

# Line Training System (LTS)

## Recommended Practice for Offshore Helicopter Operations



## Safety Through Collaboration

Collaboration empowers safety and is at the very heart of HeliOffshore. This Line Training System (LTS) Recommended Practice is a great example of how our industry – from designers and maintainers, to pilots and passengers – works together and learns from each other to ensure no lives are lost in offshore flight.

I would like to thank the HeliOffshore LTS Working Group, industry stakeholders and every HeliOffshore member who came together to deliver this guidance. Thank you for your commitment and contribution. Together, we will implement and sustain ever-higher levels of performance so those we are responsible for travel home safely every day.

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## Publishing Details

Version: 1.0  
Publication date: December 2023

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HeliOffshore would also like to thank other participants within the Operational Effectiveness Workstream, Operator Members and IOGP for their peer review of this document prior to publication.

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This document is not intended to replace any contractual negotiations, agreements or requirements between helicopter operators and their customers.

<b>1 Introduction and Background</b>	<b>4</b>	3.6 Recurrent Line Training and Checking	11	<b>6 Summary</b>	<b>19</b>
<b>2 Line Training Captain Qualifications, Experience and Training</b>	<b>6</b>	3.7 Renewals After a Period of Inactivity	12	6.1 Implementation of Recommendations	20
2.1 Recommended Minimum Qualifications and Experience	7	3.8 Assessments and Training for Command Upgrade	12	6.2 Table of Key Recommendations	21
2.2 Pilot Recency Prior to LTC Training	7	<b>4 Conduct of Line Training Flights</b>	<b>14</b>	<b>7 Annexes</b>	<b>23</b>
2.3 IOGP Report 690-2 Requirements	7	4.1 Scheduling of Training	14	<b>Annex A</b> Example CRM and KSA Skills Standards	24
2.4 Recommended Competencies for an LTC	7	4.2 Route Changes During Line Training	14	<b>Annex B</b> Example of LTC Training Record	27
2.5 Training Programme for LTCs	8	4.3 Crewing of Line Training Flights	14		
2.6 CRM Technical and Non-technical Skills	8	4.4 Threat and Error Management	14		
2.7 Example of a LTC Training Course Record	8	4.5 Briefing and Debriefing	14		
2.8 General Responsibilities of an LTC	8	4.6 Assessment Criteria and Performance Standards	15		
2.9 Standardisation of LTCs	8	4.7 Training Records	15		
<b>3 Scope of Line Training for Offshore Helicopter Operators</b>	<b>10</b>	<b>5 Night Offshore Helideck Training</b>	<b>16</b>		
3.1 Line Training Ground Course	11	5.1 Initial Simulator (FSTD) Training	17		
3.2 Initial Offshore Helideck Training Day and Night	11	5.2 IOGP Report 690-2 Requirements	17		
3.3 Initial Day or Night Line Flying Under Supervision	11	5.3 Night Line Training	17		
3.4 Experienced Pilot New to Company or Region	11	5.4 Availability of Offshore Installation for Helideck Training	17		
3.5 Introduction to Moving Decks or Vessels	11	5.5 Contractual Requirement	18		

# Section 1 Introduction and Background



# Section 1

## Introduction and Background

### 1. Introduction and background

The aim of Line Training, sometimes referred to as Mission Specific Training, is to develop the application of the knowledge and skills of how to fly a given aircraft type in circumstances specific to a particular mission or environment. Aviation regulations often highlight the need for operators to have a 'Line Training System' but usually leave the details of this to the operator. Therefore, the definition of Line Training and what falls under its remit varies. Equally, the associated assurance is not defined, so standards of training and checking will differ between operators and regions.

Historically the role of Line Trainer hasn't been recognised with a formal qualification, despite the importance of such trainers within the offshore helicopter industry. The role of Line Training Captain (LTC) has often been assigned to one of the more senior or more experienced Captains at a helicopter operator's base. Sometimes they are taken through an extensive training programme in order to prepare them for their new responsibilities, but this isn't always the case. The role of an LTC carries significant responsibility and brings with it an extensive list of essential competencies that are required to be trained and assessed in order to operate safely in the offshore environment.

It should be noted that the terminology and precise responsibilities for different types of pilot trainer/ instructor vary around the world. In some regions, operators qualify 'Training Pilots' to conduct much of the standard Line Training and the recurrent simulator training, provided they maintain currency and proficiency of line duties. Often there is considerable overlap between the role of Type Rating Instructor (TRI) or Check Airman and an LTC with perhaps little distinction between the two. It is therefore useful for operators, particularly those with ATO approval, to consider a system of providing specific authorisations to 'Training Pilots' for the conduct of Line Training to make a distinction between different Line Training disciplines e.g. offshore initial training, offshore day or night flying, Helicopter Hoist Operations (HHO), flights to moving decks, etc.

**Several recent helicopter accidents have occurred during training in support of the offshore energy sector. Two of these accidents were assessed by HeliOffshore in collaboration with IOGP in 2022 and the resultant output was summarised in the [Industry Action Plan](#).**

Several important factors were identified in both accidents that relate to training, competency and CRM as follows:

- a. Helideck availability for Night Deck Landing (NDL) Practice
- b. Crewing qualifications and experience for NDL Practice
- c. Pre-flight briefing/ Operational Risk Assessment
- d. Use of automation in late stage of approach
- e. NDL competency
- f. LTC competency
- g. CRM training competency
- h. Startle-effect, causing temporary incapacitation
- i. Self-imposed pressure.

The factors above are primarily focussed on night deck landing training and operations. The benefits of clarity, standardisation and best practice across all areas of Line Training provide an opportunity to enhance the safety of the offshore aviation industry.

The importance of well-structured Training Programmes being delivered and overseen by sufficiently experienced and trained TRIs/Check Airmen and LTCs is essential to building and developing the appropriate competencies amongst offshore aircrew as well as enhancing operational safety. The TRIs/Check Airmen usually focus on delivering aircraft type-specific training in accordance with the RFM, whilst the LTCs should focus on training the everyday competencies of a

particular operation and region. LTCs should also be considered mentors and 'standard setters' for other company pilots.

Whilst TRIs/Check Airmen can be an LTC, it should be kept in mind that the competencies of each role differ, and a TRI/Check Airman is not automatically qualified as an LTC. Equally, an LTC is not necessarily a TRI/Check Airman.

HeliOffshore recognises that different regions and companies have different aircrew training systems and varying levels of responsibility and formal training for the captains who are given a training role.

**IOGP Report 690-2** sets many of the essential baseline contracting requirements for offshore helicopter pilot qualifications and training, and is referenced throughout this document.

**The aim of this Line Training System Recommended Practice (LTS RP) is to provide offshore helicopter operators with a clear and logical guide to all relevant aspects of Line Training and to encourage better quality and more standardised training across the offshore industry.**

# Section 2 Line Training Captain Qualifications, Experience and Training



## Section 2

# Line Training Captain Qualifications, Experience and Training

### 2.1 Recommended Minimum Qualifications and Experience

Operators should select their new Line Training Captains very carefully to ensure that they have sufficient experience, credibility and aptitude to deliver this important role. As a baseline minimum a potential LTC should be a current offshore helicopter captain who can demonstrate their experience in accordance with **IOGP Report 690-2, Section 11, Table 11-1**.

### 2.2 Pilot Recency Prior to LTC Training

Before starting the training programme to become an LTC, the pilot should fulfil the recency requirements as laid out in **IOGP Report 690-2, Section 40**. It is essential that this recency is maintained at all times when flying in a training capacity. This requires a minimum of 15 hours flight time on the contracted type in the previous 60 days and a minimum of 3 'cycles' to an offshore helideck. There are additional requirements for night recency, which should be fulfilled if night flying is to be conducted.

