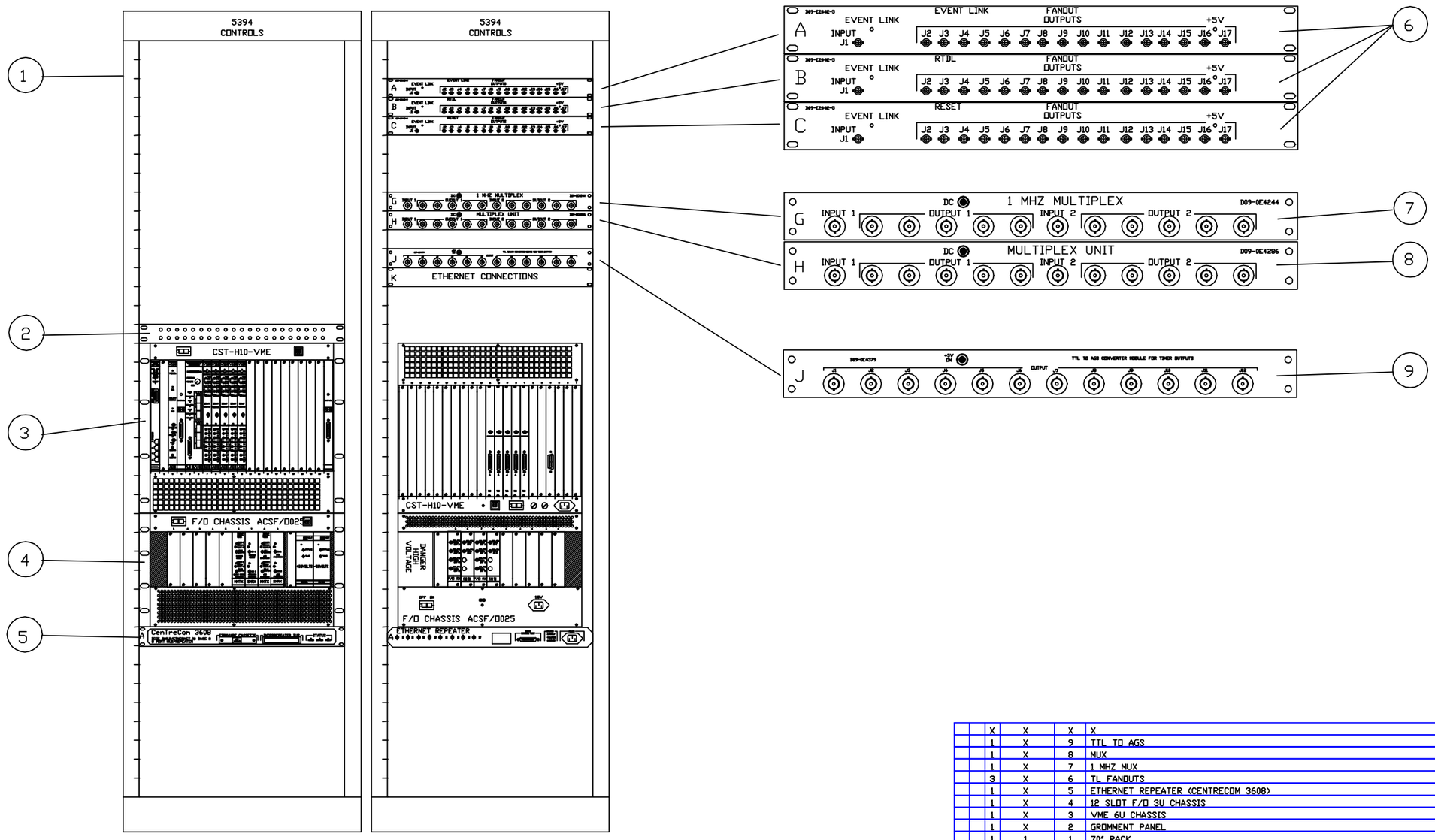
REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

CAD, CONTROLS 1/29/01 11:42 AM h10stn.dwg



QTY REQD -3	QTY REQD -2	QTY REQD -1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MATL DWG NO.,SPEC NO.
		X	X	X	X	X
		1	X	9	TTL TO AGS	X
		1	X	8	MUX	D09-DE4286
		1	X	7	1 MHZ MUX	D09-DE4244
		3	X	6	TL FANOUTS	X
		1	X	5	ETHERNET REPEATER (CENTRECOM 3608)	X
		1	X	4	12 SLOT F/O 3U CHASSIS	X
		1	X	3	VME 6U CHASSIS	X
		1	X	2	GROMMET PANEL	X
		1	1	1	70" RACK	X

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE ± .5°

NA FINISH

BREAK SHARP EDGES MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3

		DATE
DRAWN BY	Venegas	12/18/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973

RACK LAYOUT FOR H10
CONTROL SYSTEM

SIZE D | D09-E-RD2842 | REV. A
DRAWING NUMBER

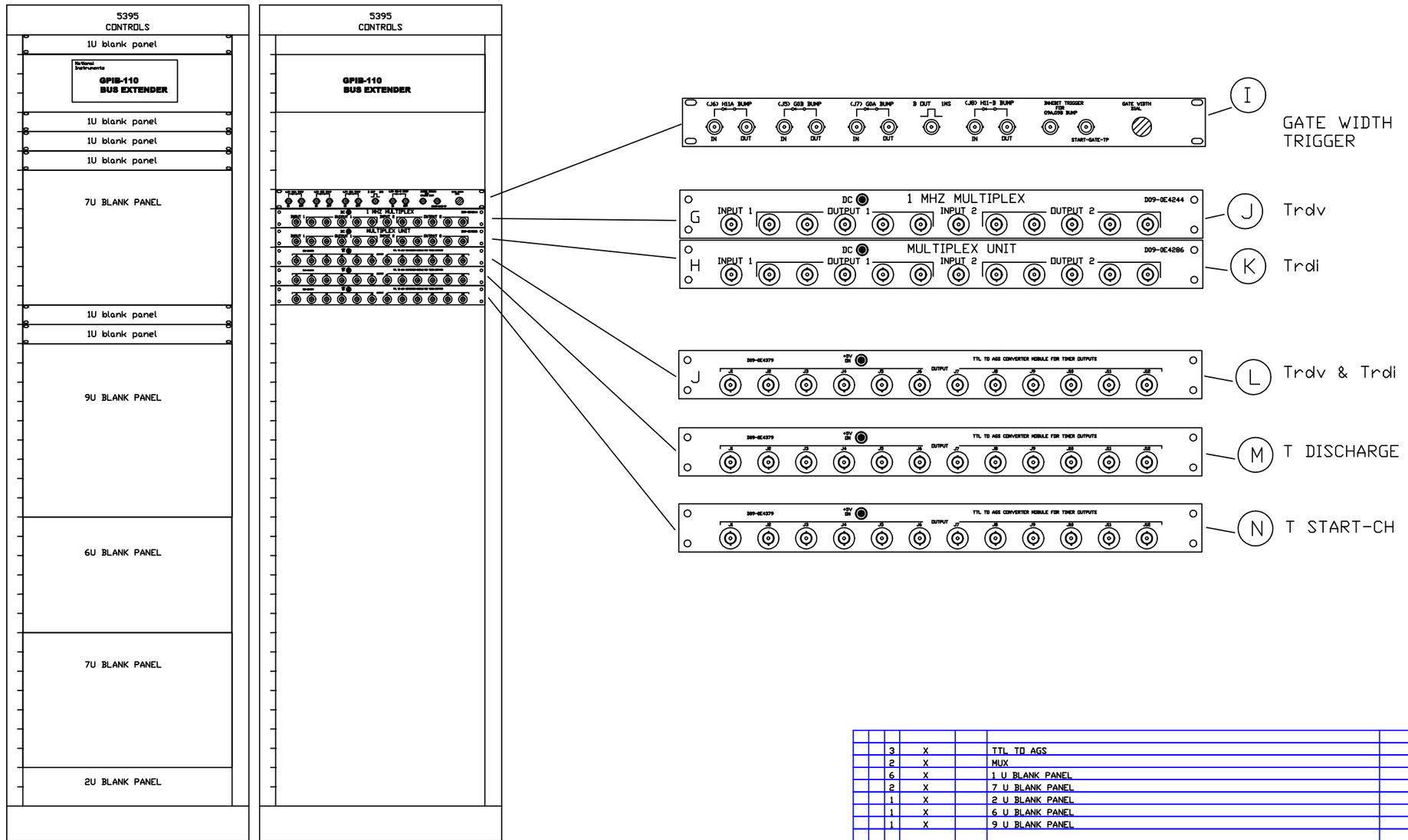
MATERIAL: ——— SCALE: FULL WEIGHT: – SHEET 1

FILE "H10STN.DWG"

*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

C-A Controls 2/26/02 10:23 AM h10_rk5395.dwg



-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L. DWG NO.,SPEC. NO.
		3	X		TTL TO AGS	X
		2	X		MUX	
		6	X		1 U BLANK PANEL	
		2	X		7 U BLANK PANEL	
		1	X		2 U BLANK PANEL	
		1	X		6 U BLANK PANEL	
		1	X		9 U BLANK PANEL	
		1	1	1	70" RACK	X

QTY REQD

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE
± .5°

OUTSTANDING ECN

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

Q.A. CATEGORY A-3

		DATE
DRAWN BY	JAPPE	2/26/02
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973

RACK LAYOUT FOR H10
CONTROL SYSTEM
RK 5395

SIZE D | DRAWING NUMBER | REV. A

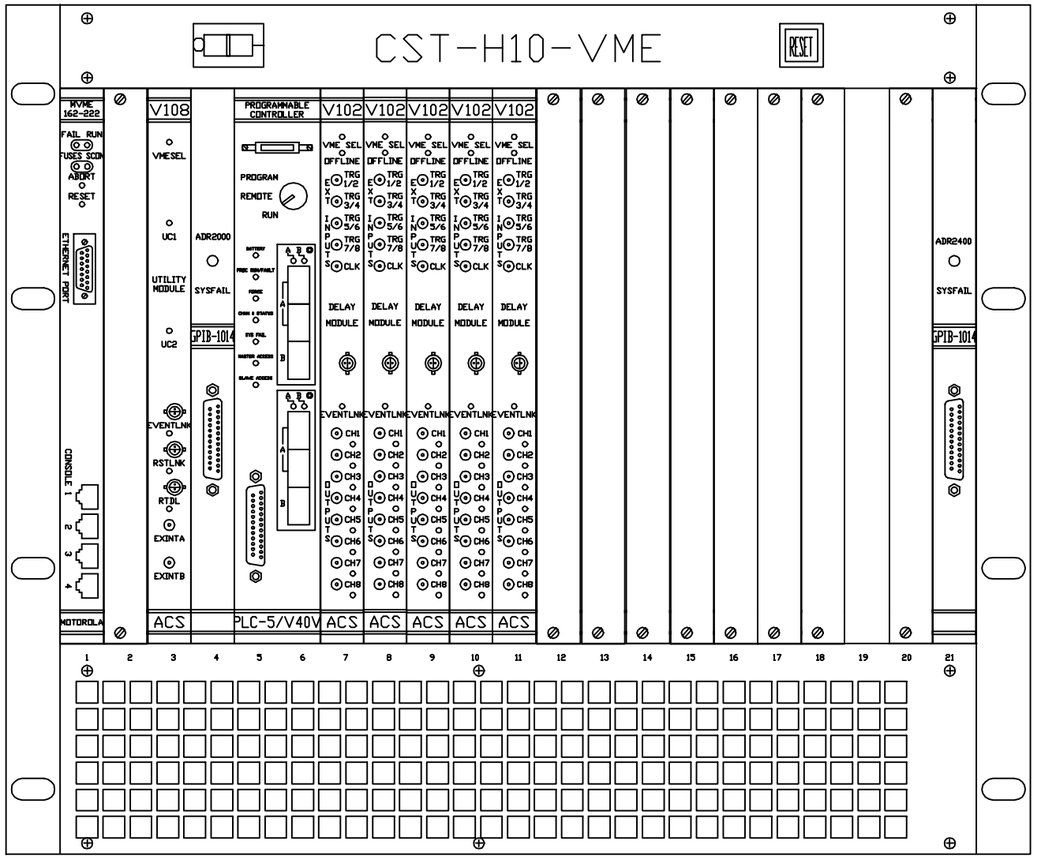
MATERIAL: ——— | SCALE: FULL | WEIGHT: – | SHEET 1

