

Monthly Maintenance Report — STCAS

Zone: ER
RIU No: 3444

Station: Barddhaman
Equip No: 3355

| SI No | Location | Description | Action Taken / Range | Observation |
|-------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------|
| 1 | NMS | Ensure E1 network is always healthy and RIU communication is stable. | Verify communication with STCAS unit. | |
| 2 | NMS | Backup the Events & Fault data logs of RIU | Store the log files & Downloaded data from Google drive | |
| 3 | NMS | Ensure RIU inputs are operated | Check all the RIU field inputs (Signals, Points, Track circuits, etc.,) are operated properly in NMS. | |
| 4 | Power Supply (LC Gate/Junction Cabins/ IB Location Box/ IB Hut or IB Room) | Check the Voltage level at 230 v AC Mains input voltage to both the Battery chargers | 220 - 260V AC | |
| 5 | Power Supply (LC Gate/Junction Cabins/ IB Location Box/ IB Hut or IB Room) | 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. | |
| 7 | Power Supply (LC Gate/Junction Cabins/ IB Location Box/ IB Hut or IB Room) | Check the Power voltages at Equipment End of Ch-A & Ch-B | The voltage shall be in the range of 22V to 26.5V | |
| 8 | Power Supply (LC Gate/Junction Cabins/ IB Location Box/ IB Hut or IB Room) | Check the mounting arrangement of Input fuse (If Any) | Ensure fuses are fastened securely | |
| 9 | Power Supply (LC Gate/Junction Cabins/ IB Location Box/ IB Hut or IB Room) | 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. | |
| 10 | Power Supply (LC Gate/Junction Cabins/ IB Location Box/ IB Hut or IB Room) | 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. | |
| 11 | Power Supply (LC Gate/Junction Cabins/ IB Location Box/ IB Hut or IB Room) | To check that RIU battery back up is available. | Switch OFF MCBs, ensure that RIU works on battery back up. | |
| 12 | Power Supply (LC Gate/Junction Cabins/ IB Location Box/ IB Hut or IB Room) | Clean the Battery Charger and Batteries | To be free from dust | |
| 13 | Power Supply (LC Gate/Junction Cabins/ IB Location Box/ IB Hut or IB Room) | Check the voltages at Equipment end of INTERNAL (RIU) Supply | 21.6V to 28.8V DC to be observed | |
| 14 | Power Supply (LC Gate/Junction Cabins/ IB Location Box/ IB Hut or IB Room) | Check the voltages at Equipment end of EXTERNAL | 21.6V to 28.8V DC to be observed | |
| 15 | Power Supply (LC Gate/Junction Cabins/ IB Location Box/ IB Hut or IB Room) | Check the all wago fuse indications | Disconnect type fuse wago indications should not glow | |

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| 19 | RIU Equipment (LC Gate/ Junction Cabins/ IB Location Box/ IB Hut or Room) | Visually examine all the cards are inserted properly and tighten the corresponding screws | Ensure the tightness of the cards | |
| 20 | RIU Equipment (LC Gate/ Junction Cabins/ IB Location Box/ IB Hut or Room) | Visually examine all PS, communication cables are tighten all the connections / Terminations / Wagoterminals | Ensure the tightness of the cables connectors | |
| 21 | RIU Equipment (LC Gate/ Junction Cabins/ IB Location Box/ IB Hut or Room) | 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 . | |
| 22 | RIU Equipment (LC Gate/ Junction Cabins/ IB Location Box/ IB Hut or Room) | Check the output Supply voltage of 24 Volts charger provided for relay input wiring | The voltage measured should be approx. 21V - 29V DC. | |
| 23 | RIU Equipment (LC Gate/ Junction Cabins/ IB Location Box/ IB Hut or Room) | 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. | |
| 24 | Communication Module | 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 | |
| 25 | Communication Module | 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 | |
| 26 | Communication Module | Check the communication status | Ensure Tx and Rx LED should Glow/Blink | |
| 27 | Communication Module | Visually examine all the communication cables areConnected properly and Communication card had tightened | Ensure the tightness of the patch card and communication module. | |
| 28 | Earthing & SPD | Clean surface of the Earth electrode/MEEB/SEEB | Surface should be kept clean | |
| 29 | Earthing & SPD | Measure the Resistance and fillwater in the Earth Pits to keep low soil resistance | R e s i s t a n c e S h o u l d | rey |
| 30 | Earthing & SPD | Check the SPD devices for any signs of physical degradation | Check the Indication LED status of SPD. (If SPD indicates FAIL then replace it) | gfg |