### 2.3 IOGP Report 690-2

The latest version of IOGP Report 690-2 can be found [here](#).

#### IOGP Report 690-2, Section 11 Flight crew - experience and qualification, states:

##### 11A Purpose

Ensuring flight crew are competent to fulfil their duties by having appropriate training, qualifications, knowledge, skill and experience.

##### 11B Expectations

The operator demonstrates flight crew meet the required experience and qualification levels by entering at the appropriate stage in the process.

### 2.4 Recommended Competencies for an LTC

Previous training experience, perhaps as a Flight Instructor (FI) or Crew Resource Management Instructor (CRMI) might be an advantage but should not be considered a prerequisite. For some pilots, the chance to become an LTC is their first opportunity to undertake a training role in the aviation industry. It is also possible that a TRI/Check

Airman might be allocated an additional role as an LTC, and in this situation it is important to highlight the differences between these two distinct roles and responsibilities.

It is essential that an LTC can communicate effectively with their crewmembers and trainees. There must not be any language barrier that could reduce the effectiveness of the training or assessment and post-flight debrief.

Core instructional training techniques must be applied along with sound application of CRM principles; both technical and non-technical aspects must be demonstrated by the prospective LTC. This allows them to set a good example to trainees, but also provides a respectful and open atmosphere for effective training to take place. LTCs should be given specific CRM training as part of their training to become an LTC.

The selected LTC should have sufficient relevant prior experience of the type of operations in which Line Training will be conducted. For example, if they are required to supervise, train or assess offshore night flights, then they should have prior experience of this themselves. Similarly, prior experience with hoisting, or operating to moving decks may be required. Where company LTCs do not have specific prior

experience in a rarely-used competency, the company must have robust supporting guidelines and management processes.

An LTC should have sufficient operational experience in the region where they will be conducting training or assessment. If an existing LTC moves to a different region or a new operating base, they should be given familiarisation training to highlight the specific features and operational challenges of flying in the unfamiliar location before conducting any training or assessments.

Prospective LTCs should have sufficient experience on the aircraft type or types, that they will be operating during training or assessment flights. They should demonstrate a sound level of knowledge of the aircraft systems, operational limitations and practical operation of the aircraft. In addition, they should keep themselves updated on any type-related events or operating challenges from around the world.

An LTC should demonstrate a high level of understanding and observance of company operations manuals and standards. They need to have sufficient knowledge of SOPs such that they can easily demonstrate or explain these to a trainee pilot.

## 2.5 Training Programme for LTCs

Helicopter Operators should develop a clear and thorough training programme in order to prepare and qualify their company LTCs. This training programme should be detailed in the company Operations Manual Part D (or equivalent) and the training delivered by a suitably qualified and experienced company LTC or TRI/Check Airman.

This training should comprise a mixture of ground based theoretical 'classroom' training, practical training using a simulator where possible and practical training in the aircraft, both on the ground and during a series of training flights. These 'training flights' can take place during normal commercial flights and need not cause any delay or interruption to passengers or the commercial operation.

Each of the Line Training flights should be scripted with various scenarios. These can range from teaching new low hour pilots, introduction to operations at a new base to bringing standards up for experienced pilots. This can also include specific specialised skills such as Helicopter Hoist Operations, night deck landing practice and determining a failure of a Line Check. An essential part of this training is the concept of 'intervention skills', where an LTC learns when and how best to intervene if the trainee isn't performing well or is struggling to fly within the operator's normal standards.

The LTC training programme should cover the following as a minimum:

- a. Teaching and Learning Course or

- Instructional Techniques Training
- b. Relevant regulation as applicable to role
- c. Company operations manuals
- d. OMB of applicable type / variant
- e. OMD or equivalent, with focus on relevant elements
- f. Company assessment/ grading standards
- g. Company forms and recording procedures
- h. Company pilot Command Assessment procedures
- i. Ground training elements
- j. Aircraft handling techniques
- k. Guidance on intervention skills
- l. Guidance on deck landing practice from either operating seat
- m. Simulated malfunctions
- n. Emergency and survival equipment training and check requirements
- o. Crew Resource Management (CRM) specific to training
- p. Threat and Error Management (TEM) techniques
- q. Enhanced crew cooperation
- r. Briefing and debriefing techniques and procedures
- s. CRM skills assessment training
- t. Company SMS knowledge, including role of Flight Safety Officer or equivalent
- u. Safety reporting systems

## 2.6 CRM Technical and Non-technical Skills

CRM Technical and Non-technical skills are an important element of any aviation operation and training programme. An LTC should be provided with specific CRM training in relation to training and assessments. As well as receiving this training during the initial LTC training course,

a regular 'CRM for trainers' refresher course should be provided. It is particularly important that communication, briefing and debriefing and TEM are revised.

CRM and Knowledge, Skills and Attitude (KSA) standards frameworks are essential, not only to ensure safe and efficient conduct of operations but also to enable effective training and assessment. Operators are encouraged to incorporate similar CRM skills and KSA standards for 'trainers' to reinforce and assess the application of these key behaviours. An example is provided at Annex A.

## 2.7 Example of a LTC Training Course Record

LTC training course content will vary between regions and operators and with the specifics of a particular operation. It is important that a clear syllabus is provided for the LTC training and that this training is properly recorded. The example of an LTC Training Course Record, as provided at Annex B, is one way in which the training can be planned and recorded.

## 2.8 General Responsibilities of an LTC

On completion of training, an LTC will have responsibilities that include the following:

- a. The general supervision of operating standards of all pilots
- b. Supervising all aspects of captains' offshore initial line flying, including final line checks during conversion to aircraft type.
- c. Supervising all aspects of co-pilot offshore initial line flying, including final

line checks during conversion to aircraft type.

- d. Carrying out pre-command course check and command course Line Training with pilots who have been recommended for command training.
- e. Carrying out ground school instruction when required, covering subjects related to line flying.
- f. Carrying out periodic line checks.
- g. Making recommendations for the improvement and maintenance of operating standards and procedures.
- h. Generally maintaining the highest possible standards of line operations by their personal example and the supervision of their aircrew colleagues

## 2.9 Standardisation of LTCs

Standardisation of training delivery and assessment is an essential part of an effective aviation training system. Operators should schedule regular flight training standardisation meetings where company flight operations policy can be discussed and new SOPs and updates to training and assessment programmes can be shared. It is recommended that LTCs attend at least one such meeting each year.

In addition, LTCs should be assessed annually, as a minimum, to ensure they are performing in accordance with the operator's standards and SOPs. This annual standardisation 'check' should be conducted with the LTC being assessed conducting the flight as the instructor and the assessment by either another nominated LTC or TRI/Check Airman.



Every LTC should undergo additional CRM training on an annual basis to ensure their ability to facilitate training, briefing and debriefing as well as making fair and balanced assessments.

Operators should develop and run programmes to ensure inter-rater reliability amongst all training personal to ensure delivery of training to a consistent standard.

# Section 3 Scope of Line Training for Offshore Helicopter Operators



# Section 3

## Scope of Line Training for Offshore Helicopter Operators

Line training for an offshore helicopter operator covers a broad range of operational competencies and has to be delivered to pilots with a range of experience from an 'Ab-initio' to an experienced Captain requiring a periodic 'Line Check'. A summary of these is covered in this section.

### 3.1 Line Training Ground Course

LTCs should be able to deliver ground training that relates to day-to-day flight operations such as aircraft performance planning, centre of gravity calculations, flight planning, briefing of passengers and aircraft pre-flight equipment checks. Some of this may be classroom-based but much of it will be practical 'hands-on' training, for example the familiarisation of aircraft safety equipment.

