then be checked for accuracy using the appropriate checklist. Ideally, a member of the helideck crew who has been appropriately trained in this function will do this. However, in extremis; the Stores person/Shipper may do it. On completion, the acceptance checklist must be signed on behalf of the helicopter operator and a copy of the training certificate of the signatory attached.
4. Upon satisfactory completion of the checklist the package should be stored prior to loading and 2 copies of the Notification to Captain (NOTOC) prepared, but not signed. *Note: The NOTOC requires the exact loading position to be detailed therefore it may not be possible to complete this until after loading.*
5. On arrival of the helicopter and immediately before loading, the package must be visually inspected for signs of damage and leaking. If any such signs are found, the package must not be loaded.
6. The stowage location for the Dangerous Goods should be agreed with the aircraft commander. The package can then be loaded.
Note: where more than one dangerous goods package is involved, consideration must be given to the segregation of incompatible dangerous goods i.a.w DGR Table 9.3A.

Procedure for the Shipment of Dangerous Goods from Offshore Installations & Vessels to Onshore by Helicopter

7. Note the stowage position of the dangerous goods on the NOTOC. The HLO or other trained member of the deck crew must sign the NOTOC.
8. The following paperwork should then be presented to the pilot.
 - 2 copies of the Shippers Declaration
 - 1 copy of the completed checklist
 - 2 copies of the signed NOTOC
 - A copy of the Dangerous Goods Certificate for the person signing the Checklist.
9. The pilot will sign both copies of the NOTOC and retain 1 copy. The HLO will keep the other copy, to be retained on the installation.
10. On departure of the helicopter, **all** stations en route and the final destination must be notified that there are Dangerous Goods onboard. This will be done by e-mailing the NOTOC to all destinations.
Note: an e-mail containing all the relevant details found on the NOTOC will also suffice.

Retention of Paperwork

DGR 9.8 requires that all paperwork be retained for a minimum period of 3 months. As a minimum the following documentation will be retained:

- 1 copy of the Shippers Declaration
- 1 copy of the signed Checklist
- 1 copy of the NOTOC signed by both HLO (or other trained person) and Pilot.

Accident/Incident Procedures

The legislation requires that all incidents involving dangerous goods presented for shipment by air, to be reported to the relevant authorities. For all operations on the UKCS, this is the Civil Aviation Authority (CAA). The definitions of the reportable occurrences are listed at appendix 1.

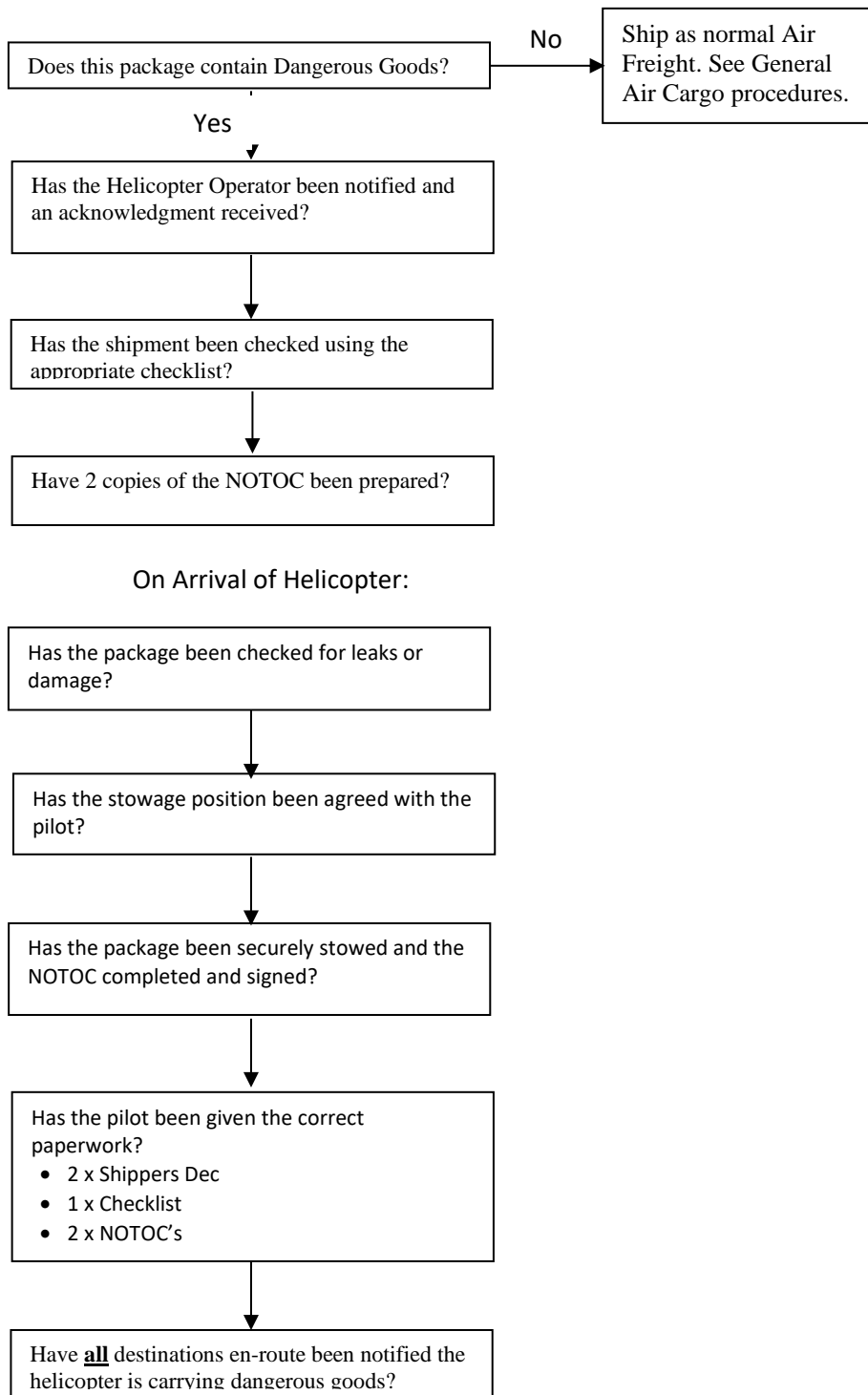
In the offshore environment the specific actions to be taken in the event of a leaking or damaged package being discovered will depend on 'where' and 'when' the discovery was made.