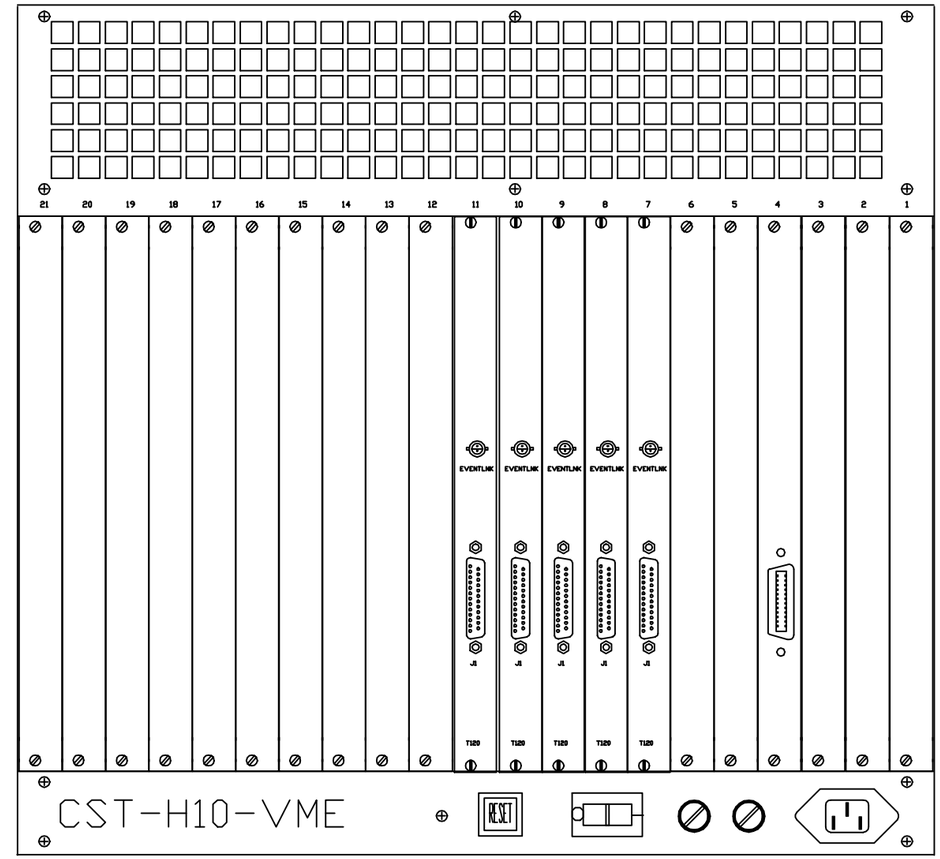
FILE "h10_rk5395.dwg"

*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

CAD, CONTROLS 1/29/01 11:12 AM h10cst.dwg





NOTE 1: FOR UNUSED SLOTS

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO./BNL NO.
		X	X	X	X	X
		35	NOTE 1	8	6U FILLER PANELS	X
		5	SLOTS 7-11	7	T120 TRANSITION MODULE	X
		5	SLOTS 7-11	6	V102 TL DECODER	94028070
		1	SLOT 5-6	5	A & B BOARD	X
		1	SLOT 4	4	GPIB 1014	
		1	SLOT 3	3	V108 UTILITY MODLULE	94028094
		1	SLOT 1	2	FRONT END COMPUTER (162-222)	X
		1	N/A	1	6U VME CHASSIS	RHIC-93008000

QTY REQD

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE ± .5°

OUTSTANDING ECN

NA FINISH

BREAK SHARP EDGES MAX. XX MIN. XX

Q.A. CATEGORY A-3

		DATE
DRAWN BY	VENEGAS	12/17/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973

VME CONTROL CHASSIS
H10

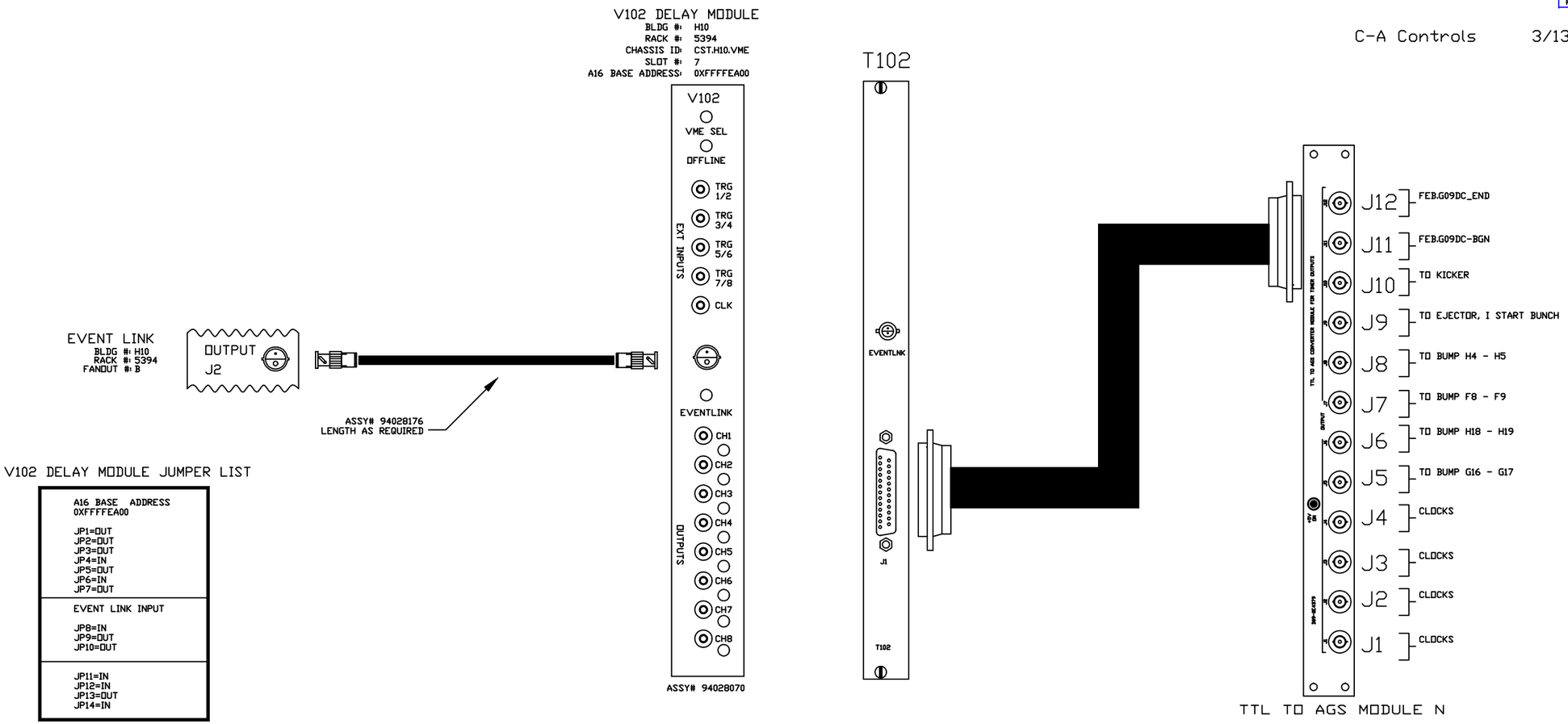
SIZE D
D09-E-RD2843
DRAWING NUMBER
REV.

MATERIAL: SCALE: WEIGHT: SHEET 2

FILE "H10CST.DWG"

1 *AUTOCAD

C-A Controls 3/13/02 11:54 AM h10v102A.dwg



V102 DELAY MODULE JUMPER LIST

A16 BASE ADDRESS 0XFFFFEA00 JP1=OUT JP2=OUT JP3=OUT JP4=IN JP5=OUT JP6=IN JP7=OUT
EVENT LINK INPUT JP8=IN JP9=OUT JP10=OUT
JP11=IN JP12=IN JP13=OUT JP14=IN

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L. DWG NO.,BNL NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±
.XX ±
.XXX ±
ANGULAR TOLERANCE ±

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY		DATE
DRAWN BY	Warren Jappe	5/8/00
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

H10 controls rack 5395

V102 DELAY MODULE

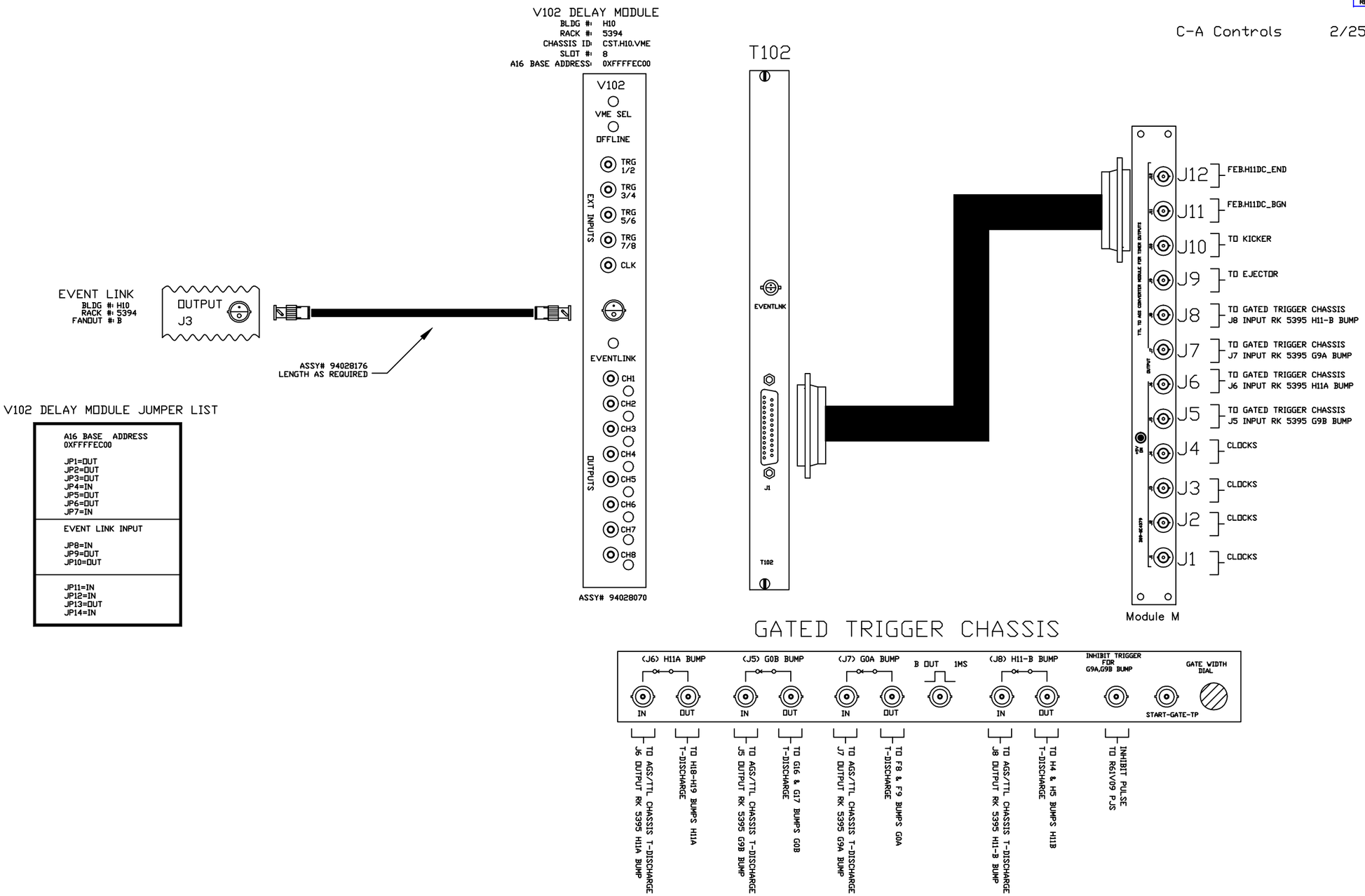
SIZE | D09-E-RD2844 | REV.
DRAWING NUMBER

