

## **HELIDECK LIMITATION LIST (HLL)**

The criteria for the design and placement of offshore helidecks have been set to define safe operating boundaries for helicopters in the presence of known environmental hazards. Where these criteria cannot be met, a limitation or restriction is placed in the HLL. These entries are usually specific to particular combinations of wind speed and direction, either restrict helicopter mass (payload), operations suspension in certain conditions or as information.


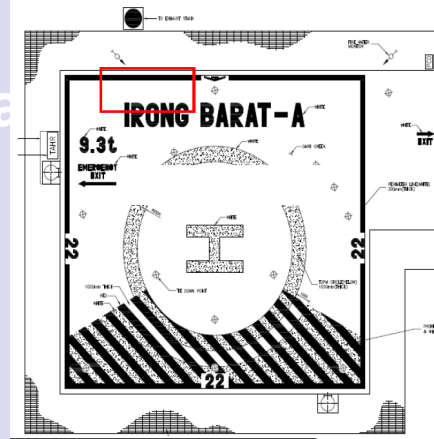
The HLL is designed for the benefit of the offshore helicopter operators and shall ensure that landings on offshore helidecks are properly controlled when adverse environmental effects or non-compliances are present. On poorly designed helidecks, severe operational restrictions may result, leading to significant payload penalties for an installation operator or vessel owner. Well designed and 'helicopter friendly' platform topsides and helidecks shall result in efficient and cost-effective operations for the installation operator.


HLL shall be documented as part of HOM. It shall contain helideck name, single issuance date or the subsequent review date; statement of the non-compliances and the relevant mitigations, limitations or restrictions. The initial issuance and revisions shall be submitted to CAAM for approval.


Safety Risk Assessment (SRA) shall be carried out for the determination of hazards and the associated mitigations. The mitigations shall be in place, prior to insertion into the HLL, or else it shall be noted otherwise. For helideck without assigned or specific HSP operations, the SRA shall be conducted by the helideck operator and assisted by the helideck inspectors. Any weight penalty or flight restriction shall be in general until reviewed by the HSP operating at the helideck.

HLL is the responsibility of Aerodrome Manager. It has to be issued, reviewed and distributed to HSP whenever there was change to the content.

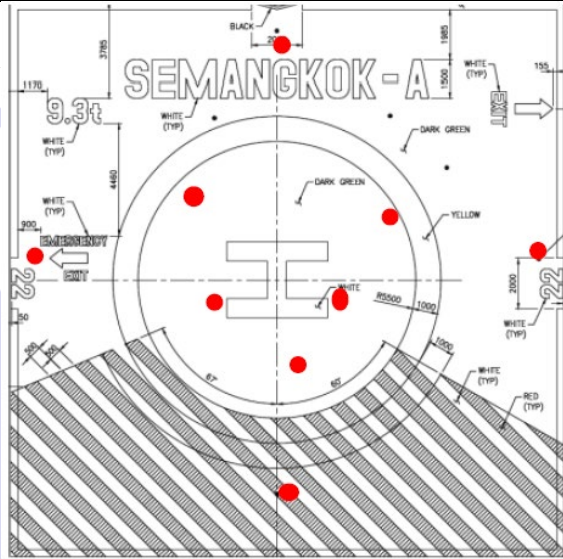

The following is the guideline for the documentation of the HLL. Specified mitigation or restriction shall be as established in the SRA:

NO	NON-COMPLIANCES (HLL)	MITIGATIONS	DOCUMENTATION
1	210° Obstacle Free Sector Infringement	<p>Relocation or height reduction;</p> <p>If unable,</p> <p>1.The infringement to be painted with obstruction marking. Small obstruction shall be painted in red.</p> <p>2.PLHS to be drawn as appropriate.</p> <p>3.The infringement shall be illuminated for night operations.</p> <p>4.SRA required and HLL issuance.</p>	<p>1.Photo of the infringement.</p>  <p>2. Photo of the helideck or drawing with the infringement marked.</p> 
2	150° Limited Obstacle Sector Infringement	<p>Relocation or height reduction;</p> <p>If unable,</p> <p>1.The infringement to be painted with obstruction marking. Small obstruction shall be painted in red.</p> <p>2.TD/PM to be offset</p> <p>3.PLHS to be drawn as appropriate.</p>	