### 3.2 Initial Offshore Helideck Training Day and Night

Prior to operating to an actual offshore helideck, the trainee should undertake a series of simulator flights as part of their preparation. There is significant benefit in conducting Line Oriented Flight Training (LOFT) in a high-fidelity Flight Simulation Training Device (FSTD). The specific skills involved in operating a helicopter in accordance with OEM approach and departure profiles for an offshore helideck

require the instruction of a TRI/Check Airman or Training Pilot in a simulator. Once the trainee pilot has successfully completed this simulator training, they should progress to flying actual offshore deck landing training.

**IOGP Report 690-2, Section 11, Table 11-1**, sets out the training requirements for initial training flights to offshore helidecks. Currently this requires a minimum of 5 day and, where required, 5 night approaches, landings and takeoffs with this training provided by a TRI/Type Rating Examiner (TRE).

Where the appropriate National Aviation Authority (NAA) allows, the initial day and night deck landing training can be trained by an LTC. The operator must have a thorough process to train offshore helideck landings and departures, supported by a robust system for training and managing LTCs, as per this document. In such circumstances the LTC should be specifically trained, assessed and authorised for this role by the operator, and they should have a minimum of 12 month's experience as an LTC. Training for the LTC should include specific intervention skills.

Operators should develop a clear 'competency pathway' to enable their aircrew to be able to operate safely and effectively offshore by day and night.

### 3.3 Initial Day or Night Line Flying Under Supervision

Once the initial helideck training has been conducted the trainee is allowed to continue with Line Training. The LTC is required to supervise a number of Line Flights, typically these will be commercial flights with passengers or cargo on board. This provides an opportunity for the trainee to practice and reinforce the skills involved with operating to and from an offshore helideck with the benefit of the LTC's guidance and experience. **IOGP Report 690-2, Section 11, Table 11-1**, provides the baseline requirements for both day and night Line Training. The requirements here are minimums, therefore it is essential that a trainee pilot demonstrates sufficient competence in each area.

### 3.4 Experienced Pilot New to Company or Region

If an experienced pilot joins an operator, it may be that they have significant previous offshore experience. In this situation, once they have satisfied any type-related training such as Initial Type Rating, Licence Proficiency Check (LPC) or Operator Proficiency Check (OPC) they will require Line Training to introduce the specifics of the operator and region.

### 3.5 Introduction to Moving Decks or Vessels

The specialist skills and competencies relating to operating a helicopter to a moving deck, such as a semi-submersible oil platform, or to the helideck of a vessel (such as an FPSO or survey ship), require careful training. This training should be conducted by an experienced LTC who has previous experience and knowledge of operating to moving helidecks. The operator should ensure that the LTC is specifically trained and assessed to perform this role. Where possible, it is advised that a flight simulator is used to enhance the training, before flying to moving helidecks offshore.

### 3.6 Recurrent Line Training and Checking

LTCs will be required to conduct regular operator recurrent Line Checks and Recency Training. Some helicopter operators require annual Line Checks to provide assurance that company SOPs are being observed and to allow standardisation of company pilots. **IOGP Report 690-2, Section 40**, sets out the baseline expectations regarding pilot recency.

### 3.7 Renewals After a Period of Inactivity

If a pilot has a break from flying activities for whatever reason, this may cause their flying recency to lapse. Equally, they may fly very infrequently due to other responsibilities or the nature of the operation. In this case a recency flight or series of flights under the supervision of an LTC will be required. Where offshore night flying takes place, the LTCs should provide night offshore recency training flights where pilots have fallen outside the operator night recency requirements.

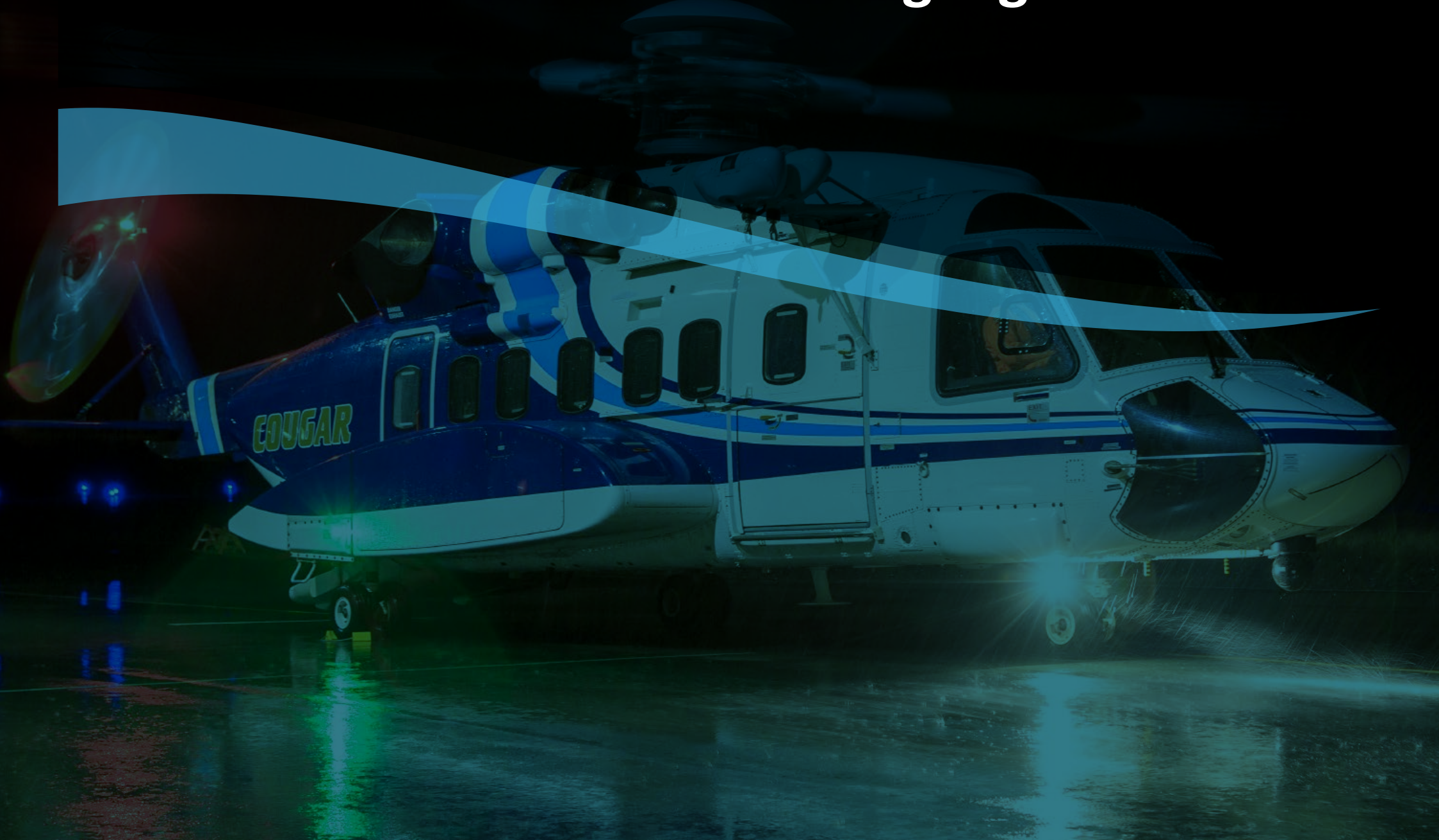
**IOGP Report 690-2, Section 40**, sets out the baseline recency requirements and the process by which a pilot can regain recency where it has lapsed.

### 3.8 Assessments and Training for Command Upgrade

LTCs should be able to assist an operator with running an Operator Command Course in order to upgrade company co-pilots. Operators should maintain documented evidence to support at which stage a pilot has entered the training system. Initial elements of this training may take place in a flight simulator either with an LTC or TRI/TRE. Command Line Training will form a significant part of an Operator Command Course. The final approval for upgrade to Aircraft Commander would be a Command Line Check, carried out by a different LTC from the one who delivered the training.