MATERIAL: | SCALE: | WEIGHT: | SHEET 3

*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

C-A Controls 2/25/02 3:24 PM h10v102N.dwg



V102 DELAY MODULE JUMPER LIST

A16 BASE ADDRESS 0XFFFFEC00 JP1=OUT JP2=OUT JP3=OUT JP4=IN JP5=OUT JP6=OUT JP7=IN
EVENT LINK INPUT JP8=IN JP9=OUT JP10=OUT
JP11=IN JP12=IN JP13=OUT JP14=IN

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L. DWG NO.,BNL NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±
.XX ±
.XXX ±
ANGULAR TOLERANCE ±

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY		DATE
DRAWN BY	Warren Jappe	5/8/00
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

H10 controls rack 5395

T-DISCHARGE

V102 DELAY MODULE

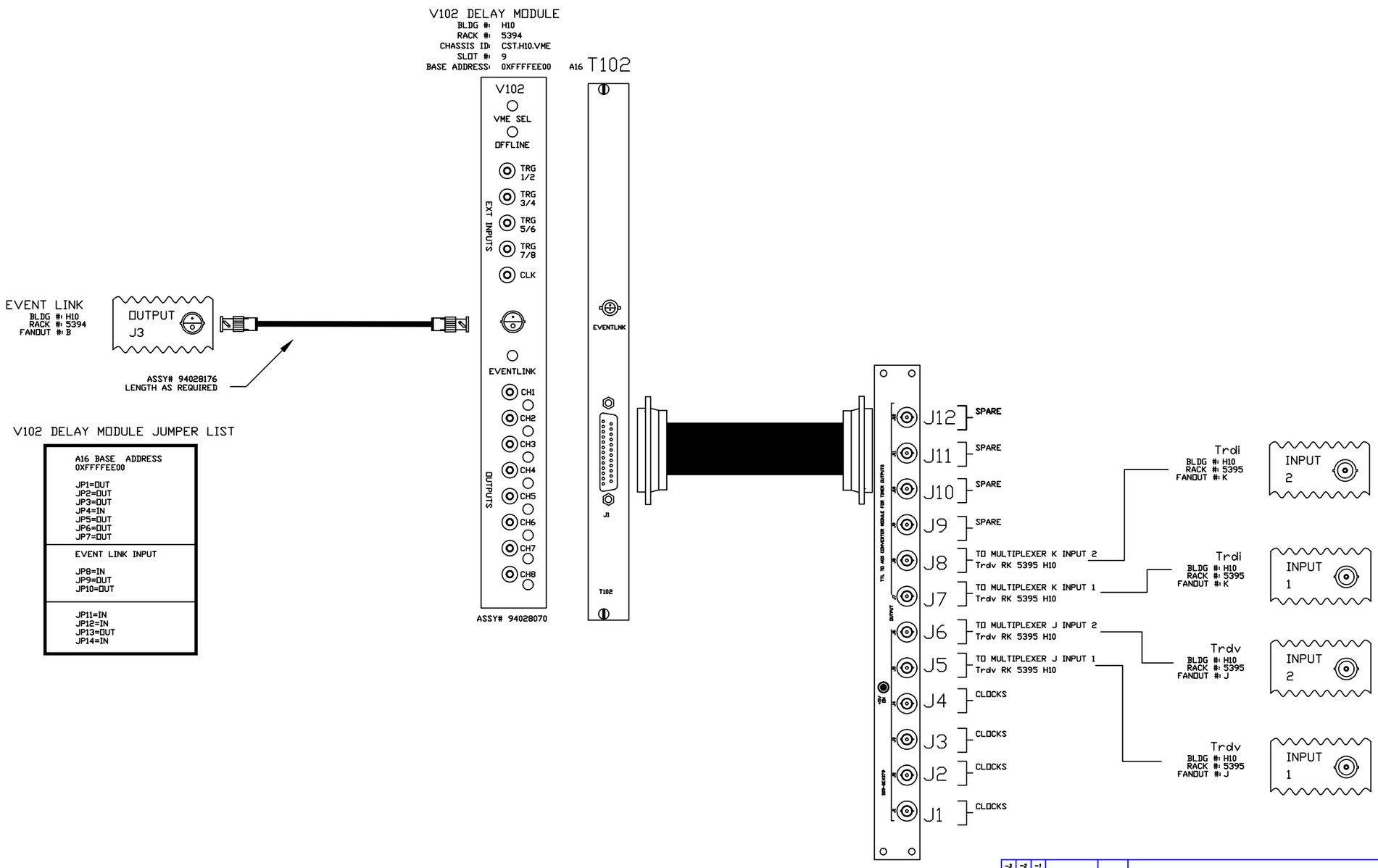
SIZE D09-E-RD2845 REV.

DRAWING NUMBER

MATERIAL: SCALE: WEIGHT: SHEET 4

*AUTOCAD

CAD, CONTROLS 1/29/01 11:48 AM h10v102L.dwg



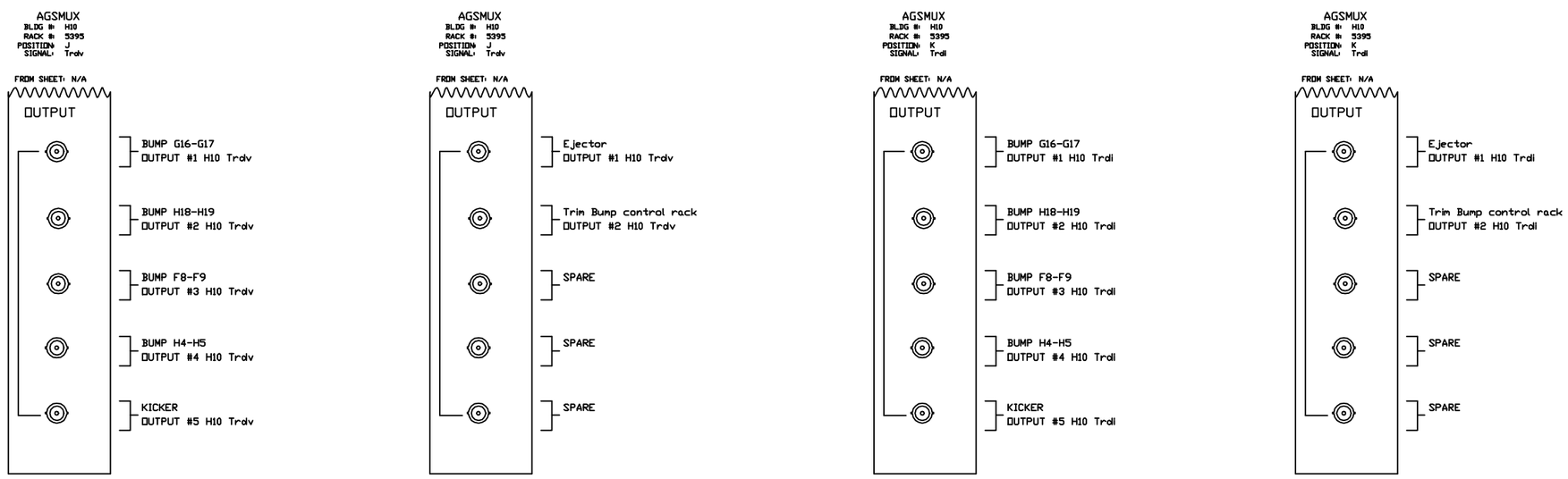
T rdv & T rdi – Module L

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M–1989	Q.A. CATEGORY		DATE	BROOKHAVEN NATIONAL LABORATORY UPTON, N.Y. 11973
	DRAWN BY	Warren Jappe	5/8/00	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	CHECKED BY			H10 controls rack 5395
DECIMAL TOLERANCES .X ± .XX ± .XXX ± ANGULAR TOLERANCE ±	DESIGN APPROVAL			Trdv & Trdi
	ENGINEER APPROVAL			V102 DELAY MODULE slot 9
	SUPVR. APPROVAL			SIZE D09–E–RD2846 REV.
NA FINISH / BREAK SHARP EDGES MAX. XX MIN. XX	NEXT ASSEMBLY			DRAWING NUMBER
OUTSTANDING ECN				MATERIAL: SCALE: WEIGHT: SHEET 5

*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

CAD, CONTROLS 1/29/01 11:49 AM h10v102La.dwg



NOTE: INPUTS ON SHEET 5

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO./BNL NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±
.XX ±
.XXX ±
ANGULAR TOLERANCE
±

OUTSTANDING ECN

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

Q.A. CATEGORY		DATE
DRAWN BY	Warren Jappe	5/8/00
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

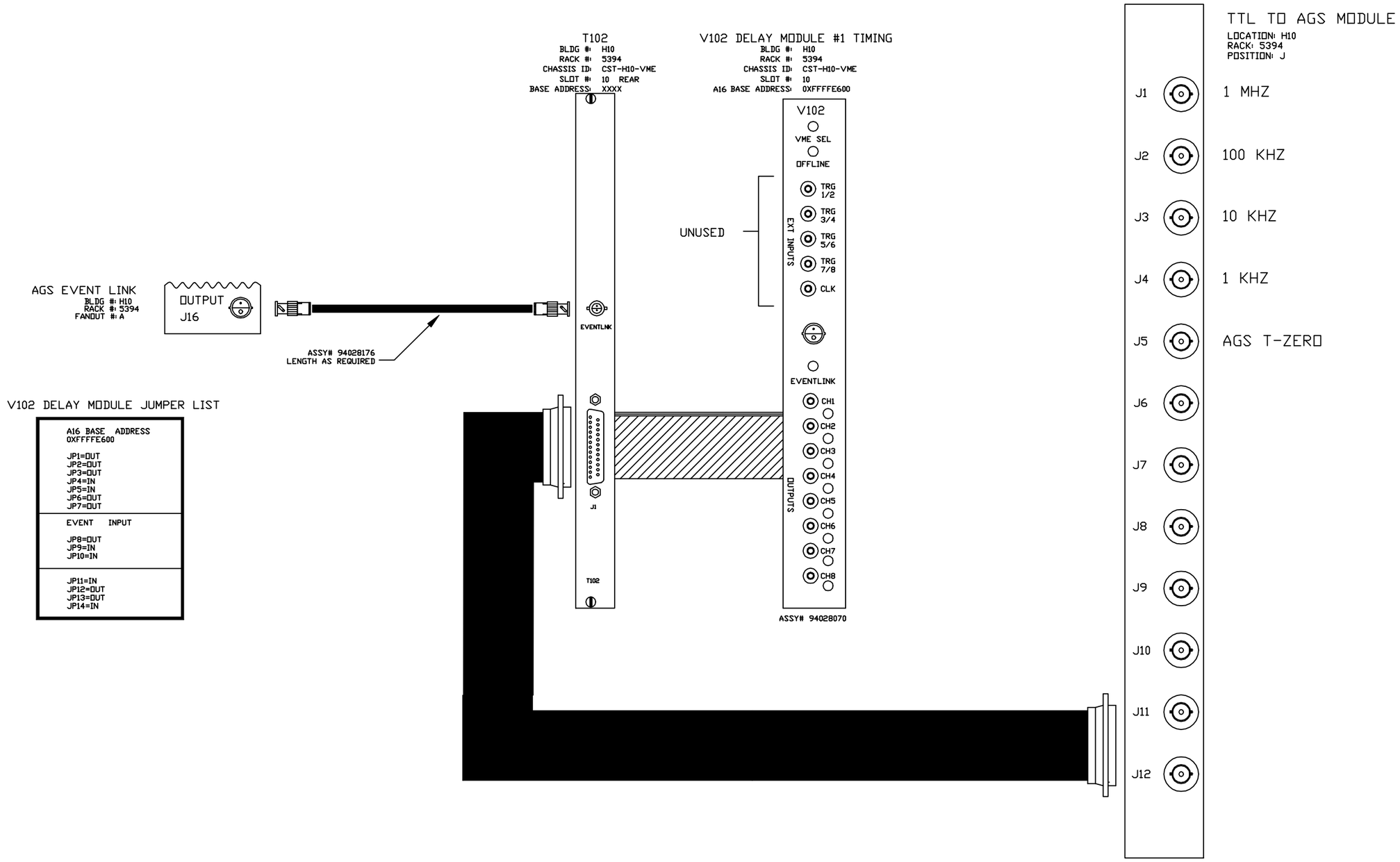
BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

H10 controls rack 5395
Trdv & Trdi
AGSMUX

SIZE
D09-E-RD2847
DRAWING NUMBER
REV.

