

Work Instruction - Operations	<b>HITACHI</b>
<b>MICROLOK FAILURE WORK INSTRUCTION</b>	 <b>Hitachi Rail Honolulu JV</b>

<b>Work description:</b> This work instruction describes the handling of Microlok II failures.		
<b>Scope:</b> This work instruction is written specifically for the OCC operating staff of Honolulu Rail Transit.		
<b>References:</b> HNL- 09547 Manual Train Operation Work Instruction, HNL-09421 Contingency Plan (Alternate Service Plan) Work Instruction, HNL-09329 Train Rescue by Means of Another Train Work Instruction		
<b>PPE and precautions</b>	<b>Competencies or qualifications</b>	<b>Licenses or permits required</b>
Nil	OCC Supervisor, Train Controller, Information Controller, Engineering & Fault Controller, Train Operator, Traffic Controller	Nil
<b>Tools and equipment required</b>		
Nil		

<b>1. Failure of a single Microlok II unit</b>	
<i>Train Controller</i>	<p>You must:</p> <ol style="list-style-type: none"> <li>1) Inform the Engineering &amp; Fault Controller of the failure</li> <li>2) Inform the OCC Supervisor of the failure</li> </ol>
<i>Engineering &amp; Fault Controller</i>	<p>You must:</p> <ol style="list-style-type: none"> <li>1) Inform the maintainer to arrange maintenance intervention</li> <li>2) Keep an eye on the Microlok II repair progress</li> <li>3) Inform the OCC Supervisor, and the Train Controller/ Yard Controller about the latest repair progress</li> </ol>
<i>OCC Supervisor</i>	<p>You must:</p> <ol style="list-style-type: none"> <li>1) Follow the fault rectifying progress closely</li> </ol>



### **Warning**

*The Train Controller must make sure a stranded train will not suddenly move as a result of the Microlok II recovering from a reboot, while the Train Operator is accessing the train.*

<b>2. Failure of all Microlok II units</b>	
<i>Train Controller</i>	<p>You must:</p> <ol style="list-style-type: none"> <li>1) Inform the Engineering &amp; Fault Controller of the failure</li> <li>2) Inform the OCC Supervisor of the failure</li> <li>3) Stop all trains entering the failed region, and if possible, hold them at stations</li> <li>4) Make sure all trans within the failed region are stopped, and if possible, at stations with doors opened</li> <li>5) Jog down the locations of all trains within the failed region on a whiteboard and seek consent from the OCC Supervisor on the evacuation methods to be used to rescue passengers to stations</li> <li>6) For each train stranded in between stations within the failed region and no Train Operator on board: <ol style="list-style-type: none"> <li>a) Make sure the stopped train will not move suddenly – impose zero speed restriction</li> <li>b) Set a safe path for the Train Operator to reach the failed train</li> <li>c) Arrange a Train Operator to board the stranded train</li> </ol> </li> <li>7) For each train stranded in between stations within the failed region <ol style="list-style-type: none"> <li>a) Instruct the onboard Train Operator to reset the EB</li> <li>b) Authorize the Train Operator to operate the train manually in BYPASS mode to the nearest station platform (following HNL-09547 Manual Train Operation) and detain passengers</li> <li>c) Avoid train movement through any switches, if possible</li> </ol> </li> </ol>

<b>Approved By:</b>	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
<b>Signature:</b>			
<b>Date:</b>			

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	<p>d) If it is not possible to entirely avoid train movement through any switches:</p> <ul style="list-style-type: none"> <li>i) For each switch that the train must go through, instruct the Train Operator to stop the train in front of the switch and visually inspect the switch position to make sure that it is locked and secured in the correct position</li> <li>ii) If the switch is found to be in the incorrect position, request through Engineering &amp; Fault Controller to arrange the maintainer on site to use clamp, locks and wedges where applicable, to manually secure the switch into the correct position before authorizing the Train Operator to drive through the switch</li> </ul> <p>8) If an emptied train is already at the station berth, consider using it as the rescue train for the stranded train following HNL- 09329 Train Rescue by Means of Another Train</p> <p>9) If an emptied train is not needed as a rescue train, then move the emptied train outside of the platform to make room for berthing of other trains</p> <p>10) On instructions from the OCC Supervisor, implement alternative services on the unaffected areas following HNL- 09421 Contingency Plan (Alternate Service Plan) Work Instruction</p> <p>11) Monitor the passenger detrainments at the stations</p> <p>12) Upon being notified by the Engineering &amp; Fault Controller that the Microlok II units have recovered:</p> <ul style="list-style-type: none"> <li>a) Arrange for the resumption of normal train service <ul style="list-style-type: none"> <li>i) Make sure previously coupled trains are now uncoupled by the maintainer</li> <li>ii) Make sure all trains are in AUTO mode by Train Ambassadors</li> <li>iii) Make sure all previously locked/clamped switches are released by the maintainer</li> <li>iv) Release one train at a time, to start and resume normal train service</li> </ul> </li> </ul> <p>13) Log the event in the Train Controller Log</p>
<i>Engineering &amp; Fault Controller</i>	<p>You must:</p> <ul style="list-style-type: none"> <li>1) Inform the maintainer to arrange immediate maintenance intervention</li> <li>2) Keep an eye on the Microlok II repair progress</li> <li>3) Inform the OCC Supervisor, the Train Controller/ Yard Controller about the latest repair progress</li> </ul>
<i>OCC Supervisor</i>	<p>You must:</p> <ul style="list-style-type: none"> <li>1) Instruct the Information Controller to make public announcements to the affected trains; informing passengers in the trains that stranded between stations to wait for the arrival of the Train Operator</li> <li>2) Assess the location of those trains stranded in between stations, confirm on the evacuation method with and instruct the Train Controller to rescue train passengers to the nearest stations.</li> <li>3) Instruct the Information Controller to make public broadcast announcements on service delays to trains and stations</li> <li>4) Instruct the (other) Train Controller to implement alternative services following HNL-09421 Contingency Plan (Alternate Service Plan) Work Instruction on the unaffected areas of the Mainline to continue limited train service</li> <li>5) Follow the fault rectifying progress closely</li> <li>6) Keep the OCC Manager updated on the Microlok II recovery progress</li> <li>7) If the Microlok II units recover, instruct the Information Controller to make public broadcast announcements on the resumption of normal train service, to trains and stations</li> <li>8) Log the event in the Duty Manager Daily Report</li> </ul>
<i>Information Controller</i>	<p>You must:</p> <ul style="list-style-type: none"> <li>1) On instructions from the OCC Supervisor: <ul style="list-style-type: none"> <li>a) Make public announcements to the affected trains; informing passengers on the failed trains in the trains that stranded between stations to wait for the arrival of the Train Operator</li> <li>b) Make public broadcast announcements on service delays to trains and stations</li> <li>c) Make regular public announcements to update trains and stations affected</li> <li>d) Broadcast to all stations (within the failed region) to arrange a Station Operator to manually open/close the PSDS in unison with the train doors for each train at berth</li> <li>e) Make public broadcast announcements to trains and stations on the resumption of normal train service</li> </ul> </li> <li>2) Log the event in the Information Controller Log</li> </ul>

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**Warning**

*When directing train staff in operating a train manually under no signaling protection, they must follow strict verbal communication rules in accordance to "Authorization To Proceed" from the HNL-- 09547 Manual Train Operation.*



**Warning**

*Each Train Controller is dedicated to only one train at a time when directing manual train movement especially in the absence of signaling protection.*

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