**IOGP Report 690-2, section 11**, specifies the requirements.

# Section 4 Conduct of Line Training Flights



# Section 4

## Conduct of Line Training Flights

Operators should have carefully-developed Line Training Programmes for their aircrew. Operators should measure the effectiveness of their training programme to ensure it is fulfilling its purpose as efficiently and safely as possible.

### 4.1 Scheduling of Training

During Line Training, the LTC should liaise closely with the scheduling department or flight operations to ensure that flights are scheduled for the avoidance of fatigue, and with consideration to the experience of the trainee pilot. The additional time taken to prepare, brief and debrief the flight should be considered.

Consideration should be given to the weather conditions in relation to conducting Line Training, particularly for new or inexperienced pilots.

Trainee pilots should be assigned a small number of LTCs for their Line Training to assure continuity. However, it is recommended that the 'Line Check' is completed by a different LTC.

### 4.2 Route Changes During Line Training

LTCs must remain vigilant to the changing

operating environment, particularly the weather, and carefully consider any route changes that may be requested or required. The LTC will need to assess the impact of unexpected weather conditions from a training perspective before changing the route. They must ensure the trainee is comfortable and capable of completing any anticipated manoeuvres safely. If the wind direction and obstacle environment means the trainee would have to act as PF during takeoff and landing, they shall fully understand the scenario. If there is any doubt about the trainee's ability to cope, the LTC should not hesitate to reject a change of routing request.

### 4.3 Crewing of Line Training Flights

During initial Line Training and Line Checks, the LTC should act as the aircraft commander of the constituted crew. This is also the case when conducting training or assessment of a co-pilot. For recurrent Line Training, the LTC should form part of the constituted crew. For Line Checks, the LTC can occupy the cockpit jump-seat, where aircraft type allows, so that two candidates can be assessed simultaneously as a crew. Where aircraft type requires the LTC to occupy one of the pilot's seats, prior consideration should be given to which seat the trainee or candidate will occupy if they are to be observed as Pilot

Flying (PF) for the offshore approach.

All pilots should be trained in both PF and Pilot Monitoring (PM) roles. If company policy allows them to operate from either seat, then training and assessment should take place from both seats.

### 4.4 Threat and Error Management (TEM)

TEM should form a routine part of all pre-flight planning and should be actively used during all flight operations. LTCs should use TEM to identify and, where necessary, mitigate any 'Anticipated Threats' that could impact the safe conduct of a Line Training flight. Some threats may relate specifically to the conduct of training or to the inexperience of the trainee in some circumstances. There will be many situations that a new trainee hasn't yet seen or experienced. For example, the forecast weather should be suitable for an inexperienced trainee and where necessary particular focus and briefing of hazardous conditions, such as helideck turbulence, must be given.

Unanticipated Threats, such as a change of routing during the flight or unexpected poor weather at destination, will have to be carefully and logically managed. During Line Training it is important that the trainee

isn't rushed or put under unreasonable pressure, which could lead to forced errors or mistakes. Therefore, extra time may be required to explain any changes to a flight and for the LTC to safely monitor the trainee and command the flight effectively. This is especially true during offshore night flying. **Refer to Annex A, CRM skills standards.**

### 4.5 Briefing and Debriefing

Comprehensive pre-flight briefing and post-flight debriefing are essential components of Line Training and assessments. It is appropriate that the LTC delivers a specific 'training briefing' before the flight. This should be approximately 10 minutes in addition to the normal pre-flight planning and briefing. The following points should be covered:

#### a. Purpose of the training or Line Check:

- i. To deliver necessary training and to confirm that proficiency has been maintained to operate as PF and PM (including being in command where appropriate) during offshore commercial operations.
- ii. An opportunity to develop knowledge and understanding beyond the minimum standard, through two-way discussions with the LTC.

- iii. An opportunity to provide feedback to the Company, particularly on effectiveness of SOPs.

**b. Role of the LTC:**

- i. If part of the flight crew, the LTC will behave and support the other pilot as they normally would for a routine flight. If the other pilot is a qualified commander, then the candidate shall take the role of commander for the flight.
- ii. If observing the crew from a jump-seat, the LTC will have a passive role, but shall be available to assist with management of the cabin and passengers in the event of an abnormal or emergency situation.

**c. Management of the flight:**

For Line Checks there should be no difference in the way in which the flight is managed from routine flights, except the candidate(s) shall be asked to complete IFR approaches onshore and offshore, even though VMC may prevail.

**d. Route, area and specialist role competency:**

After post flight duties have been completed, the LTC may ask some appropriate questions of the candidate to confirm their knowledge and understanding in relation to specifics of operating in the area or conducting any specialist roles.

Adequate time should also be scheduled to allow for an appropriate, detailed debrief following any Line Training exercise.

## 4.6 Assessment Criteria and Performance Standards

Operators should have clearly-defined assessment criteria and performance standards for all areas of their aircrew training system. This will ensure that there is a direct read-across from Type Rating or Instrument Rating checks to Line Training/ Checks. This also ensures that a sufficiently high standard of competence is maintained across a company and between different regional operations.

The performance standards should be applied fairly and robustly so that the integrity and credibility of the training system is maintained. Operators should have a clear, well-defined and understood grading system which can be applied to each area of a Line Training flight or Line Check. LTCs should be able to understand the performance standards and apply the associated grading system. LTCs should be able to provide debriefing to a trainee or candidate and, where required, make recommendations for additional training or award a 'pass' or 'recommendation for command training' or similar.

Operators should develop an assessment process, for all aspects of Line Training, based on the CRM Skills and KSA Standard shown at Annex A.

## 4.7 Training Records

Operators should maintain clear, formal records for each trainee or candidate within the operator's training department. These documents should be kept securely and held 'in confidence'. These should be made

available to any training staff who have a requirement to access the documents as well as to the trainee on request. This documentation should record any Line Training that a trainee has received, along with any recommendations or restrictions from the LTCs. **IOGP Report 690-2, Section 39**, sets out the general expectations in the area.

Company training departments should hold regular meetings involving all company TRIs and LTCs to discuss and assess the progress of the company pilots. This process should identify pilots who are eligible and suitable for further progression such as command training or other specialist roles.

# Section 5 Night Offshore Helideck Training

The background of the slide is a dark, atmospheric photograph of an offshore oil rig at night. The rig's complex steel structure is silhouetted against a dark sky with scattered clouds. Some lights are visible on the rig, and another smaller rig is visible in the distance on the horizon. A prominent, wide, light blue wavy graphic element curves across the middle of the image, partially overlapping the rig and the sky.



# Section 5

## Night Offshore Helideck Training

This section aims to provide more detail specifically relating to Offshore Night Helideck Training. Operators are advised to give particular attention to the details and requirements of preparing their aircrew for night flying operations if this is a contractual requirement or routine activity.

### 5.1 Initial Simulator (FSTD) Training

Operators should use an FSTD to prepare pilots for the challenges of operating to and from offshore helidecks at night. This module of training could be added to the end of a Type Rating course where FSTD are used or added as part of an Operator Proficiency Check (OPC) or Licence Proficiency Check (LPC) or it could be part of a standalone FSTD training package. Offshore night flying operations, including helideck approaches and departures, should also be incorporated into LOFT exercises.

There is significant training value in arranging additional training time in an FSTD to allow demonstration and practice of night helideck operating procedures. Training in a high fidelity, but safe environment is a proven method for instilling the techniques and specific procedures that are essential for safe night operations offshore. The simulator also provides an ideal training opportunity to practice the important skill

of flying an offshore missed approach. It is important that both the Pilot Flying (PF) and Pilot Monitoring (PM) roles are trained and practiced allowing operational flexibility.