MATERIAL: SCALE: WEIGHT: SHEET 6

*AUTOCAD



V102 DELAY MODULE JUMPER LIST

A16 BASE ADDRESS 0XFFFFE600 JP1=OUT JP2=OUT JP3=OUT JP4=IN JP5=IN JP6=OUT JP7=OUT
EVENT INPUT JP8=OUT JP9=IN JP10=IN
JP11=IN JP12=OUT JP13=OUT JP14=IN

CAD, CONTROLS 1/29/01 10:52 AM h10_102.dwg

FILE "H10_102.DWG"

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO./DWG NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE
± .5°

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3		DATE
DRAWN BY	VENEGAS	12/11/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973

AGS CONTROLS WIRING DIAGRAM

CST-H10-VME

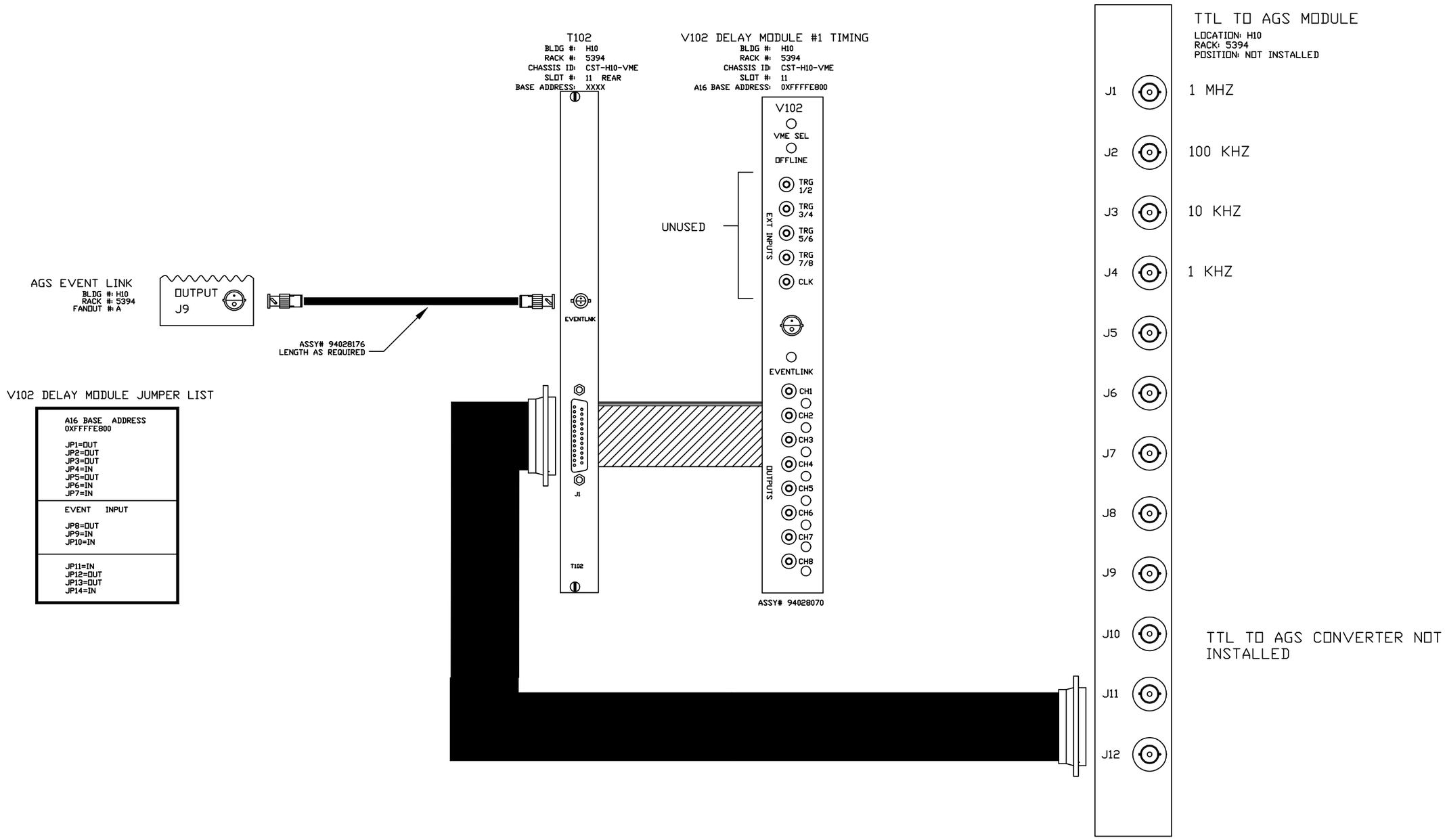
V102 DELAY MODULE #1 TIMING

SIZE D | D09-E-RD2848 | REV. A

DRAWING NUMBER

MATERIAL: ——— SCALE: NA WEIGHT: — SHEET 7

*AUTOCAD



V102 DELAY MODULE JUMPER LIST

A16 BASE ADDRESS 0XFFFFE800 JP1=OUT JP2=OUT JP3=OUT JP4=IN JP5=OUT JP6=IN JP7=IN
EVENT INPUT JP8=OUT JP9=IN JP10=IN
JP11=IN JP12=OUT JP13=OUT JP14=IN

CAD, CONTROLS 1/29/01 10:54 AM h10_102_.dwg

FILE "H10_102_2.DWG"

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO./INL NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE
± .5°

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3

		DATE
DRAWN BY	VENEGAS	12/22/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

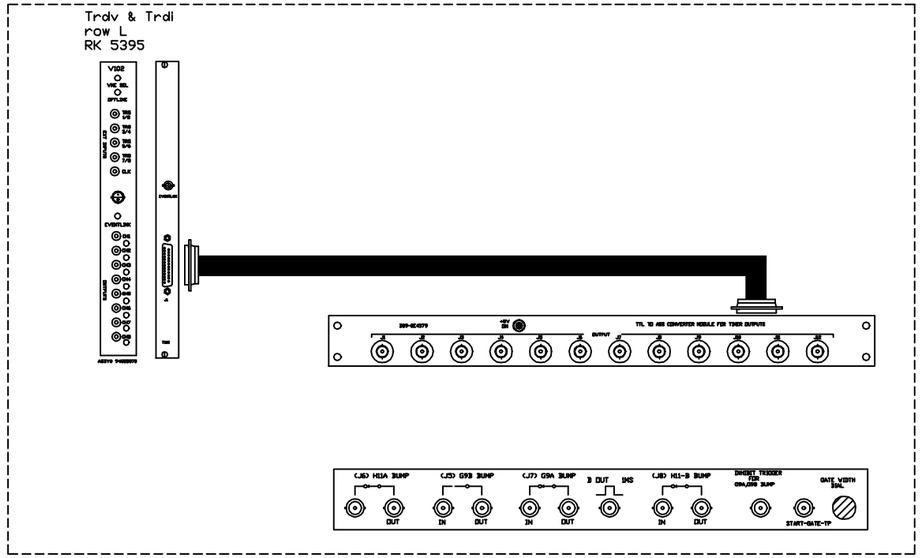
BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973

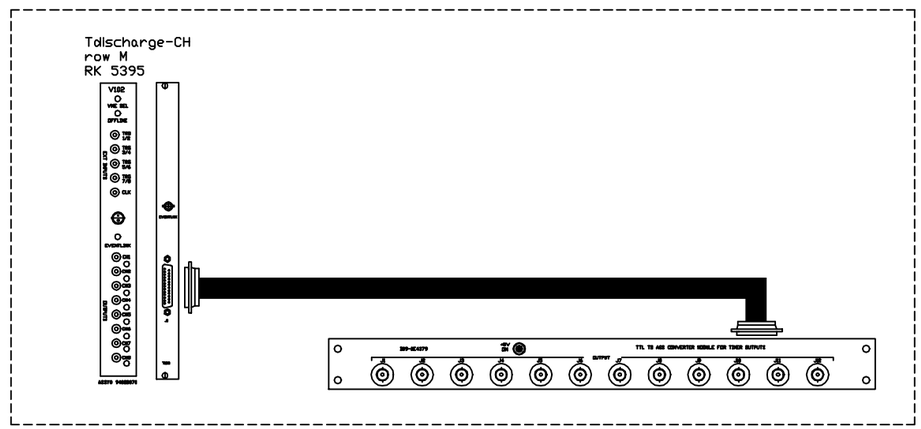
AGS CONTROLS WIRING DIAGRAM
CST-H10-VME
V102 DELAY MODULE #2 TIMING

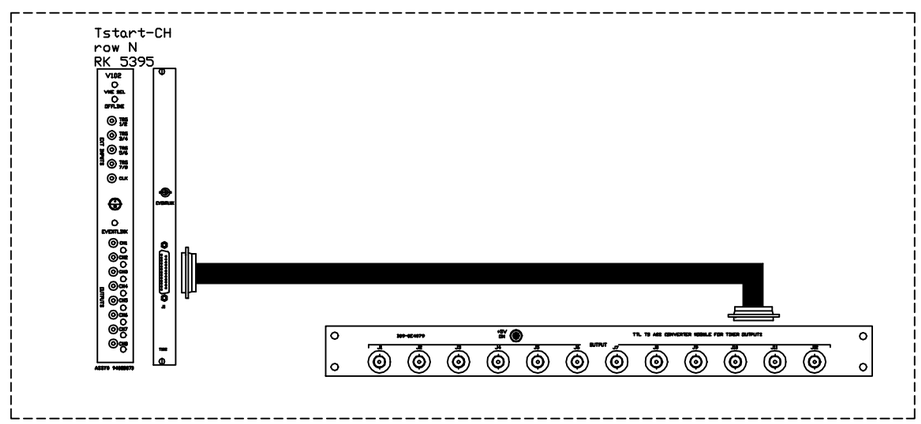
SIZE D
D09-E-RD2849
DRAWING NUMBER
REV. A

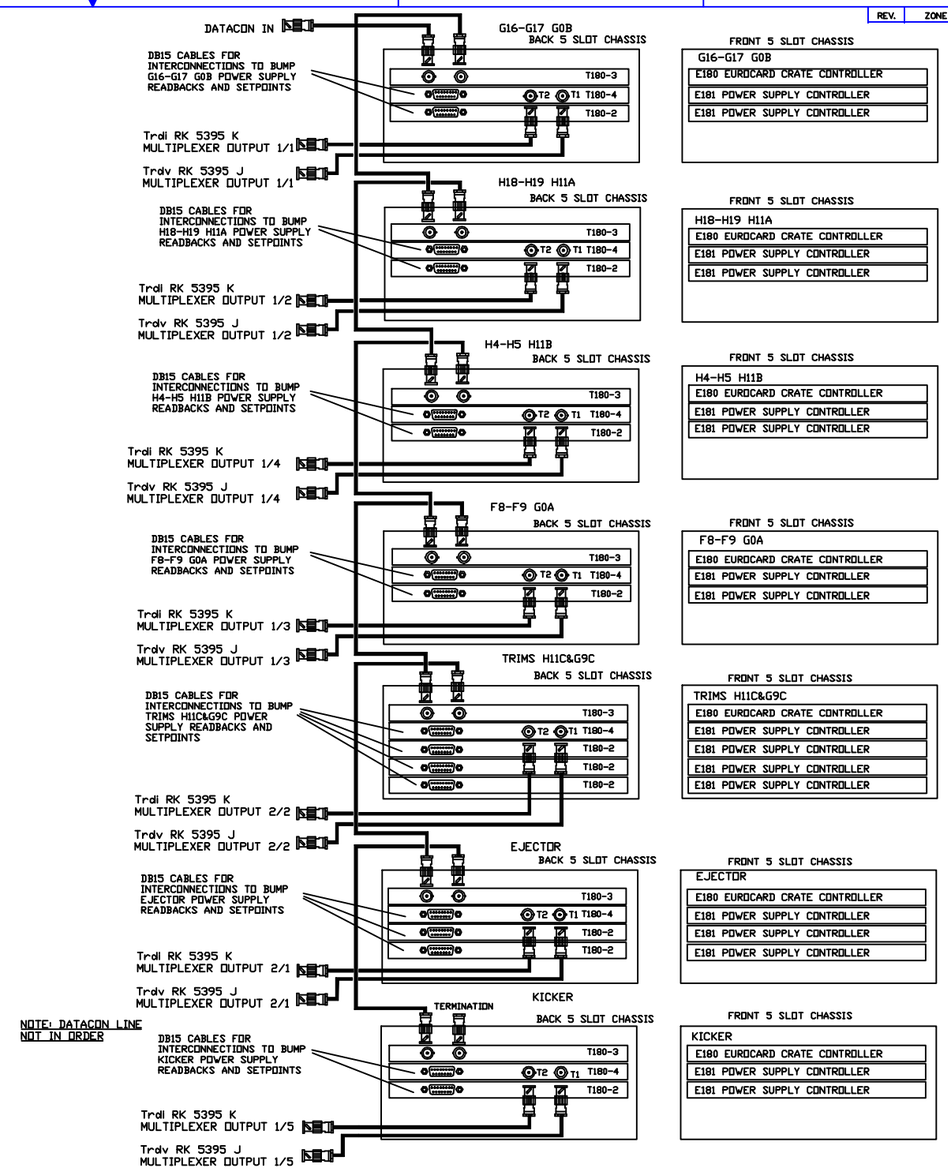
MATERIAL: ——— SCALE: NA WEIGHT: – SHEET 8

