SIGNAL DIRECTORATE

RESEARCH DESIGNS AND STANDARDS ORGANISATION

MANAK NAGAR, LUCKNOW - 226011

Title: Monthly Maintenance Schedule For HBL STCAS - RIU (Remote Interface Unit)

SN	Issue	Version	Reason of Amendment
1	First	1.0	First Issue

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Firm's Representative with	Railway Representative with
Name Designation and Date	Name Designation and Date

Monthly Maintenance Report — STCAS

Zone	Station	RIU No	RIU Equip No
ER	Dankuni	5676	5666666666

NMS

Sl No	Description	Action Taken / Range	Observation	Remarks	Image
1	Ensure E1 network is always healthy and RIU communication is stable.	Verify communication with STCAS unit.	ghn		
2	Backup the Events & Fault data logs of RIU	Store the log files & Downloaded data from Google drive			
3	Ensure RIU inputs are operated	Check all the RIU field inputs (Signals, Points, Track circuits, etc.,) are operated properly in NMS.			

POWER

Sl No	Description	Action Taken / Range	Observation	Remarks	Image
1	Check the Voltage level at 230 v AC Mains input voltage to both the Battery chargers	220 - 260V AC	ghg		
2	Check the working of the A/C input supply monitoring relay for both the channels of A/C 230 V supply input to RIU	Ensure that the A/C supply monitoring relays are in ON condition when A/C power in available.			
3	Check the Power voltages at Equipment End of Ch-A & Ch-B	The voltage shall be in the range of 22V to 26.5V			
4	Check the mounting arrangementof Input fuse(If Any)	Ensure fuses are fastened securely			
5	Check the output Power Supplyvoltage for both Battery charger bank	21.6 ~ 28.8V DC to be observed for final O/P Voltage for both battery banks.			
6	Check the connections of the diodes in the charging path from both the battery charger output to	Ensure that the diodesare firmly connected to TB1			

Sl No	Description	Action Taken / Range	Observation	Remarks	Image
	batteries.	and TB2 in channel 1 and TB3 and TB4 in channel 2 respectively.			
7	To check that RIU battery back up is available.	Switch OFF MCBs, ensure that RIU works on battery back up.			
8	Clean the Battery Charger and Batteries	To be free from dust			
9	Check the voltages at Equipment end of INTERNAL (RIU) Supply	21.6V to 28.8V DCto be observed			
10	Check the voltages at Equipment end of EXTERNAL	21.6V to 28.8V DCto be observed			
11	Check the all wago fuse indications	Disconnect type fuse wago indications should not glow			

RIU_EQUIP

Sl No	Description	Action Taken / Range	Observation	Remarks	Image
1	Clean the RIU Equipment and Check the communication status of the RIU COM1 & RIU COM2 Modules	To be free from dust,LEDs should be Glow/Blink PWR LED MHLT LED WHLT LED DATA1 LED DATA2 LED CH1/LINK1 LED CH2/LINK2 LED BMS LED CNS LED BHLT LED	ghjjhjhj		
2	Check all Health Status LEDs, i.eRIU – FSC Module	LEDs should be Glow/Blink PWR LED SCS LED WHLT LED ADC LED MHLT LED			
3	Check the Power Supply Module -RIU	LEDs should be Glow/Blink PWR LED CAN LED ISO LED			
4	Visually examine all the cards are inserted properly and tighten the corresponding screws	Ensure the tightness of the cards			
5	Visually examine all PS, communication cables are tighten	Ensure the tightness of the			

Sl No	Description	Action Taken / Range	Observation	Remarks	Image
	all the connections / Terminations / Wagoterminals	cables connectors			
6	Check the RIU Internal and External wirings	1. Check the firmness of wiring Connections from FSC module to Rly. FieldInputs. 2.Check the firmness ofCommunication cable connections between RIU communication to F M S Unit 3.Check the firmness of wiring connections between Battery Charger .			
7	Check the output Supply voltage of 24 Volts charger provided for relay input wiring	The voltage measured should be approx. 21V - 29V DC.			
8	Check voltage from contacts of field input relays at terminals. witred to RIU.	The voltage on the terminals when the relay is picked up should be between 20 to 29V DC.			

COMM

Sl No	Description	Action Taken / Range	Observation	Remarks	Image
1	Check the Quad/OFC	1. Check the firmness of wiring/OFC patch card termination to communication card. 2. Ensure OFC routing is properly done with avoiding 90 degree bending	ytuuyuy		
2	Check the Quad/OFC	1. Check the firmness of wiring/OFC patch card termination to communication card. 2. Ensure OFC routing is properly done with avoiding 90 degree bending			

Sl No	Description	Action Taken / Range	Observation	Remarks	Image
3	Check the communication status	Ensure Tx and Rx LED should Glow/Blink			
4	Visually examine all the communication cables areConnected properly and Communication card had tightened	Ensure the tightness of the patch card and communication module.			

EARTHING

Sl No	Description	Action Taken / Range	Observation	Remarks	Image
1	Clean surface of the Earth electrode/MEEB/SEEB	Surface should be kept clean	uyhj		
2	Measure the Resistance and fillwater in the Earth Pits to keep low soil resistance	Resistance Should b e "d 2 •			
3	Check the SPD devices for any signs of physical degradation	Check the Indication LED status of SPD. (If SPD indicates FAIL then replace it)			