### 5.2 IOGP Report 690-2 Requirements

Operators should ensure that the TRIs/ Check Airmen/ Training Pilots and LTCs who are involved in delivering offshore helideck training at night have adequate experience with this type of flying and, are themselves, satisfactorily current and recent.

**IOGP Report 690-2, Section 11, Table 11-1**, sets out the training requirements for initial training flights to offshore helidecks. Currently this requires a minimum of 5 day and, where required, 5 night approaches, landings and takeoffs with this training provided by a TRI/TRE.

Where the appropriate National Aviation Authority (NAA) allows, the initial day and night deck landing training can be trained by an LTC. The operator must have a thorough process to train offshore helideck landings and departures, supported by a robust system for training and managing LTCs, as per this document. In such circumstances the LTC should be specifically trained, assessed and authorised for this role by the operator, and they should have a minimum of 12 month's experience as an LTC. Training for

the LTC should include specific intervention skills.

Once this initial training and checking has been satisfactorily completed a period of Line Training at night should be conducted to build experience through a supervised process. This should be part of a clearly-defined competency pathway.

### 5.3 Night Line Training

The IOGP 690-2 requirements form an essential minimum baseline for night operational training both for the unfamiliar pilot or experienced pilot in relation to offshore night recency.

It is essential that prior to any offshore night Line Flying, the LTC and trainee have adequate information relating to the offshore installation that they are planning to fly to. If it is a moveable structure or vessel such as a survey ship or FPSO, then an accurate and updated location and orientation report must be obtained prior to, and during, the flight. The weather and wind conditions are an essential part of this planning process, so that an accurate assessment can be made of which 'pilot seat' the offshore approaches should be made from. Cross-cockpit approaches (i.e. flown by the pilot with the worst visual references of the helideck) should not be flown. Any

relevant helideck limitations or remarks should be fully briefed and understood prior to departure.

Consideration should be given to the weather conditions in relation to conducting night Line Training, particularly for new or inexperienced pilots. It is also recommended that if IFR operations are to be conducted offshore at night, that airborne radar approaches (also known as ORA/ARA/OSAP) are practiced in VMC before being flown in IMC at a later stage. All approaches, offshore and onshore, should be flown as Stabilised Approaches in accordance with the latest version of [HeliOffshore Flight Path Management RP](#).

### 5.4 Availability of Offshore Installations for Helideck Training.

As identified in the IOGP/ HeliOffshore Industry Action Plan (IAP), the availability of offshore helidecks is an essential component of an effective offshore training programme, for both novice pilots and experienced pilots requiring recency training flights. The unavailability of offshore helidecks for helicopter training puts strain on the operator's training department, by causing interruptions or delays to training and possibly puts pressure on an operator to train at an unsuitable time or to 'compress' training into a short period.

Operators and their customers should have good working relationships with several manned offshore helidecks so that day and night helideck training flights can be planned and conducted at mutually agreeable times. Where possible, familiarisation flights should be made during daytime before using a helideck for night training. It is naturally advantageous for the helideck operator (energy company) to facilitate helideck training so that their helicopter operator has sufficient appropriately qualified crews to operate the contracted flights.

### 5.5 Contractual Requirement

There should be a contractual obligation to facilitate helideck training, by day and night. This should form part of a responsible contracting model. This requirement is referenced in **IOGP 69X-0, Section 9C.6**. In addition the IOGP/ HeliOffshore IAP provides the following in its conclusion:

**“It is critical that where contracts call for night support for routine air transportation, or for medevac standby, offshore asset duty holders are obliged to provide helideck access to helicopter operators to allow them to complete Night Deck Landing Practice exercises on a contractually agreed basis.”**

# Section 6 Summary



# Section 6 Summary

Line Training is a distinct and essential part of ensuring aircrew are thoroughly trained and ready to perform their specific roles in a particular environment.

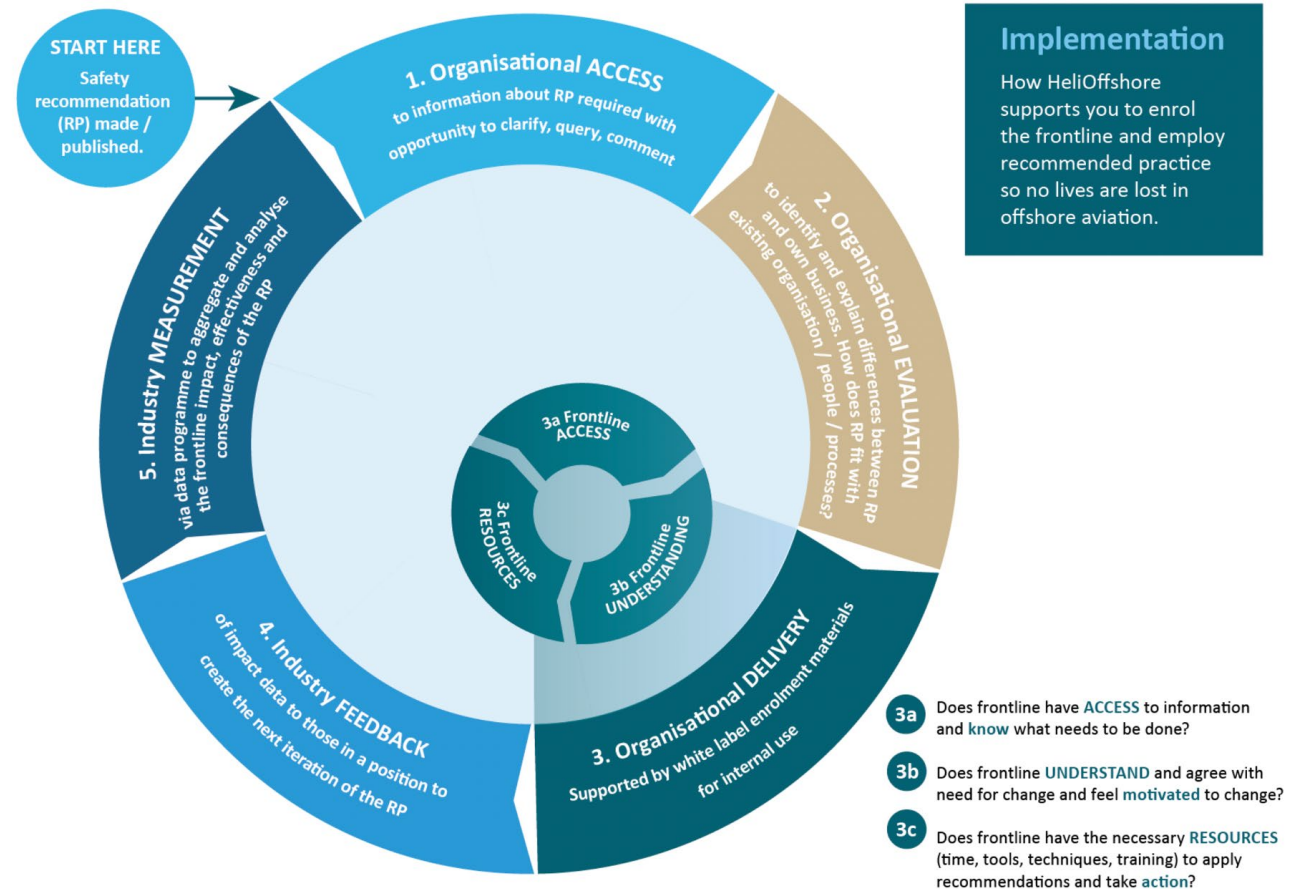
This Recommended Practice document covers the key areas of focus for developing a professional Line Training System with suitably qualified LTCs providing high quality training for their company aircrew. The implementation of these recommendations is essential for building and assuring a safe and effective offshore pilot training system.