*AUTOCAD









NOTE: DATACON LINE NOT IN ORDER

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO./BNL NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES .X ± .XX ± .XXX ± ANGULAR TOLERANCE ±

NA FINISH

BREAK SHARP EDGES MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY		DATE
DRAWN BY	Warren Jappe	5/26/00
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

H10 Bump Power Supply Controls

SIZE | DRAWING NUMBER: D09-E-RD2850 | REV. A

MATERIAL: | SCALE: | WEIGHT: | SHEET 9

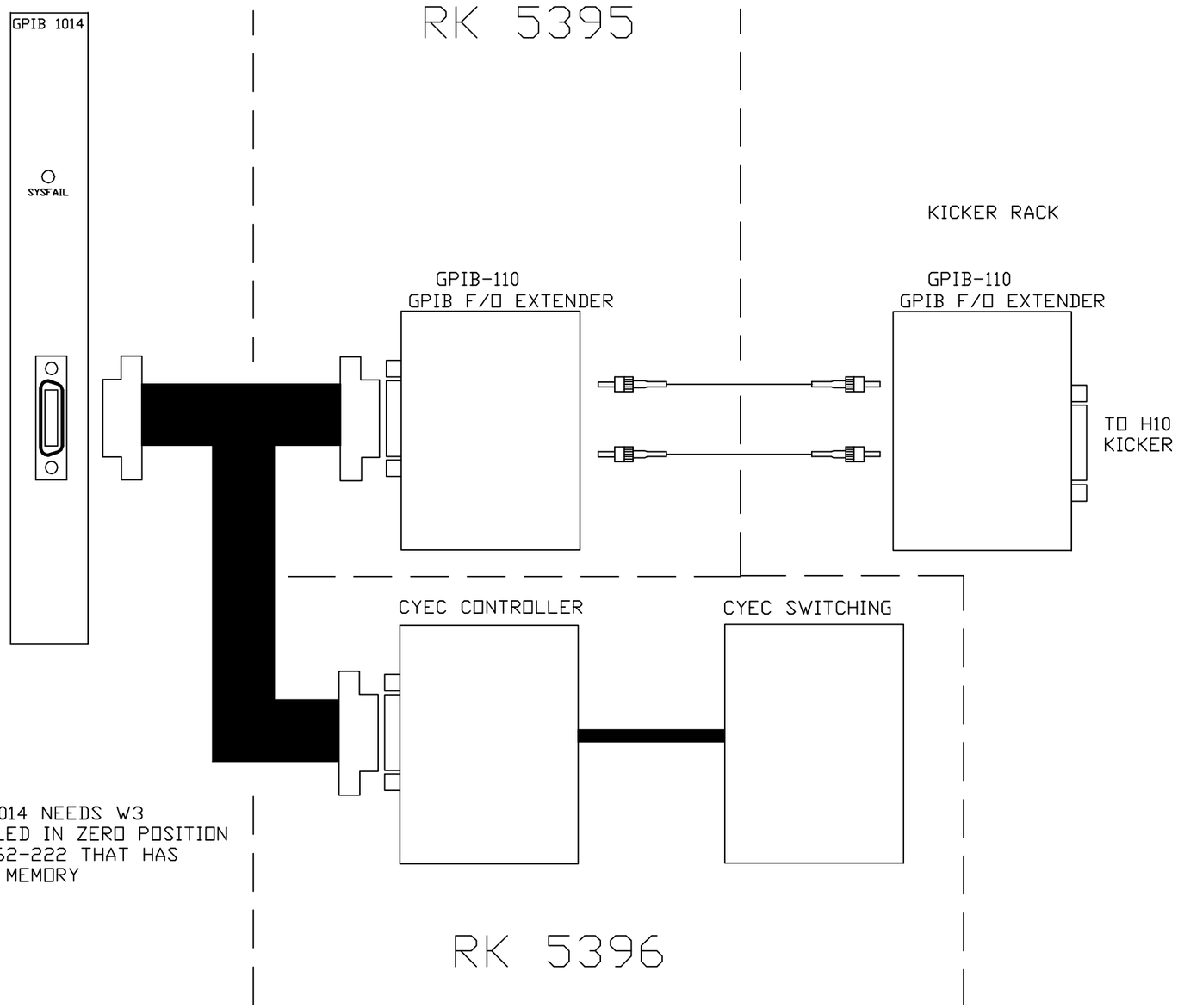
CAD, CONTROLS 1/29/01 11:10 AM h10bumps1.dwg

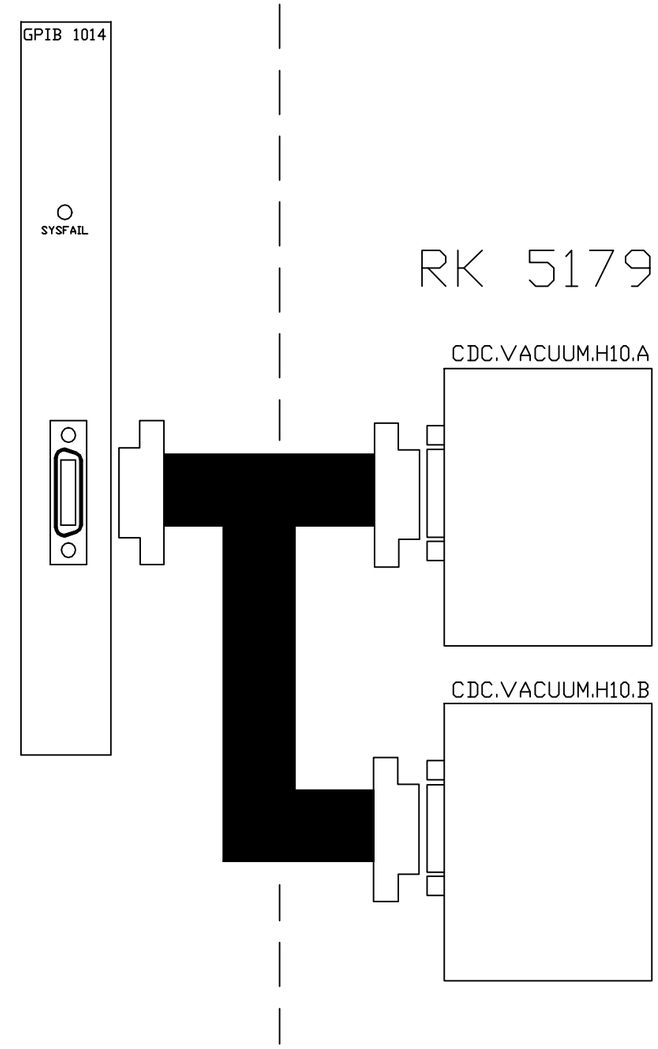
*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

GPIB 1014 FOR 488 DEVICES
BLDG #: H10
RACK #: 5394
CHASSIS ID: CST-HITL3-VME
SLOT #: 4
A24 BASE ADDRESS: 0XF0002000

GPIB 1014-- 488 DEVICE CONTROLLERS
BLDG #: H10
RACK #: 5394
CHASSIS ID: CST-H10-VME
SLOT #: 21
A24 BASE ADDRESS: 0XF0002400





NOTE: 1014 NEEDS W3
INSTALLED IN ZERO POSITION
WITH 162-222 THAT HAS
16 MEG MEMORY

CAD, CONTROLS 1/29/01 11:05 AM h10_488.dwg

H10_488.DWG

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO./BNL NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
DECIMAL TOLERANCES .X ±.030 .XX ±.015 .XXX ±.005 ANGULAR TOLERANCE ± .5°
OUTSTANDING ECN
NA FINISH
BREAK SHARP EDGES MAX. XX MIN. XX

Q.A. CATEGORY A-3		DATE
DRAWN BY	VENEGAS	5/29/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973

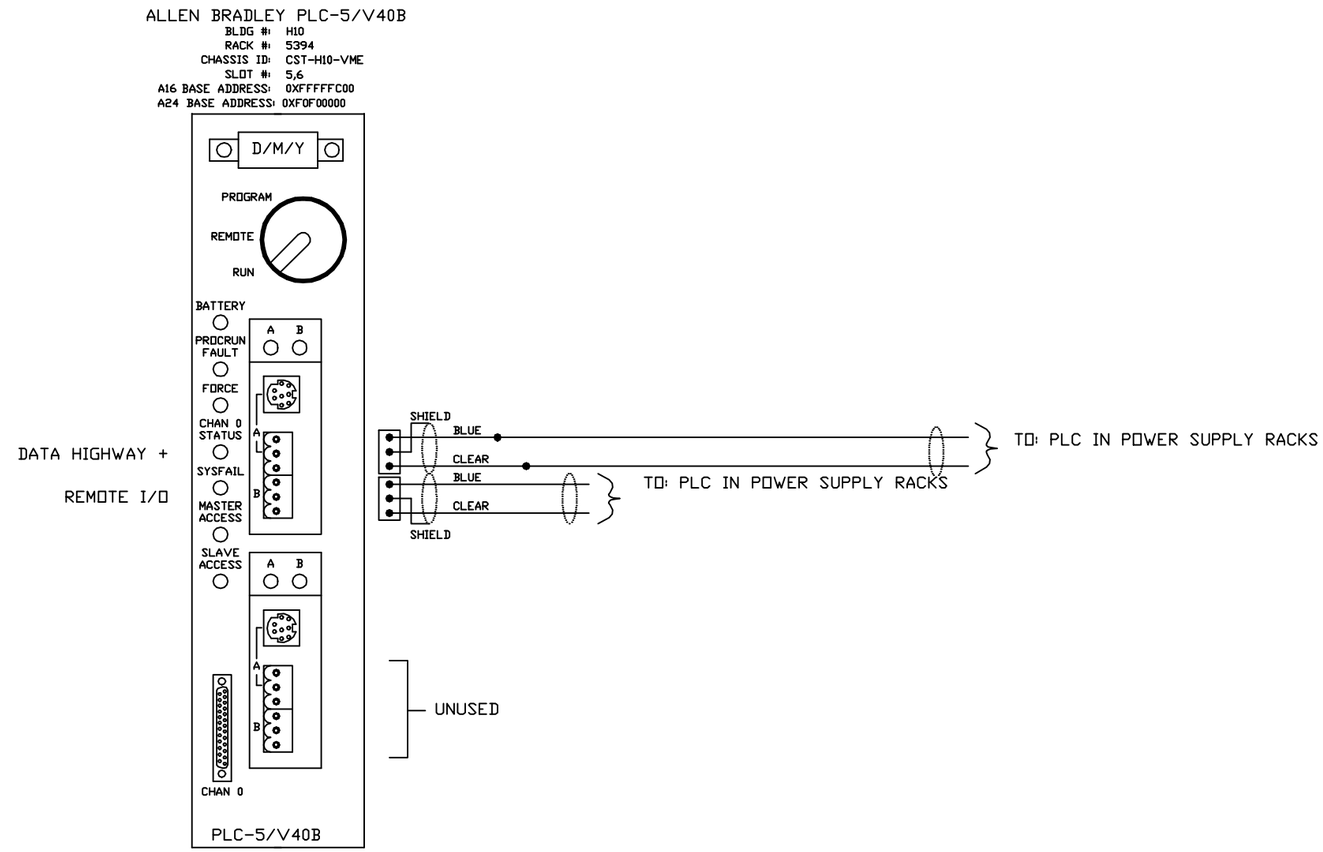
AGS CONTROLS WIRING DIAGRAM
VME CHASSIS CST-H10-VME
GPIB INTER FOR DEVICE CNTRLS

