Title:

RC3684 RELIABILITY PROGRAM

A/S REGNECENTRALEN

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Abstract:

This publication describes the features of the reliability program used in connection with RC3684 HDLC controller.

1. GENERAL

The program is a reliability test program used in connection with the RC3684 HDLC controller and the corresponding MUS driver. The test program is written in MUSIL. The program, which continously transmits/receives blocks of 256 bytes each, can exercise any controller and stream. The channels may be connected internally using the internal clock on the SLA-interface, or externally using modems. The receive streams are numbered as channelnumber *2 (2,4,6 and 8), and the transmitter streams are numbered as channelnumber *2+1 (3,5,7 and 9).

2. DATA TRANSFER PHASE

Once the user has specified the controller and channelnumbers, "OPENING" (a Reservation Command), "CONNECTING" (a Position Command) and "STARTING DATA TRANSFER" will be displayed on the system console.

During the data transfer phase the console is constantly active and any character will cause the corresponding stream to be temporarily suspended. The below mentioned commands are acknowledged.

2.1. STAT

"STAT" will cause the accumulated statistics to be displayed. The statistics will be reset when this command is actioned. Note that suspending the receiver channel may cause the corresponding transmitter to enter the retransmission mode as the transmitter is still active. During the initial information transfer phase of few frames might be retransmitted.

2.1.1. DP REC

Double precision count of the transmitted information packets.

2.1.3. DP RCRET

Double precision count of the recerved packets with Frame Checking Sequence, bit-count or controller time-out error.

2.1.4. DP RETRANS

Double precision count of the retransmitted information packets.

2.1.5. R:RNR 2.1.5.

Single precision count of the received RNR packets.

2.1.6. X:RNR 2.1.6.

Single precision count of the transmitted RNR packets.

2.1.7. R:REJ 2.1.7.

Single precision count of the received REJ packets.

2.1.8. X:REJ 2.1.8.

Single precision count of the transmitted REJ packets.

2.2. FRMR 2.2.

Display the FRMR information frame. Consult the "RC implemented HDLC protocol" for further study.

2.3. MICRO 2.3.

Print the controller micro-program RAM on the line printer.

2.4. CONT 2.4.

Continue the data transfer phase.

2.5. TERM 2.5.

Terminate the current stream and ask for new parameters.

3. ERROR CONDITION

The give-up mask is 8'161577 and any matching status causes the text "HDLC ERROR (OCTAL)" to be displayed. The user can either ignore (I), repeat (R) or terminate (T) on the error.

4. REFERENCES

HDLC Driver, user manual	RCSL:43-GL7724
HDLC Channel program luy-out	RCSL:43-GL7723
The "RC implemented HDLC protocol	RCSL:43-GL7909