This recommended practice document deliberately encourages alignment with the requirements stated in **IOGP Report 690-2**, even if this is not yet a contractual requirement for all operators. Operators are strongly encouraged to apply the recommendations within this document in the most appropriate way for their company, aircraft types, role and region.

## 6.1 Implementation of Recommendations

Implementation of these recommendations is an important process for operators. In order to guide operator members of HeliOffshore through the implementation process, an **'Implementation Toolkit'** has been developed. This bespoke software

enables a logical process of gap analysis between company procedures and the full list of recommendations contained in this RP. The toolkit can be found on the HeliOffshore Space, available for Operator Members [here](#).



## 6.2 Table of Key Recommendations

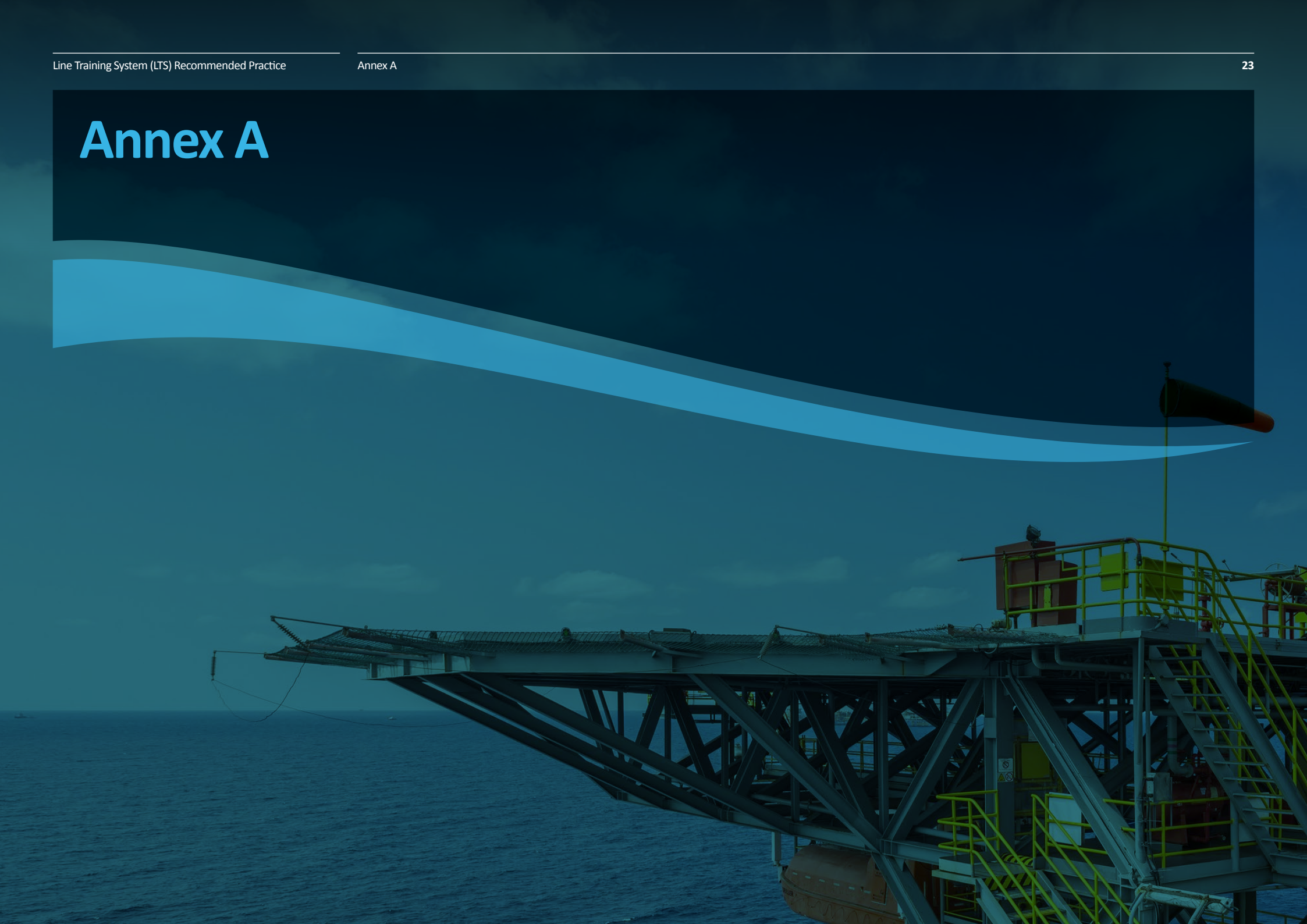
The table below is a **summary** of the recommendations made within this document:

Recommendation	RP Reference	Recommendation	RP Reference
Line Training Captains should be selected based on their experience, credibility and aptitude to deliver the role.	2.1	LTCs should be able to deliver ground training that relates to day-to-day flight operations for their organisation, covering classroom and practical training.	3.1
As a minimum, potential LTCs should be a current offshore captain with experience as stated in R690-2, section 11, table 11-1.	2.1	Ab-initio trainees should undertake a series of simulator flights prior to operating to an actual offshore helideck.	3.2
Prior to commencing LTC training, the pilot should fulfil the recency requirements as stated in R690-2 section 40, and this recency should be maintained at all times whilst flying in a training capacity.	2.2	Initial day and night deck landing training can be conducted by an LTC, where the appropriate National Aviation Authority (NAA) allows. In this case, operators must have a thorough process to train offshore helideck landings and departures, supported by a robust system for the training and management of LTCs. This training should be conducted by TRI/TRES if the NAA does not allow LTCs to conduct this training.	3.2
Additional night recency requirements should be fulfilled if night flying is to be conducted.	2.2	LTCs should supervise a number of 'Line Flights' for trainees once initial helideck training has been completed.	3.3
Operators should have a defined set of competencies that an LTC candidate can demonstrate prior to LTC selection. Examples of these are listed in section 2.4.	2.4	For an experienced pilot new to the company or region, Line Training should be conducted to cover specific knowledge or procedures applicable to the operator and region.	3.4
Operators should develop a clear and thorough training programme in order to prepare and qualify their company LTCs.	2.5	Training to moving decks or vessels should be conducted by an LTC who has previous experience and has knowledge of operating to moving helidecks.	3.5
LTCs should be provided with specific CRM training for Technical and Non-Technical skills required.	2.6	LTCs should be tasked with conducting regular operator recurrent Line Checks and Recency Training.	3.6
Operators should provide a clear syllabus for LTC training and ensure that the training is properly recorded.	2.7	LTCs should be involved in running an Operator Command Course in order to upgrade company co-pilots.	3.8
Operators should have a clearly defined set of responsibilities for the LTC on completion of training. An example list of responsibilities is provided at 2.8.	2.8	Operators should ensure that they have carefully-developed Line Training Programmes for their aircrew and should measure the effectiveness of their programmes.	4
Operators should schedule regular flight training standardisation meetings that LTCs are able to attend.	2.9		
LTCs should be assessed at least annually, as a minimum, to ensure alignment with the Operator's standards and SOPs.	2.9		

Recommendation	RP Reference
During Line Training, trainees should be assigned a small number of LTCs to ensure continuity, with a line check to be conducted by a different LTC.	4.1
LTCs should carefully consider any route changes that may be requested or required, due to any changes in the operating environment.	4.2
Operators should have a policy on the crewing of flights dependent on the scenario and aircraft type.	4.3
All pilots should be trained in both PF and PM roles, with training and assessments taking place in both seats if company procedures allow flight operations from both seats.	4.3
LTCs should use TEM to identify and mitigate any 'anticipated threats' that could impact the safe operation of a Line Training flight.	4.4
Operators should have a policy on LTCs delivering a specific 'Training Briefing' before each flight in addition to normal pre-flight planning and briefing.	4.5
Operators should allow adequate time to be scheduled for an appropriate, detailed debrief following any Line Training exercise.	4.5
Operators should have defined topics that should be covered by LTC-delivered training briefings.	4.5
Operators should ensure that they have clearly defined assessment criteria and performance standards for all areas of their aircrew training system.	4.6
LTCs should be able to understand the performance standards and apply the associated grading system.	4.6
Operators should develop an assessment process for all aspects of Line Training, based on CRM Skills and KSA Standard shown in Annex A.	4.6

