

Frank, sorry to bother you on this once again, but I still do not quite understand the performance data you presented. You stated that this performance was for the very latest demodulators. Are the numbers below the requirements limits for the new demodulators or are they the actual measured performance of the demodulators. I think they are the requirements limits because the  $10^{-4}$  Eb/No on a separate slide you showed (entitled: "Key DAMS-NT Parameters") agree with the numbers below. If this is the case, can you tell me the actual performance numbers for the new demodulators?

Also, do you know what the proposed parameters for the next generation GOES satellite will be? Even though there was a gentleman there from NASA, I think there was still some uncertainty about the planned -

G/T in the satellite =

Downlink EIRP =

The reason I am asking all these questions is that we are trying to respond, as requested by Jim Wydick, to the proposed updates to the HDR system prior to the next TWG meeting. Some of our responses require us to perform link analyses and I would like our questions to reflect as accurately as possible the real performance of the DCS system.

John

The DAMS-NT are the latest demodulators received at Wallops. They are not in use yet pending resolution of the stated dispute.

Frank Street

-----Original Message-----

From: John Thompson [mailto:jthompson@sigeng.com]  
Sent: Monday, June 21, 2004 11:49 AM  
To: Street, Frank  
Subject: RE: DAMS-NT performance

Frank, are these the very latest ones ... the demodulators that are sitting in quarantine at the moment because of the dispute with ISI or are is this data for the previous demodulators which are currently installed and supporting HDR at Wallops?

John N. Thompson  
Signal Engineering, Inc.  
6370 Lusk Blvd., Suite F206  
San Diego, California 92121  
Voice: (858) 552-8131  
Fax: (858) 552-1429

-----Original Message-----

From: Street, Frank [mailto:frank.street@mitretek.org]

Sent: Monday, June 21, 2004 6:17 AM

To: John Thompson; james.wydick@noaa.gov; Woolner, Peter G.

Subject: RE: DAMS-NT performance

John

The performance data represents the DAMS-NT demodulators as they were tested before they were delivered to Wallops.

Frank Street

-----Original Message-----

From: John Thompson [mailto:jthompson@sigeng.com]

Sent: Friday, June 18, 2004 3:31 PM

To: Jim Wydick (james.wydick@noaa.gov); Woolner, Peter G.; Street, Frank

Subject: DAMS-NT performance

Is the DAMS-NT performance data presented at the TWG meeting that of the demodulators installed at Wallops today or is it the performance of the demodulators that are the latest version. I understand the latter are still held up because of contract issues so I did not know which set of demodulators the data represented.

What was presented by Frank Street at the TWG meeting was the following:

For 100 BPS:

At Eb/No of 10.4 dB-Hz the BER is  $1 \times 10^{-4}$

At Eb/No of 11.4 dB-Hz the BER is  $1 \times 10^{-5}$

At Eb/No of 12.4 dB-Hz the BER is  $1 \times 10^{-6}$  or better

For 300 and 1200 BPS:

At Eb/No of 10.2 dB-Hz the BER is  $1 \times 10^{-4}$

At Eb/No of 11.9 dB-Hz the BER is  $1 \times 10^{-5}$

At Eb/No of 11.4 dB-Hz the BER is  $1 \times 10^{-6}$  or better

Thanks for your help.

John N. Thompson