For discoveries made prior to loading in the helicopter; or after unloading from the helicopter (where there was no evidence of leakage on the aircraft): the installations own COSHH procedures for dealing with spillages are to be followed.

For discoveries made during unloading from the helicopter: the pilot is to be informed immediately and the guidance in the helicopter operator's operations manual is to be followed. The installation will provide such support services as requested by the pilot to control the leakage and enable unloading and securing of the leaking package. Additional support will be required to decontaminate the helicopter hold and allow a determination that the airworthiness of the helicopter has not been affected. The installation will also be required to provide any necessary information to permit the helicopter operator to meet its reporting commitments to the CAA & Air Accident Investigation Board.

Procedure for the Shipment of Dangerous Goods from Offshore Installations & Vessels to Onshore by Helicopter

Dangerous Goods by Air Shipping Procedure:



Procedure for the Shipment of Dangerous Goods from Offshore Installations & Vessels to Onshore by Helicopter

Appendix 1.

ACCIDENT OR INCIDENT INVOLVING DANGEROUS GOODS

Definitions:

Aircraft Accident – An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which the aircraft is missing or completely inaccessible.

Serious Incident (Aircraft) – An incident involving circumstances indicating that an Aircraft Accident nearly occurred.

Dangerous Goods Accident - an occurrence associated with and related to the transport of dangerous goods by air, which results in fatal or serious injury to a person or major property damage.

Dangerous Goods Incident - an occurrence other than a dangerous goods accident associated with and related to the transport of dangerous goods by air, not necessarily occurring on board an aircraft, which results in injury to a person, property damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained. Any occurrence relating to the transport of dangerous goods, which seriously jeopardizes an aircraft or its occupants, is also deemed to be a dangerous goods incident.

Undeclared Dangerous Goods - Articles or substances that are classified as dangerous goods in accordance with the IATA DGR that have been offered for air transport without a completed shipper's declaration.

Special Notification Requirements In The Event Of Aircraft Accident Or Serious Incident When Dangerous Goods Are Being Carried

If an aircraft carrying dangerous goods as cargo is involved in an accident, or serious incident in which dangerous goods are involved, the platform operator must provide information, without delay, to emergency crews responding to the accident or serious incident about the dangerous goods on board, as shown on the copy of the information to the pilot-in-command (NOTOC). The information must be sufficient to enable any hazards created by the dangerous goods to be minimised and include the quantity and the location on board the helicopter. As soon as possible, the platform operator must also provide this information to the aircraft operator so that they in turn may provide this information to the CAA & Air Accidents Investigation Board.

Dangerous Goods Leakage/Spillage

If evidence is found of damaged or leaking packages, the position where the dangerous goods were stowed on the aircraft must be inspected for damage or contamination and any hazardous contamination removed. In particular the flight crew must be notified so that they may take steps to ensure that the airworthiness of the aircraft has not been compromised and that their company procedures for decontamination of the aircraft and incident reporting may be followed. Reasonable steps must be taken to identify the nature and source of the contamination before proceeding with the



Procedure for the Shipment of Dangerous Goods from Offshore Installations & Vessels to Onshore by Helicopter

unloading of the contaminated baggage or cargo and safe containment of the substance to facilitate disposal.

Undeclared Dangerous Goods

The platform operator must report any occasion when undeclared or mis-declared dangerous goods are discovered in cargo or baggage (in and outbound) to the helicopter operator for onward reporting to the CAA.

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