Recommendation	RP Reference
Operators should ensure that clear, formal training records are maintained for each trainee/candidate, which should be kept securely and held in confidence.	4.7
Operators should use an FSTD for initial night helideck training.	5.1
Offshore night flying operations should be incorporated into LOFT exercises.	5.1
Operators should ensure that any TRI, Check Airman, Training Pilot or LTC delivering night helideck training have adequate experience with this type of flying and, are themselves, satisfactorily current and recent.	5.2
Operators should ensure that prior to any offshore night flying training, the crew has all relevant information relating to the specific offshore installation they are flying to.	5.3
Consideration should be given to the weather conditions in relation to conducting night Line Training, particularly for new or inexperienced pilots.	5.3
Operators should have a policy on practicing airborne radar approaches in VMC during the daytime if IFR flights are to be conducted at night.	5.3
Operators should fly all approaches, onshore and offshore, in accordance with the latest <a href="#">HeliOffshore Flight Path Management RP</a> .	5.3
Operators and their customers should ensure they have good working relationships with several manned offshore platforms so day and night helideck training flights can be conducted.	5.4
Operators should have a contractual agreement that allows them to use helidecks for pilot training.	5.5

# Annex A



# Annex A

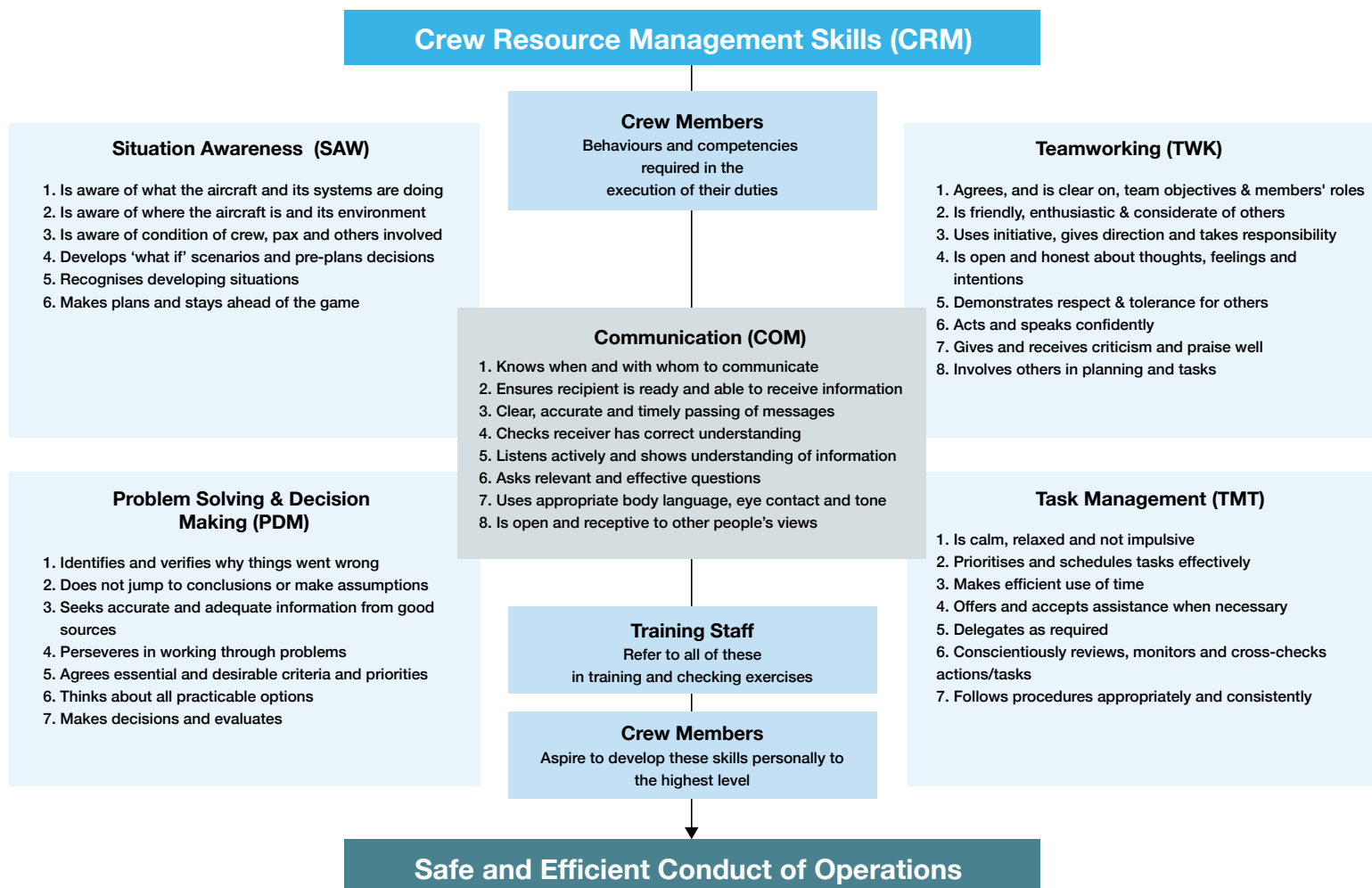
## Example CRM Skills Standards

The CRM Skills and KSA standards outlined here are based on the pilot competency sets (with associated observable behaviours) that were originally developed for Evidence-based Training (EBT) programmes, supported by ICAO and promoted by IATA.

Operators are encouraged to familiarise instructors, examiners and crews with these competencies and incorporate their analysis and assessment of performance into all aspects of training and daily operations.

