

Page 1 of 3	Effective from 21.01.2021	Document Title: Monthly Maintenance Schedule For HBL STCAS - RIU (Remote Interface Unit)	SIF-0552	Version 1.0
-------------	------------------------------	---	----------	-------------

**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

Prepared by:	Approved by:
G. Pavan Kumar ED/Tele-II  R N Singh ADE/Signal-5  Ashutosh Chaubey SSE/Signal	Shaminder Singh PED/QA/S&T/RDSO

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
ECR	DDUE	434545	4345453

Module	Status
NMS	Open: 2, 3
POWER	Not yet started
RIU_EQUIP	Not yet started
COMM	Not yet started
EARTHING	Not yet started
POWER SUPPLY	Open: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
RIU EQUIPMENT	Open: 2, 3, 4, 5, 6, 7, 8

Completed

Not Completed

## NMS

SI 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.	rtrrt		
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 SUPPLY

SI No	Description	Action Taken / Range	Observation	Remarks	Image
1	Check the Voltage level	220 - 260V AC	rtrrereer		

SI No	Description	Action Taken / Range	Observation	Remarks	Image
	at 230 v AC Mains input voltage to both the Battery chargers				
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 is 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 arrangement of Input fuse (If Any)	Ensure fuses are fastened securely			
5	Check the output Power Supply voltage 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 batteries.	Ensure that the diodes are firmly connected to TB1 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 DC to be observed			
10	Check the voltages at Equipment end of EXTERNAL	21.6V to 28.8V DC to be observed			
11	Check the all wago fuse indications	Disconnect type fuse wago indications should not			

SI No	Description	Action Taken / Range	Observation	Remarks	Image
		glow			

## RIU EQUIPMENT

SI 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	rertreer		
2	Check all Health Status LEDs, i.e RIU – 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 all the connections / Terminations / Wagoterminals	Ensure the tightness of the 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 of Communication cable			

SI No	Description	Action Taken / Range	Observation	Remarks	Image
		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.			