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28 March 1986

Area Code 617
 692-4765

To: VLBA Data Acquisition/Recorder Group
 From: Alan E.E. Rogers
 Robert J. Cady
 Subject: Proposed use of "coaxicon" connectors in VLBA modules

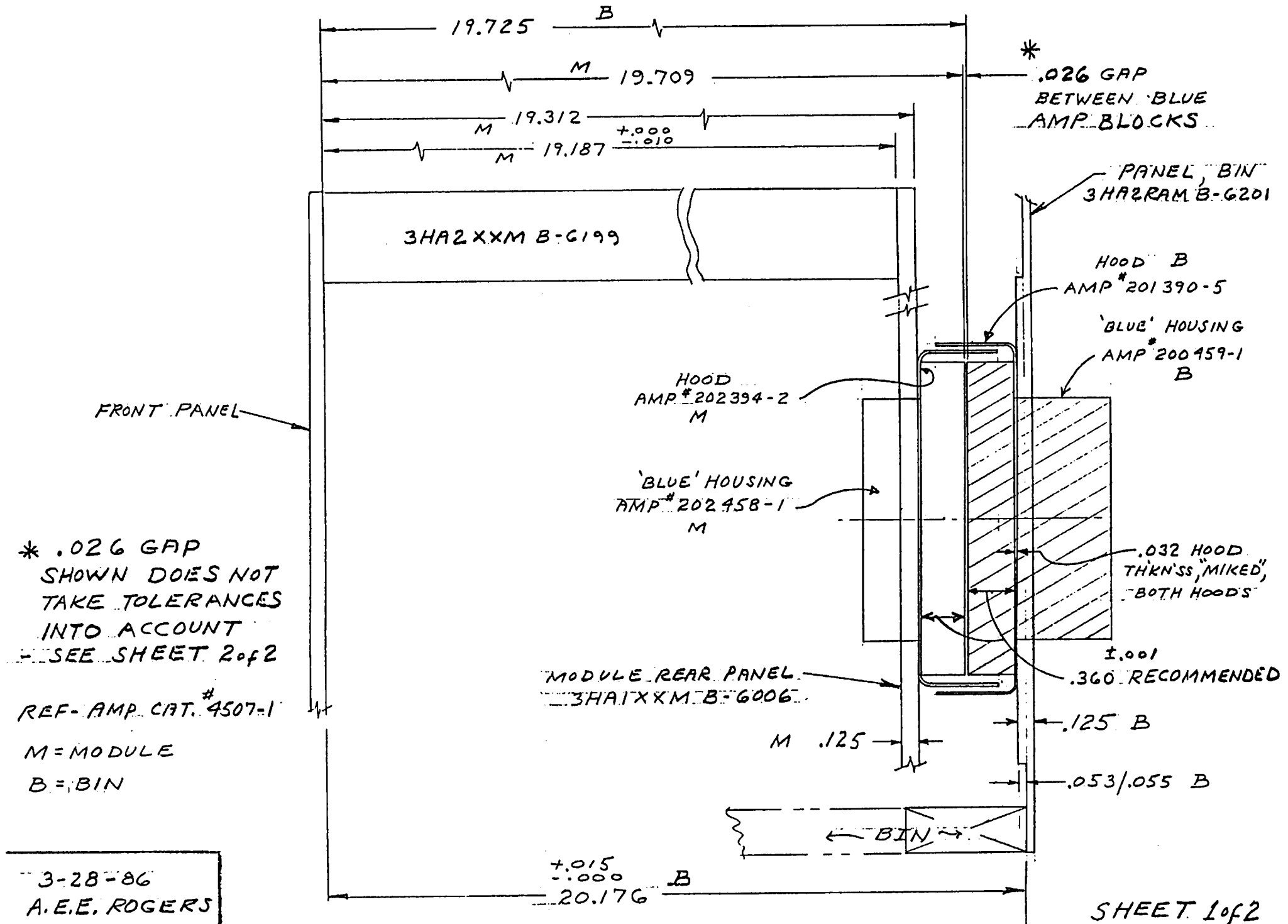
We propose to use the coaxicon contacts and amp blocks for the following VLBA modules:

<u>Module</u>	<u>Signals</u>	<u># contacts</u>	<u>Comments</u>
I.F. Distributor	MCB, 5M, SYNC	6	I.F. signals will use OSP
Baseband converter	I.F., Video, MCB, 5M, SYNC, 5M	15	
5 MHz Distributor	5M	12	
32 MHz Synthesizer	5M, 32M	3	
A/D Converter	Video	8	

In order to ensure that the coaxicon contacts fully mate with only a very small gap (less than .05") between housings we propose to machine the amp blocks to the dimension "T" of .360"±.001. With a bin panel relief of 0.053"/0.055" there will be no interference - that is, there will always be a gap to prevent the front panels from being bent. See attached Figures One and Two of two.

We expect that with these modifications the coaxicons will provide satisfactory contacts with the following advantages over the OSP contacts:

- 1] Less expensive (\$10 vs \$30 per contact pair).
- 2] One common extender cable can be used for all modules (except I.F. distributor which will need an OSP extender in addition).
- 3] Simpler module assembly.



* .026 GAP SHOWN DOES NOT TAKE TOLERANCES INTO ACCOUNT - SEE SHEET 2 of 2

REF-AMP CAT. #4507-1

M=MODULE
B=BIN

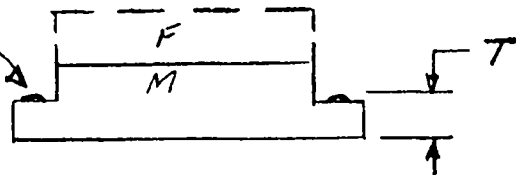
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VLBI MODULE & BIN BLUE AMP BLOCKS CLEARANCE STUDY

DETERMINATION OF BLUE AMP BLOCKS GAP

GAP (WITHOUT TOLERANCES)	MINIMUM GAP (WITH TOLERANCES)	MAXIMUM GAP (WITH TOLERANCES)
MODULE BAR 19.187 MODULE REAR PNL .125 AMP BLOCK HOOD .032 MODIFIED AMP BLOCK + .360 <hr style="width: 100%;"/> DISTANCE 19.704"	19.187 .130 .037 + .361 <hr style="width: 100%;"/> 19.715"	19.177 .120 .027 + .359 <hr style="width: 100%;"/> 19.683"
BIN BAR 20.176 BIN PNL - .054 <hr style="width: 100%;"/> 20.122 AMP BLOCK HOOD - .032 <hr style="width: 100%;"/> 20.090 MODIFIED AMP BLOCK - .360 <hr style="width: 100%;"/> DISTANCE 19.730"	20.176 - .055 <hr style="width: 100%;"/> 20.121 - .037 <hr style="width: 100%;"/> 20.084 - .361 <hr style="width: 100%;"/> 19.723	20.191 - .053 <hr style="width: 100%;"/> 20.138 - .027 <hr style="width: 100%;"/> 20.111 - .359 <hr style="width: 100%;"/> 19.752
BIN 19.730 MODULE - 19.704 <hr style="width: 100%;"/> GAP → .026"	19.723 - 19.715 <hr style="width: 100%;"/> .008"	19.752 - 19.683 <hr style="width: 100%;"/> .069"

FIN OR
'FLASH' AREA



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(35) BLUE AMP BLOCK SAMPLES 'MIKED'
AN AVE. OF .374" (.009" OVER BOOK DIM. OF .365")

SHEET 2 of 2