All,

We have made the following changes to the 9.2 Transmit and Monitor Station Operation Tables because of errors found at the UNH Interoperability Lab. All transitions changed have additions underlined and deletions crossed-out.

Transmit Machine:

1. Reference 3205 on page 9.2-6 is incorrect.

   Counter CSTFQ is used *only* for 4 and 16 Mbit/s, but is always decremented by this High Media Rate reference.

   Thus, I modified REF 3205 and added *new* REF 3221 as follows.

TBAB	3205	**EOD** & FSMR<2 & TS=STXD << The last octet of the Frame's Information Field has been transmitted. >> << 4 Mbit/s and 16 Mbit/s only >>	TS=STXN; TX_FCS;<br~~ If FSMR<2 then TX_EFS(I=E=0);~~<br~~ If FSMR>1 then TX_EFS(E=0);~~ TX_EFS(I=E=0); FSTI=1; **If** JS=SDAC then CSTFQ=(CSTFQ-1)
TBAB	3221	**EOD** & FSMR>1 & TS=STXD << The last octet of the Frame's Information Field has been transmitted. >> << High Media Rate only >>	TS=STXN; TX_FCS; TX_EFS(E=0); FSTI=1

2. Reference 3215 on page 9.2-27 is incorrect.

   Counter CSTFQ is used *only* for 4 and 16 Mbit/s, but is always decremented by this High Media Rate reference.

   Thus, I changed 3215 as follows.

TBAG	3215	**PORT_ERR(correctable)** & FIPTXIS=1 & FPMR>1 & TS=STXD << C-Port could not complete transmission of frame being transmitted - abort frame >> << High Media Rate only >>	TS=STXN; **If** FPASO=0 then TX_AB; **If** FPASO=1 then (TX_INV_FCS; TX_EFS(E=1)); FSTI=1~~;~~<br~~ If JS=SDAC then CSTFQ=(CSTFQ-1)~~ << Terminate the transmission of the frame by transmitting either an Abort Sequence or an Invalid FCS and setting the E bit to one >>

3. Reference 3219 on page 9.2-28 is incorrect.

   Counter CSTFQ is used *only* for 4 and 16 Mbit/s, but is always decremented by this High Media Rate reference.

   Thus, I changed 3219 as follows.

TBAG	3219	**STATION_ERR(correctable)** & FIPTXIS=0 & FSMR>1 & TS=STXD << Station could not complete transmission of frame: enter the Transmit Normal state. >> << High Media Rate only >>	TS=STXN; **If** FSASO=0 then TX_AB; **If** FSASO=1 then (TX_INV_FCS; TX_EFS(E=1)); FSTI=1~~;~~ ~~If JS=SDAC then CSTFQ=(CSTFQ-1)~~ << Terminate the transmission of the frame by transmitting either an Abort Sequence or an Invalid FCS and setting the E bit to one >>

Monitor machine:

The Monitor Overview FSM on page 9.2-4 illustrates the concept of handling the Station that does not provide phantom support. However, the Monitor Station Operation Table on pages 9.2-29 and 9.2-30 has not incorporated this change. Also, reference 3322 is missing from table.

To summarize the change I made:

1. Reinserted reference 3322 (page 9.2-29) inadvertently deleted from table;
2. Modified 3316 (page 9.2-29) and 3318 (page 9.2-29) by adding "& FSPDA=1" indicating phantom drive *is supported*;
3. Added two new references (3301 and 3302 to page 9.2-29) to handle the same conditions as 3316 and 3318 respectively when phantom drive *is not supported*; and
4. Modified 3320 (page 9.2-29) by making Remove_station unconditional since the state MS=SWFD is entered only if phantom *is supported*.

These changes are shown below.

MAD	3316	**FR_BN(SA=SUA)** & FSJC=1 <u>& FSPDA=1</u> & MS=SOPT << Station <u>*supporting* phantom drive</u> received a Beacon MAC frame from its C-Port and starts Hard Error Recovery by entering the Wire Fault Delay state. >>	MS=SWFD; FSHBA=FSOP=0; TSIT=R; TSLMT=R
<u>MAC</u>	<u>3301</u>	<u>**FR_BN(SA=SUA)** & FSJC=1 & FSPDA=0 & MS=SOPT</u> <u><< Station *not supporting* phantom drive received a Beacon MAC frame from its C-Port and starts Hard Error Recovery by entering the Internal Test state. >></u>	<u>MS=SIT; FSHBA=FSOP=0; TSLMT=R; INT_TEST</u>
MBD	3318	**FR_BN(SA=SUA)** & FSPDA=1 & MS=STBN << Station <u>*supporting* phantom drive</u> received a Beacon MAC frame from its C-Port and continues Hard Error Recovery by entering the Wire Fault Delay state. >>	MS=SWFD; TSIT=R; TSLMT=R
<u>MBC</u>	<u>3302</u>	<u>**FR_BN(SA=SUA)** & FSPAD=0 & MS=STBN</u> <u><< Station *not supporting* phantom drive received a Beacon MAC frame from its C-Port and continues Hard Error Recovery by entering the Internal Test state. >></u>	<u>MS=SIT; INT_TEST</u>
MDC	3320	**TSIT=E** & MS=SWFD << Station has completed waiting for Wire-Fault Detection. >>	MS=SIT; ~~If FSPDA=1 then~~ Remove_station; INT_TEST

	3322	**TSLMT=E** & MS=SIT << Lobe test to be executed by the Station.	FSBNT=1 << Request Join to execute JS=SLT >>

The following changes were the result of the above changes.

1. Figure 9.2-3 on page 9.2-4 has been modified to start the LMT timer (bottom transition in MS=SOPT).
2. Line 111 has been changed to:

   "Counter, Station TXI Frame Queued (CSTFQ), 4 Mbit/s and 16 Mbit/s only."

Thanks go to Simon Harrison for finding the Monitor problem. When I made these changes, I found the Transmit problems.

Best regards,
Ken, Neil and Ivar