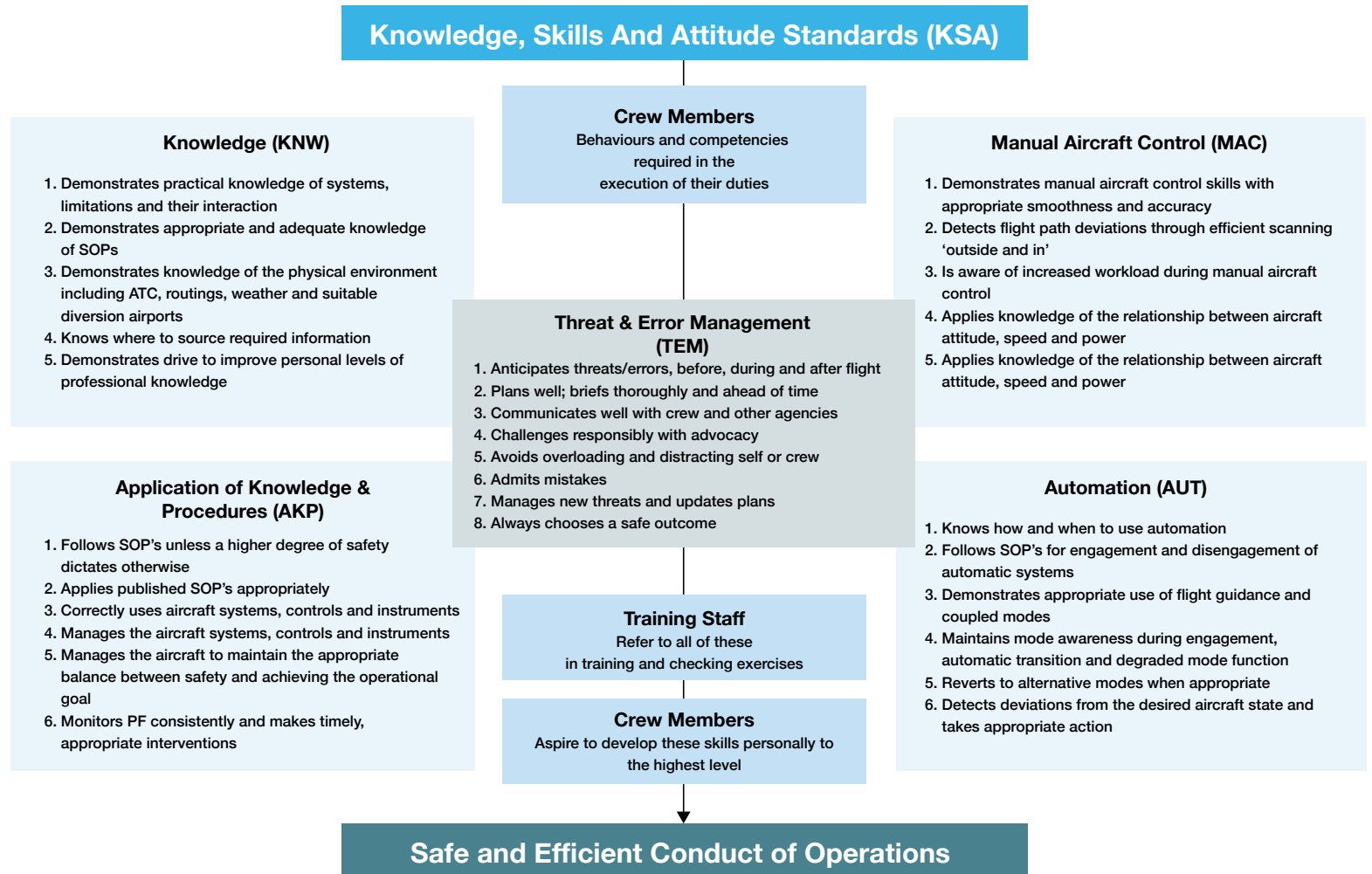
Instructors and examiners can refer to these competencies in facilitated debriefings after training and checking exercises. They can also be used to assess crew performance as part of established processes within an approved training organisation (ATO).

Crews can also be encouraged to analyse their own individual and collective performance based on these competencies after training and checking exercises. In addition, the competencies can be used as the basis of a post-flight debriefing exercise; essentially providing a framework for consideration of what went well, what didn't go well and what might be improved on future flights.

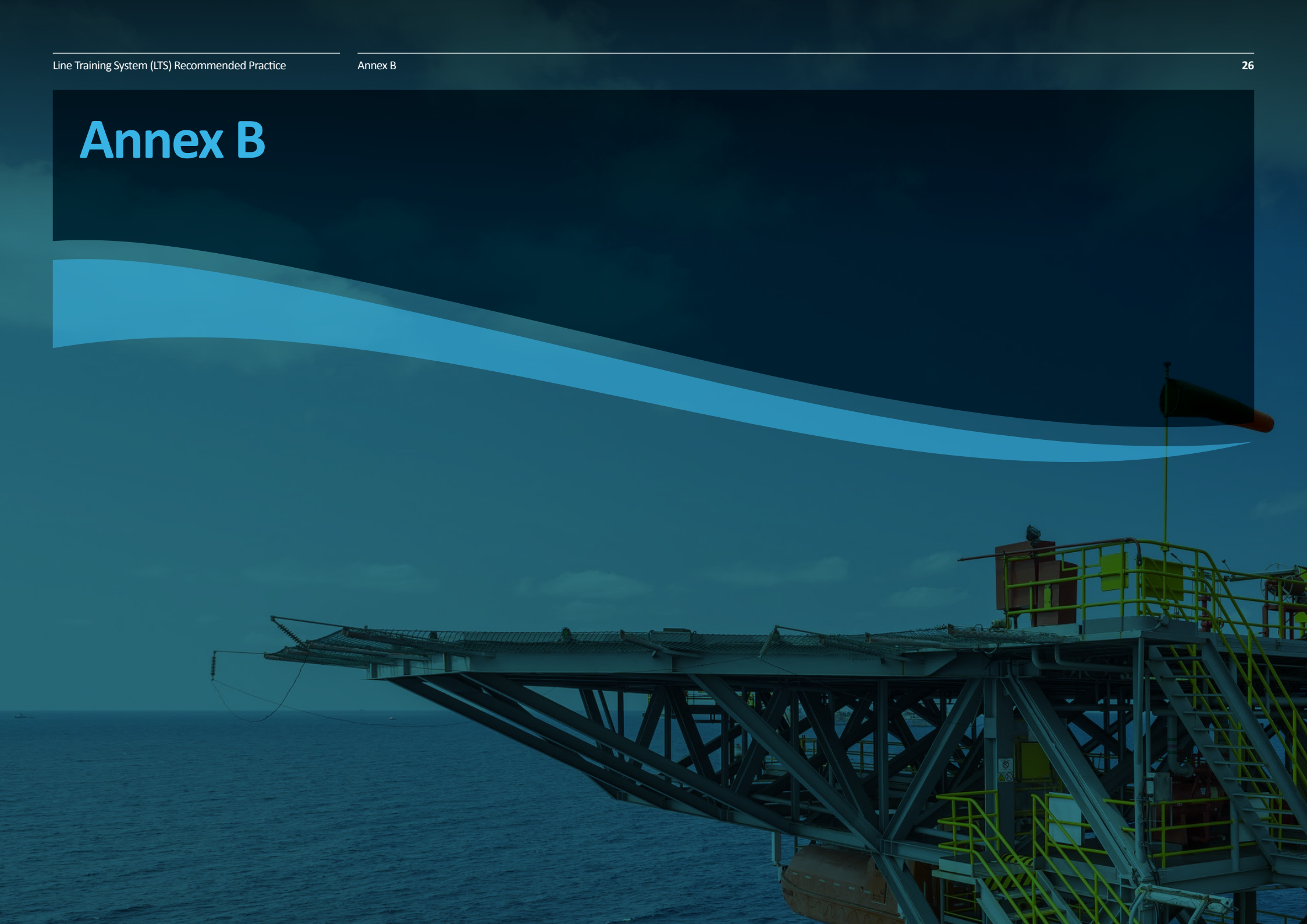




## Example KSA Standards



# Annex B



# Annex B

## Example of LTC Training Record

LTC Training Course Record							
Name				Licence No.			
Location				A/C Type			
Prerequisite Training:		Teaching and learning course CRM skills for trainers course					
Planned				Completed			
		Ground	Sim	Flight	Complete	Instructor	Date
1	LTC Theory	8 hrs					
2	Simulator- CRM skills		2 hrs				
3	Simulator- Intervention		2 hrs				
4	Line flight scenario 1			Variable			
5	Line flight scenario 2			Variable			
6	Line flight scenario 3			Variable			
7	Line flight scenario 4			Variable			
8	Night deck landings			Variable			
9	LTC recommendation			Variable			
10	LTC assessment flight			Variable			
		<b>Total Hours</b>					
<b>Date</b>	<b>Trainee Signature</b>	<b>Instructor Name</b>	<b>Instructor Signature</b>	<b>Valid to</b>			
<b>Head of Training comments</b>							

## Senior training managers are encouraged to participate in our online, secure collaboration tool: HeliOffshore Space.

Operator member representatives are encouraged to complete the gap analysis within the Implementation Toolkit, hosted in the HeliOffshore Space.

You can find out more about HeliOffshore, our safety plan, and the workstreams at [www.helioffshore.org](http://www.helioffshore.org)

This guidance will be updated regularly. If you have comments or suggested amendments, please email: [info@helioffshore.org](mailto:info@helioffshore.org)



**HeliOffshore**  
*Safety Through Collaboration*