


Work Instruction - Operations	
AF-902 TRACK CIRCUIT FAILURE	

Work description: This work instruction describes the handling of AF-902 Track Circuit failures.		
Scope: This work instruction is written specifically for the OCC operating staff of Honolulu Rail Transit.		
References: HNL-09547 Manual Train Operation, HNL-09535 Sweep Run, HNL-09421 Contingency Plan, HNL-08663 Infrastructure Access Procedure		
PPE and precautions	Competencies or qualifications	Licenses or permits required
Nil	OCC Supervisor, Train Controller, Information Controller, Engineering and Fault Controller, Train Attendant	Nil
Tools and equipment required		
Nil		

1. Failure of the standby unit - off-line failure alarm received	
<i>Train Controller</i>	You must: <ul style="list-style-type: none"> inform the Engineering and Fault Controller of the failure inform the OCC Supervisor of the failure arrange a safe path for the maintainer to reach the failed track circuit for inspection and back if required log the event in the Train Controller Log
<i>Engineering and Fault Controller</i>	You must: <ul style="list-style-type: none"> inform the maintainer to arrange maintenance intervention coordinate with the Train Controller to allow the maintainer to access the track for inspection if required keep track of the inspection/repair progress inform the OCC Supervisor and the Train Controller about the latest inspection/repair progress
<i>OCC Supervisor</i>	You must: <ul style="list-style-type: none"> follow the inspection/fault rectifying progress closely

2. Failure of the active unit - on-line failure alarm received

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<i>Train Controller</i>	You must: <ul style="list-style-type: none"> • inform the Engineering and Fault Controller of the failure • inform the OCC Supervisor of the failure • arrange a safe path for the maintainer to reach the failed track circuit for inspection and back if required • if the failover is successful but the train is stranded nearby a switch, arrange a safe path and send a Train Attendant on board the train to operate the train manually in BYPASS mode and move it out of the switch area. The Train Attendant shall put the train back to AUTO at the next station berth • if the failover is successful but a sequential track occupancy error occurs, arrange a sweep train and conduct a sweep run through the track circuit in accordance to HNL-09535 Sweep Run • log the event in the Train Controller Log
<i>Engineering and Fault Controller</i>	You must: <ul style="list-style-type: none"> • inform the maintainer to arrange maintenance intervention • coordinate with the Train Controller to allow the maintainer to access the track for inspection and back if required • keep track of the inspection/repair progress • inform the OCC Supervisor and the Train Controller about the latest inspection/repair progress
<i>OCC Supervisor</i>	You must: <ul style="list-style-type: none"> • follow the inspection/fault rectifying progress closely
<i>Train Attendant</i>	You must: <ul style="list-style-type: none"> • follow the safe path established by the Train Controller to access the train • operate the train in accordance to the instructions from the Train Controller

3. Failure of the active and standby units - on-line and off-line failure alarms received

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Train Controller

You must:

- inform the Engineering and Fault Controller of the failure immediately
- inform the OCC Supervisor of the total failure of the AF-902 units
- arrange a safe path for the maintainer to reach the failed track circuit for inspection if required
- arrange a safe path for the maintainer to return to the station if required
- If the failed AF-902 is a platform track circuit, ensure no trains (even in BYPASS mode) can pass through the platform track, set the station platform to “out of service”
- on instructions from the OCC Supervisor, implement alternative services in accordance to HNL-09421 Contingency Plan
- on instructions from the OCC Supervisor, perform a class 1 reset in conjunction with the reset by the maintainer at the TCCR
- on instructions from the OCC Supervisor, arrange a sweep train and a Train Attendant to conduct a sweep run in accordance to HNL-09535 Sweep Run
- on instructions from the OCC Supervisor, implement the Temporary Speed Restriction based on the speed and track as recommended by the maintainer
- log the event in the Train Controller Log

Engineering and Fault Controller

You must:

- inform the maintainer to arrange immediate maintenance intervention by sending a trackwork engineer and a signaling technician to the scene to inspect the failed track circuits
- coordinate with the Train Controller to allow the maintainer to access the track for inspection and back
- keep track of the inspection progress
- obtain the recommendation from the maintainer and explain to the OCC Supervisor
- coordinate with the Train Controller for the establishment/surrendering of the Emergency Track Possession in accordance to HNL-08663 Infrastructure Access Procedure if required
- inform the OCC Supervisor and the Train Controller about the latest inspection/repair progress
- log the event in the Engineering and Fault Controller Log

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<i>OCC Supervisor</i>	<p>You must:</p> <ul style="list-style-type: none"> • follow the inspection progress closely • assess the recommendations from the maintainer • if an emergency repair is recommended, instruct the Train Controller to set up an Emergency Track Possession in accordance to HNL-08663 Infrastructure Access Procedure so that the emergency repair work can be proceeded promptly • if resetting the occupancy is recommended, instruct the Train Controller to coordinate the reset with the maintainer • if a sweep train to sweep through the track is required, instruct the Train Controller to arrange a sweep train in accordance to HNL-09535 Sweep Run • if speed restriction is recommended, instruct the Train Controller to impose Temporary Speed Restriction based on the speed values and limits recommended by the maintainer • instruct the Information Controller to make regular public announcements on service delays to trains and stations • follow the fault rectifying progress closely • if the AF-902 units recover: • instruct the Train Controller to restore normal train service after the Emergency Track Possession is surrendered and/or track clear • instruct the Information Controller to make public announcements on resumption of normal train service to trains and stations • log the event in the OCC Supervisor Daily Report
<i>Information Controller</i>	<p>You must:</p> <ul style="list-style-type: none"> • make public broadcast announcements on service delays to trains and stations • make regular public announcements to update trains and stations affected • log the event in the Information Controller Log
<i>Train Attendant</i>	<p>You must:</p> <ul style="list-style-type: none"> • follow the safe path established by the Train Controller to access the train • operate the train by following the instructions from the Train Controller