		<p>4.The infringement shall be illuminated for night operations.</p> <p>5.SRA required and HLL issuance.</p>	<p>3.Statement of the infringement, to include height, position, distance, etc.</p> <p>4. Limitation and/or restriction.</p> <p>5. For helideck with existing HSP contract, the MTOLW limitation is to be inserted (if any)</p>
3	180° Falling Gradient Infringement	<p>Relocation,</p> <p>If unable,</p> <p>1. If overfly could not be avoided, restriction on MTOLW shall be imposed to ensure sufficient clearance of the tail rotors in the event of single engine failure during take- off.</p> <p>2. SRA required and HLL issuance</p>	<p>1.Photo of the infringement.</p>  <p>2.Photo of the helideck or drawing with the infringement marked.</p>

			
			<p>3.Statement of the infringement, to include length or size, position, distance, etc.</p> <p>4.Limitation and/or restriction.</p> <p>5.For helideck with existing HSP contract, the MTOLW limitation is to be inserted (if any)</p>
4	Safe Landing Area Infringement	<p>Relocation or height reduction:</p> <p>If unable,</p> <p>1.The obstruction shall be painted in contrast colour.</p> <p>2.SRA required and HLL issuance</p>	<p>1.Photos of the infringement.</p> <p>2.Photo of the helideck or drawing with the infringement marked.</p>



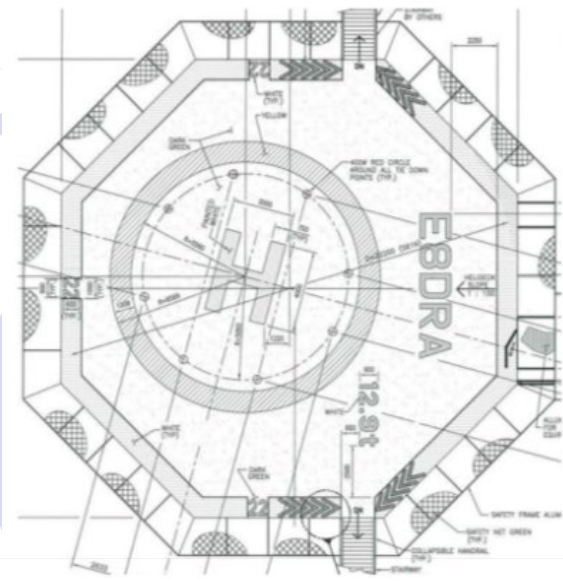
			
6	<b>Perimeter Netting Non – Compliance</b> <b>Note:</b> <ul style="list-style-type: none"> <li>i. Slope Less Than 10°</li> <li>ii. Not Flush with The Helideck Surface</li> </ul>	<ul style="list-style-type: none"> <li>1. Helideck crew to be position between the perimeter netting and passengers’ movement.</li> <li>2. Embarkation/Disembarkation through door facing the helideck access.</li> <li>3. SRA required and HLL issuance</li> </ul>	<ul style="list-style-type: none"> <li>1. Inclusion of the mitigations</li> </ul> 
7	<b>Single Access</b>	<ul style="list-style-type: none"> <li>1. PHLS to be drawn</li> <li>2. SRA required and HLL issuance</li> </ul>	<ul style="list-style-type: none"> <li>1. Photo of helideck or helideck drawing showing the position of single access and PLHS.</li> </ul>



			<p>2. Direction of approach/take-off restriction.</p> <p>3. For helideck with existing HSP contract, the MTOLW limitation is to be inserted (if any)</p>
9	Crosswind Operations	<p>1. Wind limitation and/or restriction</p> <p>2. MTOLW limitation</p> <p>3. SRA required and HLL issuance</p>	<p>1. The drawing showing the helideck, obstructions and approach/take off path.</p> <p>2. Wind limitation and/or restriction.</p> <p>3. For helideck with existing HSP contract, the MTOLW limitation is to be inserted (if any)</p>
10	Chevron Swung	<p>1. Re-marking of the Chevron</p> <p>2. Re-alignment of the H</p> <p>3. HLL issuance. SRA not required</p>	<p>1. Photo or drawing of helideck with new Chevron and H marking</p>

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11	<b>Day VMC Operations Only</b> <b>Note: Helideck Lighting (TLOF) System Not Available</b>	<b>1. No night operations, or day when visibility below 5 km.</b> <b>2. HLL issuance. SRA not required</b>	<b>1. Statement of DAY VMC only.</b>