SIZE D | D09-E-RD2851 | REV.
DRAWING NUMBER
MATERIAL: ——— SCALE: NA WEIGHT: – SHEET 10

*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

CAD, CONTROLS 1/29/01 11:07 AM h10_plc1.dwg



FILE "H10_PLC1.DWG"

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO.,BAR NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE
± .5°

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3		DATE
DRAWN BY	Venegas	12/22/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973

CONTROLS WIRING DIAGRAM

VME CHASSIS CST-H10-VME

ALLEN BRADLEY VME PLC-5

SIZE D

D09-E-RD2852

DRAWING NUMBER

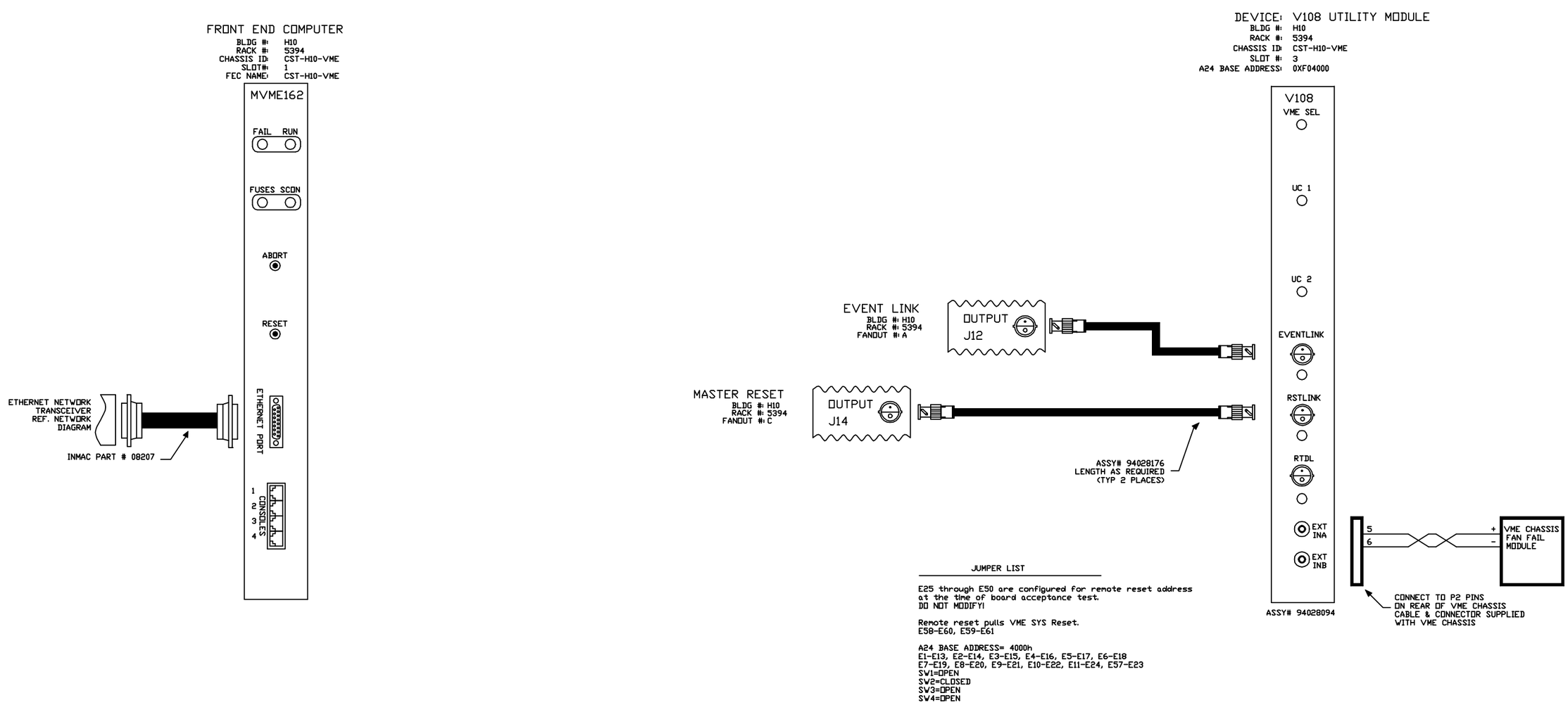
REV. A

MATERIAL: ———— SCALE: NA WEIGHT: – SHEET 11

*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

CAD, CONTROLS 1/29/01 11:08 AM h10_v108.dwg



JUMPER LIST

E25 through E50 are configured for remote reset address at the time of board acceptance test.
DO NOT MODIFY!

Remote reset pulls VME SYS Reset.
E58-E60, E59-E61

A24 BASE ADDRESS= 4000h
E1-E13, E2-E14, E3-E15, E4-E16, E5-E17, E6-E18
E7-E19, E8-E20, E9-E21, E10-E22, E11-E24, E57-E23
SW1=OPEN
SW2=CLOSED
SW3=OPEN
SW4=OPEN

H10_V108.DWG

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO./BNL NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE
± .5°

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3		DATE
DRAWN BY	VENEGAS	12/22/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973

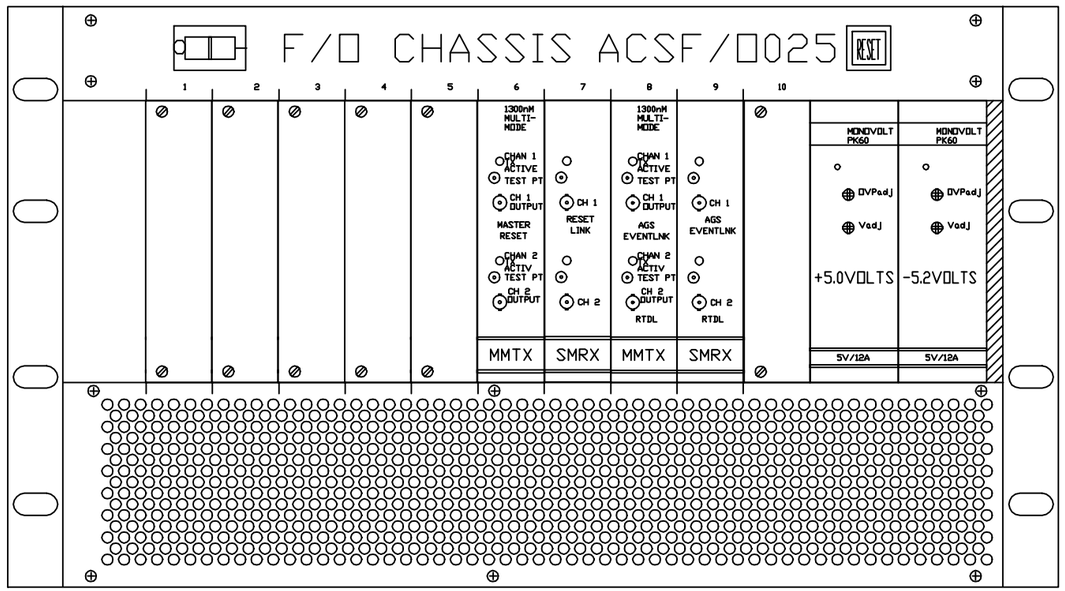
AGS CONTROLS WIRING DIAGRAM
VME CHASSIS CST-H10-VME
FT END COMP/V108 UTIL MODULE

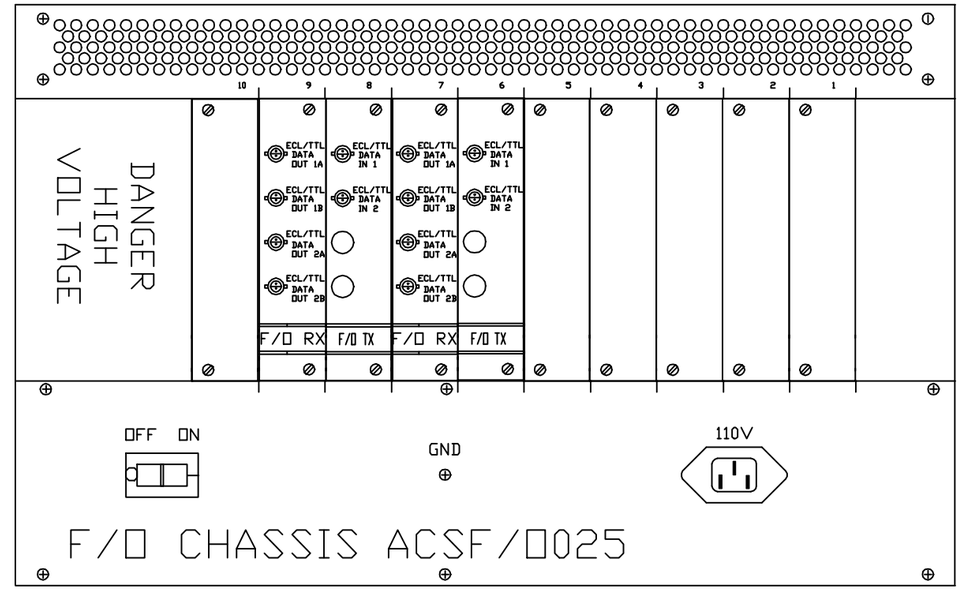
SIZE D
D09-E-RD2853
DRAWING NUMBER
REV. A

MATERIAL: ——— SCALE: NA WEIGHT: – SHEET 12

*AUTOCAD

CAD, CONTROLS 1/29/01 11:35 AM h10f_o.dwg





NOTE 1: FILLER PANELS FOR UNUSED SLOTS

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO.,BNL NO.
		12	NOTE 1	10	3U X 6HP BLANK PANEL	ESFE-3032
		X				
		X				
		2	SLOT 6,8 R	7	3U F/O TX TRANSITION MODULE (TTL)	
		2	SLOT 6,8	6	F/O MMTX	
		1	SLOT 12	5	MONOVOLT P.S. -5.2V	
		1	SLOT 11	4	MONOVOLT P.S. +5V	
		2	SLOT 7,9 R	3	3U F/O TRANSITION MODULE (TTL)	D09-E2542
		2	SLOT 7,9	2	F/O SMRX	94028101
		1	X	1	12 SLOT 3U F/O CHASSIS	94028261

QTY REQD

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES .030 .015 .005 .X ± .XX ± .XXX ± ANGULAR TOLERANCE .5° ±

