TRIP REPORT

SUBJECT: WSA600

PLACE: Cambridge, Mass....CISL

DATE: November 13, 1967

IN ATTENDANCE:

A. Bhushan/MIT	T. Beatson/GE-SIPD
F. Corbato/MIT	A. Letizia/GE-SIPD
R. Daley/MIT	I. Popejoy/GE-SIPD
S. Dunten/MIT	M. Tobias/GE-SIPD
E. Glaser/MIT	
J. Ossanna/BTL	
J. Saltzer/MIT	
R. Stotz/MIT	

1. Both BTL and MIT indicate that use for WSA600 is for computer-to-computer communication. For the most part the applications involve GE645-to-satellite computer. However, GE645-to-IBM 360/67 was also mentioned.

   The communications channels will be dedicated, not switched. At present there is no specific requirement for multipoint connection.

   Mr. Ossanna mentioned that although automatic switching of wide band lines will not be available until 1970's, except for special (military) applications, manual switching may well be practical and necessary before that time.

2. The meeting was unable to proceed satisfactorily under the subject heading "MIT & BTL Requirements". The point is that the WSA600 to be specified now should not be viewed as a special item developed to satisfy definite defined needs.

   The needs of MIT-BTL are of a general nature. The product which results at this time will probably be no different than a general market offering.

   Specifically GE has stated that WSA600 will be designed to interface with type 301 and 303 Bell Systems Data Sets. Both BTL and MIT, however, also have 500-5000 ft. distance applications in which it would be desirable to use a direct connect "black box" (at base band) rather than data sets.

   Mr. Ossanna, BTL, discussed the 201 and 203 data sets. The interface to these data sets is quite a bit different than the 301 and 303. However, there appears to be a definite need for communication at 7200 bps - - and using a word, rather than character, adapter.

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3. The subject of character formatting (6+1, 7+1, 8+0, etc.), block check (or cyclic check character), and transparent modes, were discussed at length. The basic underlying question in these discussions is "what will the WSA600 be compatible with?" Both MIT and BTL see a need to be fully compatible with IBM.

4. The idea of using program changeable control words by means of the 16 x 9 (16 words x 9 bits each) active memory circuit card was very well received. During this discussion MIT & BTL agreed to come up with lists of control characters and the action to result.
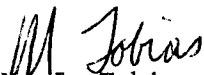
    The discussion came up with the additional possibility of using the memory not only to store the control characters for comparison purposes, but also to store actions (i.e., if a control character match occurs on word A1, then decode word A2 for the action to take place). This would result in a "stored program" adapter.

5. There was fairly strong objection, by MIT, to burdening software with a difficult cyclic check character calculation in a high speed device. It was agreed that GE would look into this calculation by hardware.

    It was observed that if the adapter is to be program changeable ASCII 7+1 to IBM 8+0 (for example) then presumably it would be necessary for hardware to calculate a single "block check character" on the one hand, or a "cyclic check character" on the other.

ACTION ITEMS

1. GE agreed to look into calculation of block check character, and/or cyclic check character by hardware.

2. MIT-BTL agreed to develop lists of desired control characters and the WSA action to result when a match is detected.

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