NA FINISH

BREAK SHARP EDGES MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3

DRAWN BY Venegas 12/19/97

CHECKED BY

DESIGN APPROVAL

ENGINEER APPROVAL

SUPVR. APPROVAL

DATE

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973

H10 F/O CHASSIS

SIZE D09-E-RD2854 REV. A

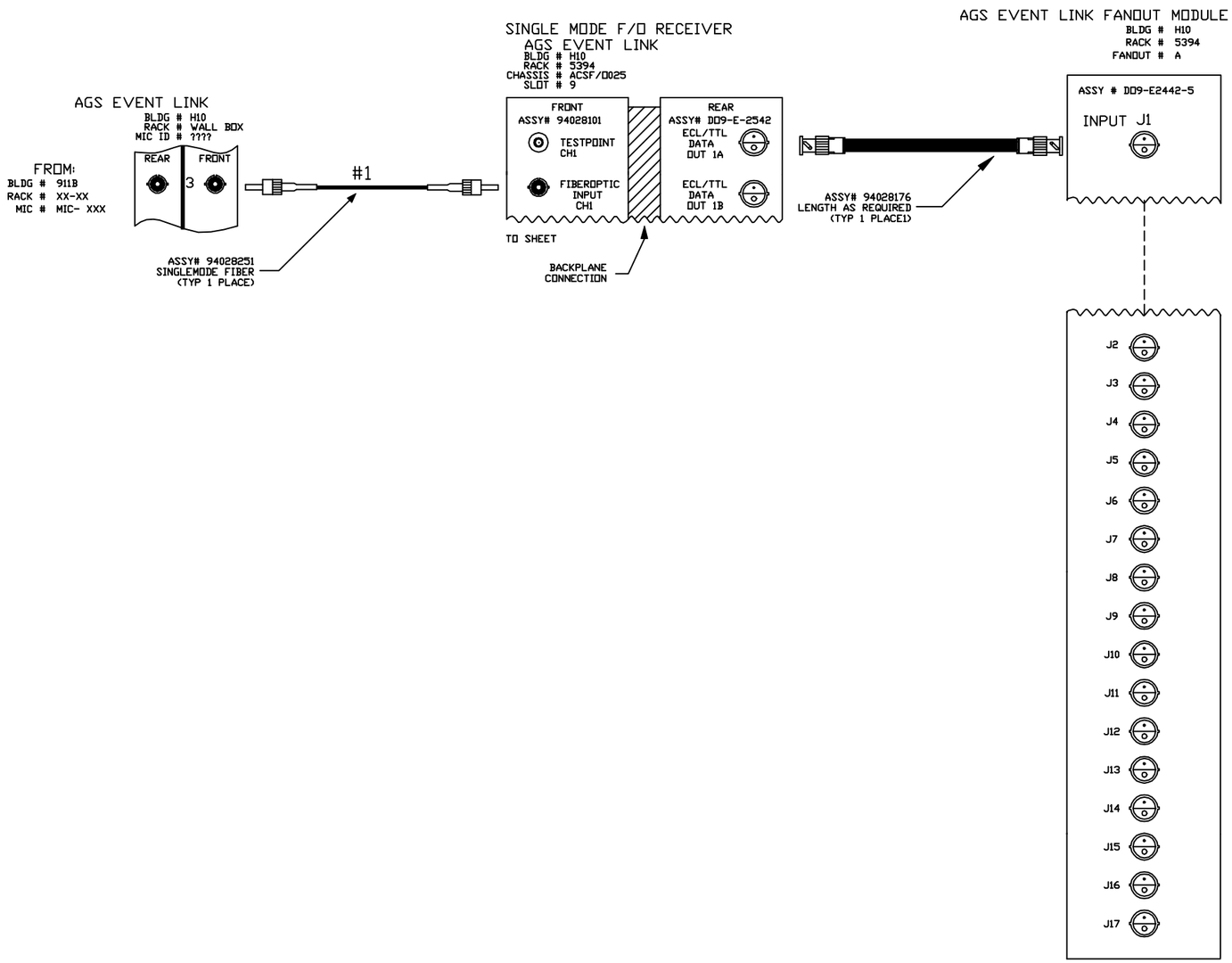
DRAWING NUMBER

MATERIAL: FULL SCALE: - WEIGHT: 13 SHEET

FILE "H10F_O.DWG"

*AUTOCAD

CAD, CONTROLS 1/29/01 11:16 AM h10event.dwg



FILE "H10EVENT.DWG"

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO.,DRL NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE
± .5°

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3

		DATE
DRAWN BY	VENEGAS	12/19/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973

AGS CONTROLS WIRING DIAGRAM

H10

AGS EVENT LINK

SIZE D

D09-E-RD2855

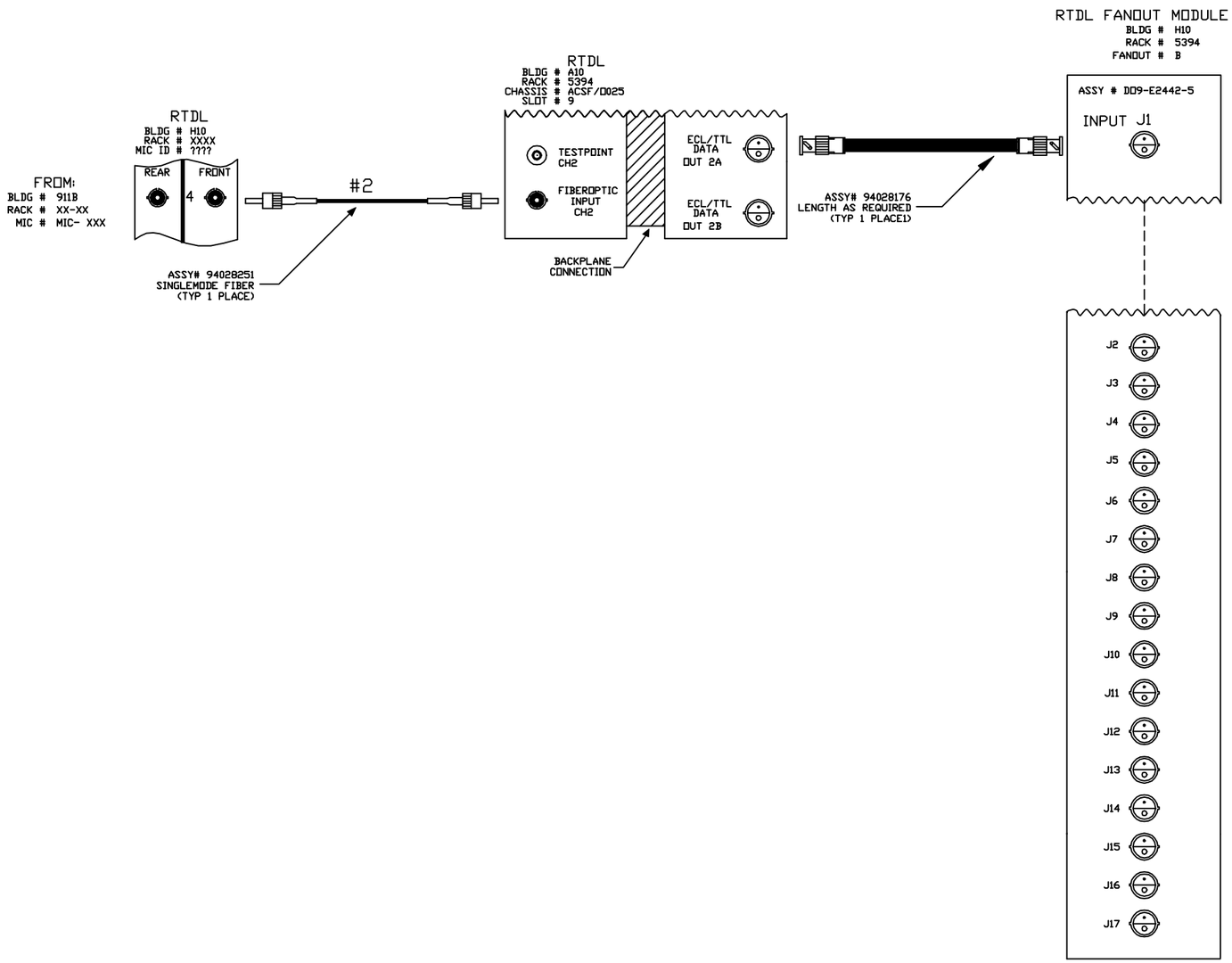
DRAWING NUMBER

REV. A

MATERIAL: ——— SCALE: NA WEIGHT: – SHEET 14

*AUTOCAD

CAD, CONTROLS 1/29/01 11:39 AM h10rtdl.dwg



TO RK5439 FANOUT J1

TO RK5439 FANOUT J1

FILE "H10RTDL.DWG"

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO.,SPEC NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE
± .5°

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3

		DATE
DRAWN BY	VENEGAS	12/19/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973

AGS CONTROLS WIRING DIAGRAM

H10

RTDL

SIZE D

D09-E-RD2856

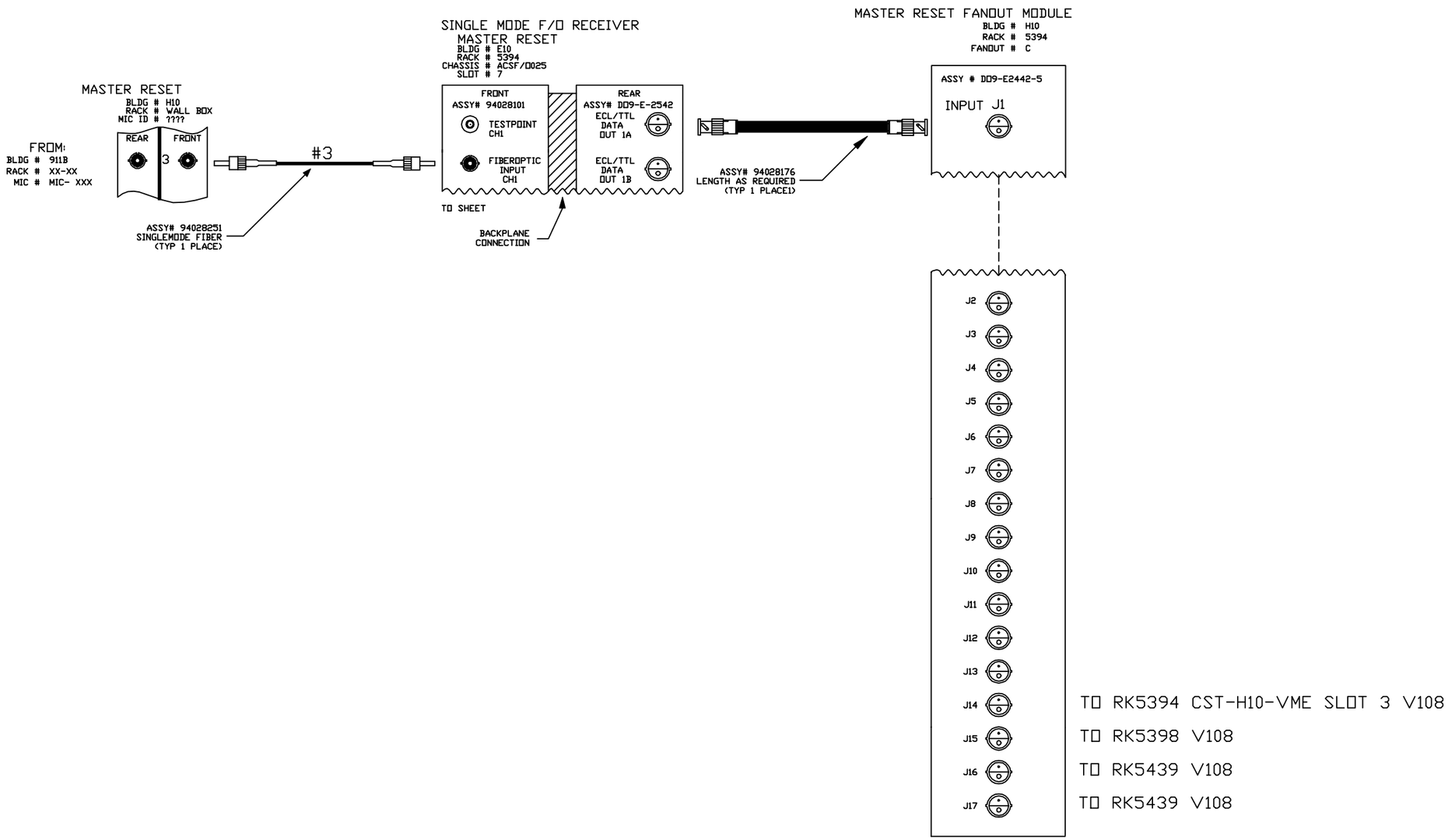
DRAWING NUMBER

REV. A

MATERIAL: ——— SCALE: NA WEIGHT: – SHEET 15

*AUTOCAD

CAD, CONTROLS 1/29/01 11:37 AM h10reset.dwg



FILE "H10RESET.DWG"

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO.,SPL NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE
± .5°

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3		DATE
DRAWN BY	VENEGAS	12/19/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973

AGS CONTROLS WIRING DIAGRAM

H10

MASTER RESET

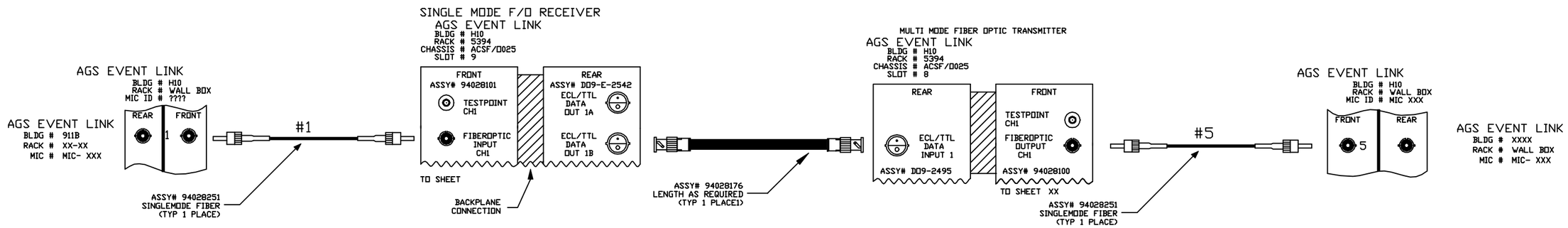
SIZE D | DRAWING NUMBER D09-E-RD2857 | REV. A

MATERIAL: ——— SCALE: NA WEIGHT: – SHEET 16

*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

CAD, CONTROLS 1/29/01 11:32 AM h10evrpt.dwg



FILE "H10EVRPT.DWG"

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO.,SPEC. NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE ± .5°

OUTSTANDING ECN

NA FINISH

BREAK SHARP EDGES MAX. XX MIN. XX

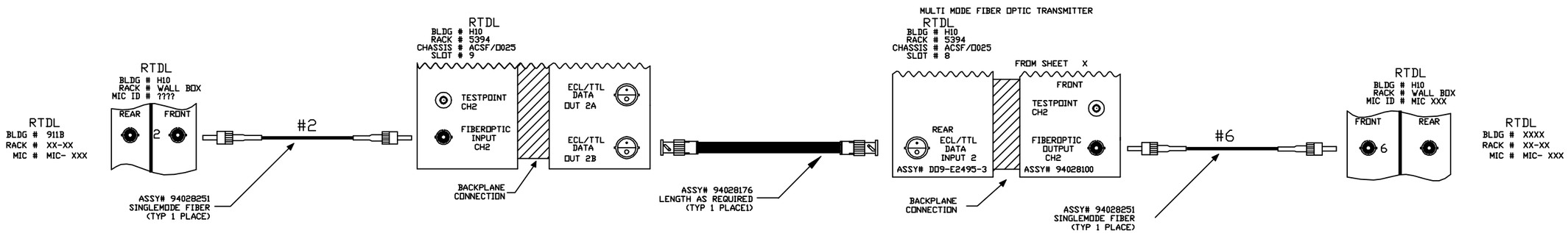
Q.A. CATEGORY A-3		DATE	BROOKHAVEN NATIONAL LABORATORY ASSOCIATED UNIVERSITIES, INC. UPTON, N.Y. 11973
DRAWN BY	VENEGAS	12/19/97	
CHECKED BY			AGS CONTROLS WIRING DIAGRAM
DESIGN APPROVAL			H10
ENGINEER APPROVAL			AGS EVENT LINK RETRANSMIT
SUPVR. APPROVAL			SIZE D — D09-E-RD2858 — REV. A
NEXT ASSEMBLY			DRAWING NUMBER

MATERIAL: ——— SCALE: NA WEIGHT: – SHEET 17

*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

CAD, CONTROLS 1/29/01 11:40 AM h10rtrpt.dwg



FILE "H10RTRPT.DWG"

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO./DWG. NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE
± .5°

FINISH: NA

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3		DATE
DRAWN BY	VENEGAS	12/19/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973

AGS CONTROLS WIRING DIAGRAM

H10

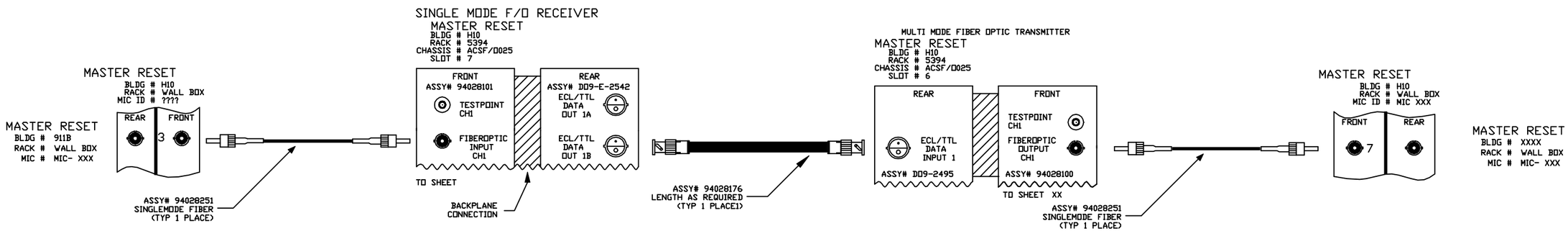
RTDL RETRANSMIT

SIZE D | DRAWING NUMBER D09-E-RD2859 | REV. A

MATERIAL: ——— | SCALE: NA | WEIGHT: – | SHEET 18

*AUTOCAD

CAD, CONTROLS 1/29/01 11:36 AM h10rerpt.dwg



FILE "H10RERPT.DWG"

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO.,DWG NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE
± .5°

NA FINISH — BREAK SHARP EDGES — MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3		DATE
DRAWN BY	VENEGAS	12/31/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973

AGS CONTROLS WIRING DIAGRAM

H10

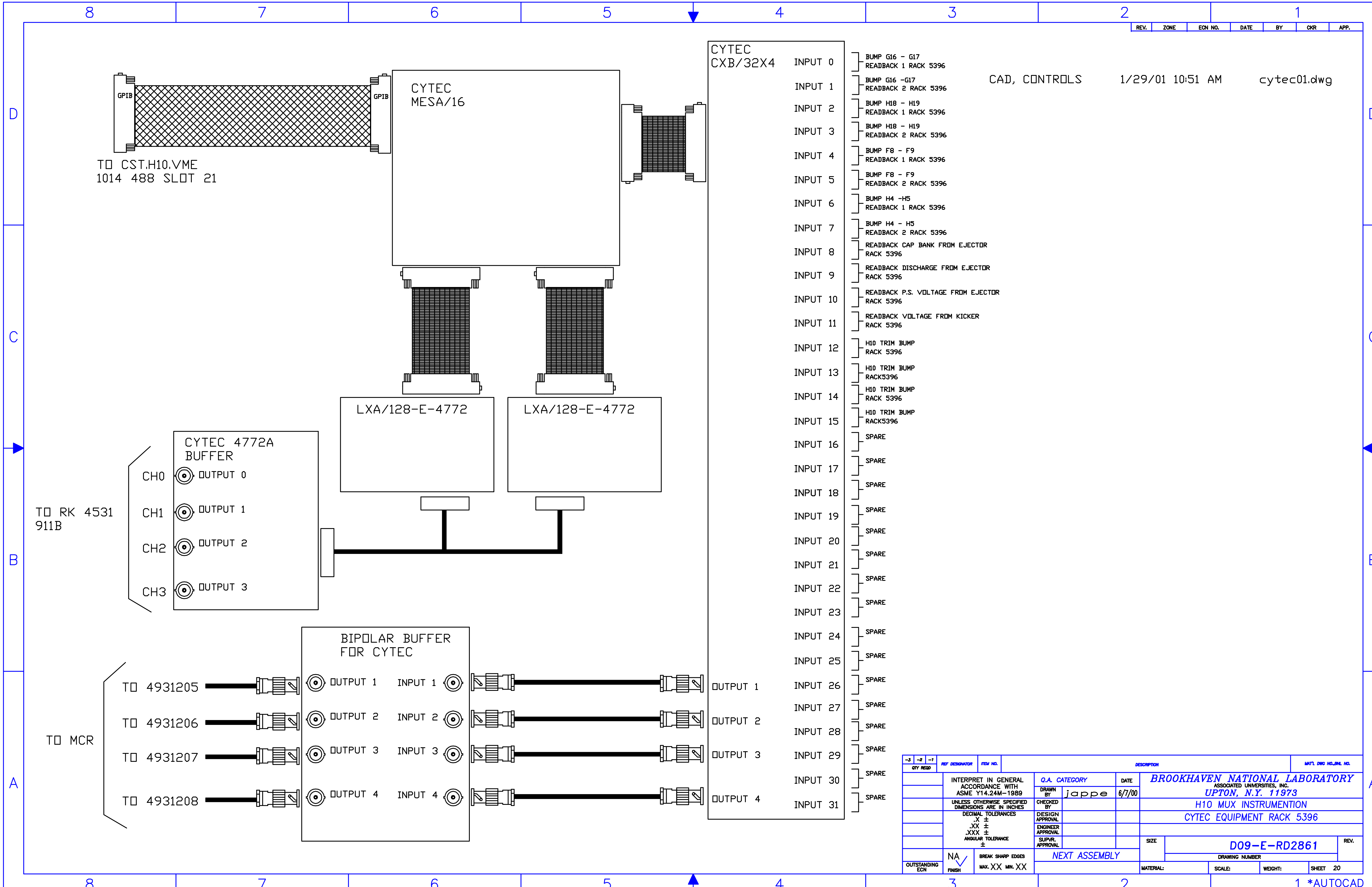
RESET RETRANSMIT

SIZE D — D09-E-RD2860 — REV. A

DRAWING NUMBER

MATERIAL: ——— SCALE: NA WEIGHT: – SHEET 19

*AUTOCAD


8 7 6 5 4 3 2 1
D C B A
REV. ZONE ECN NO. DATE BY CKR APP.
CAD, CONTROLS 1/29/01 10:51 AM cytec01.dwg
GPIB
GPIB
TO CST.H10.VME
1014 488 SLOT 21
CYTEC
MESA/16
CYTEC
CXB/32X4
INPUT 0
BUMP G16 - G17
READBACK 1 RACK 5396
INPUT 1
BUMP G16 -G17
READBACK 2 RACK 5396
INPUT 2
BUMP H18 - H19
READBACK 1 RACK 5396
INPUT 3
BUMP H18 - H19
READBACK 2 RACK 5396
INPUT 4
BUMP F8 - F9
READBACK 1 RACK 5396
INPUT 5
BUMP F8 - F9
READBACK 2 RACK 5396
INPUT 6
BUMP H4 -H5
READBACK 1 RACK 5396
INPUT 7
BUMP H4 - H5
READBACK 2 RACK 5396
INPUT 8
READBACK CAP BANK FROM EJECTOR
RACK 5396
INPUT 9
READBACK DISCHARGE FROM EJECTOR
RACK 5396
INPUT 10
READBACK P.S. VOLTAGE FROM EJECTOR
RACK 5396
INPUT 11
READBACK VOLTAGE FROM KICKER
RACK 5396
INPUT 12
H10 TRIM BUMP
RACK 5396
INPUT 13
H10 TRIM BUMP
RACK5396
INPUT 14
H10 TRIM BUMP
RACK 5396
INPUT 15
H10 TRIM BUMP
RACK5396
INPUT 16
SPARE
INPUT 17
SPARE
INPUT 18
SPARE
INPUT 19
SPARE
INPUT 20
SPARE
INPUT 21
SPARE
INPUT 22
SPARE
INPUT 23
SPARE
INPUT 24
SPARE
INPUT 25
SPARE
INPUT 26
SPARE
INPUT 27
SPARE
INPUT 28
SPARE
INPUT 29
SPARE
INPUT 30
SPARE
INPUT 31
SPARE
OUTPUT 1
OUTPUT 2
OUTPUT 3
OUTPUT 4
LXA/128-E-4772
LXA/128-E-4772
CYTEC 4772A
BUFFER
TO RK 4531
911B
CH0
OUTPUT 0
CH1
OUTPUT 1
CH2
OUTPUT 2
CH3
OUTPUT 3
BIPOLAR BUFFER
FOR CYTEC
TO MCR
TO 4931205
OUTPUT 1
INPUT 1
TO 4931206
OUTPUT 2
INPUT 2
TO 4931207
OUTPUT 3
INPUT 3
TO 4931208
OUTPUT 4
INPUT 4
-3 -2 -1
QTY REQD
REF DESIGNATOR
ITEM NO.
DESCRIPTION
MAT'L DWG NO.,BNL NO.
INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
DECIMAL TOLERANCES
.X ±
.XX ±
.XXX ±
ANGULAR TOLERANCE
±
Q.A. CATEGORY
DATE
DRAWN BY jappe 6/7/00
CHECKED BY
DESIGN APPROVAL
ENGINEER APPROVAL
SUPVR. APPROVAL
BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973
H10 MUX INSTRUMENTION
CYTEC EQUIPMENT RACK 5396
SIZE
D09-E-RD2861
DRAWING NUMBER
REV.
OUTSTANDING ECN
NA
FINISH
BREAK SHARP EDGES
MAX. XX MIN. XX
NEXT ASSEMBLY
MATERIAL:
SCALE:
WEIGHT:
SHEET 20
*AUTOCAD