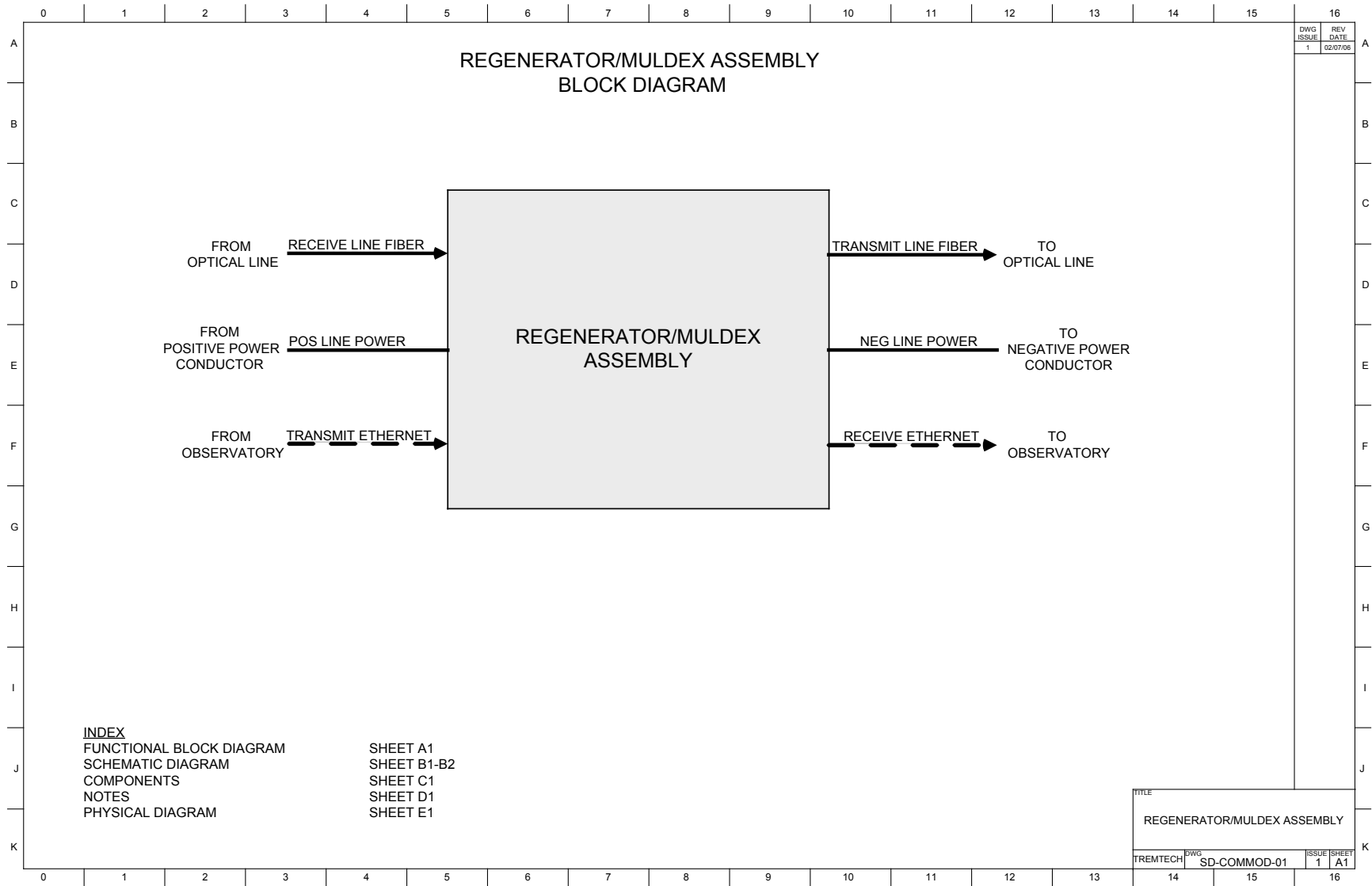
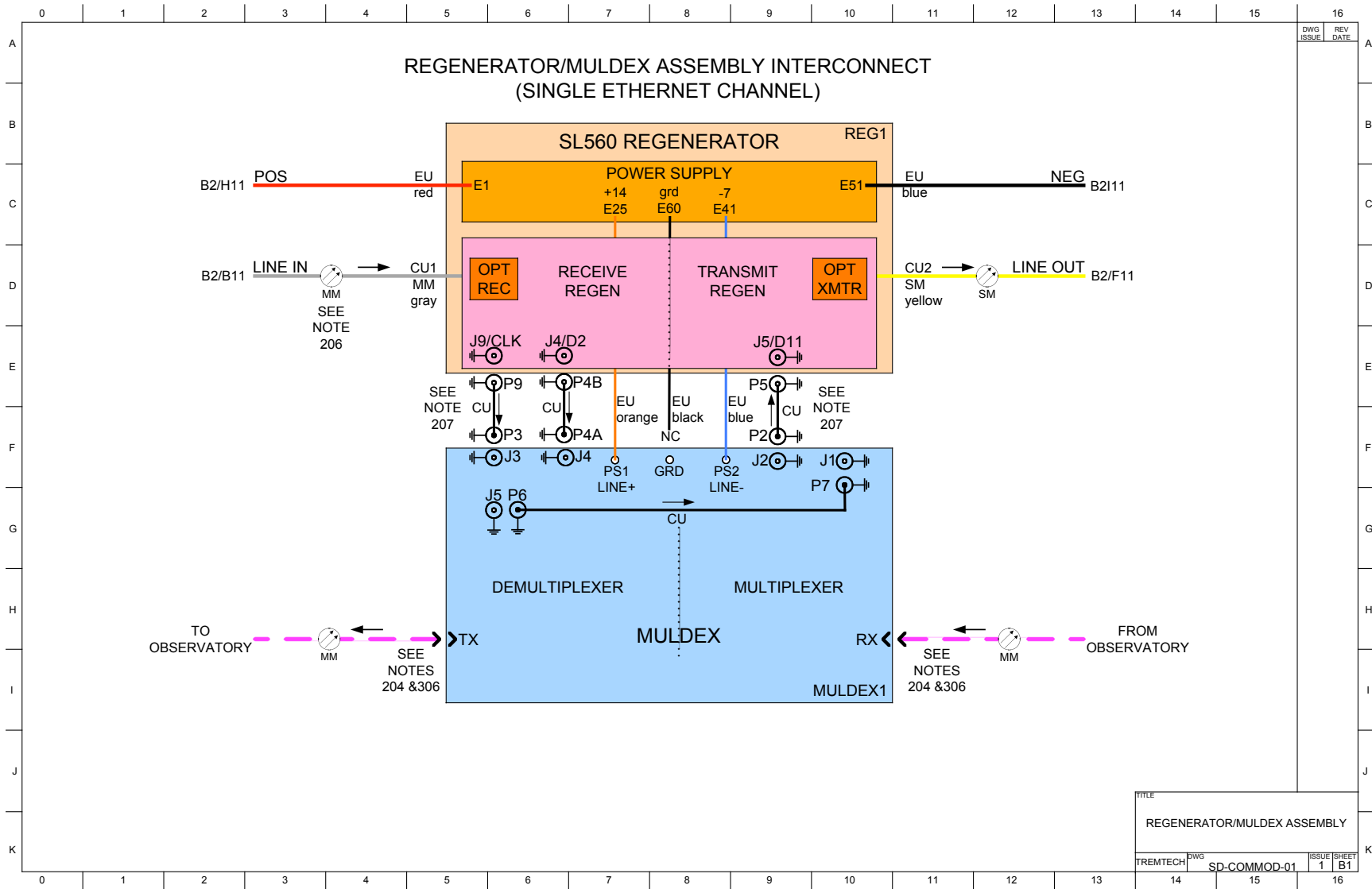


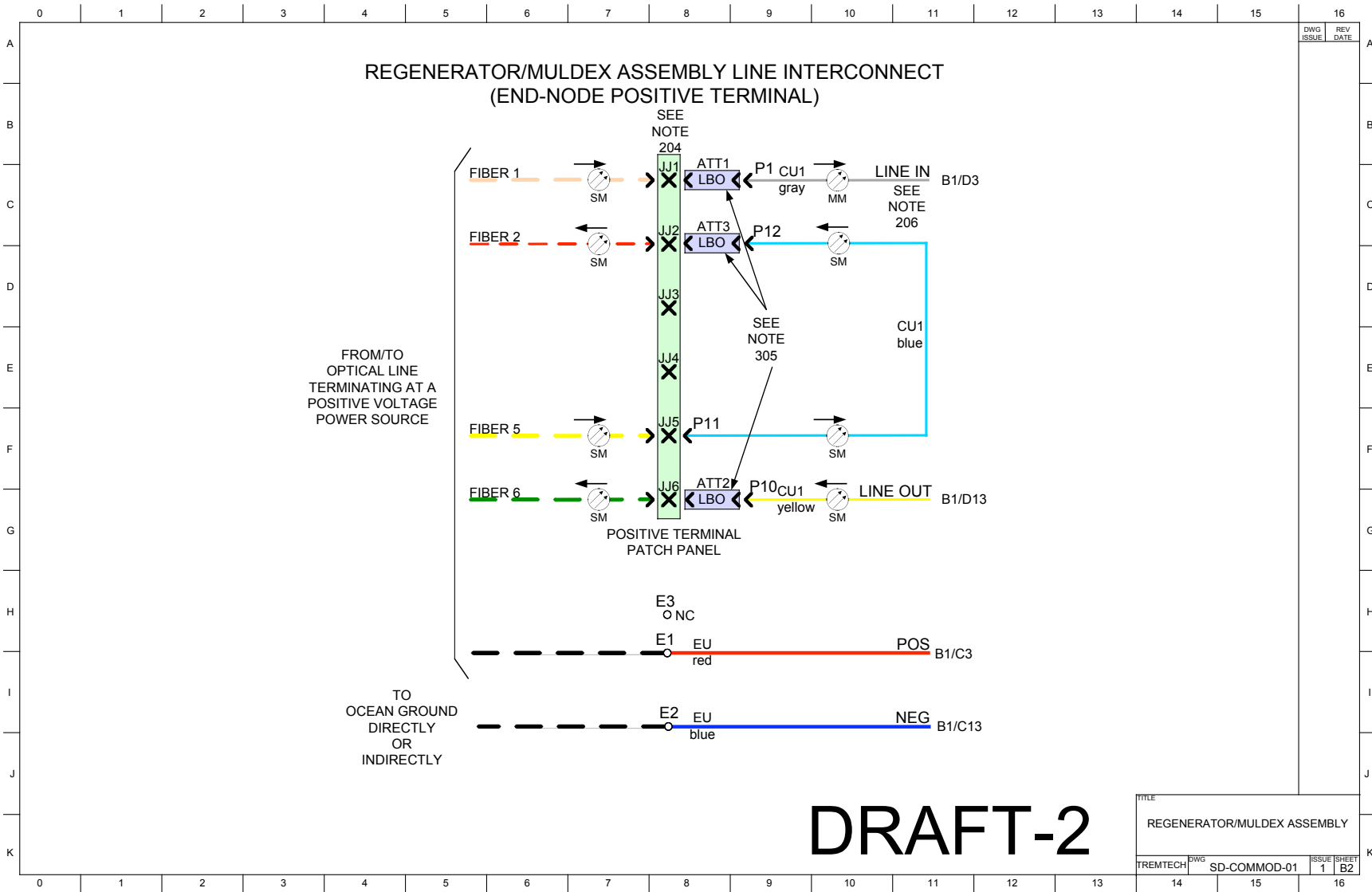
ATTACHMENT C: REGENERATOR/MULDEX



ATTACHMENT C: REGENERATOR/MULDEX



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	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	REGENERATOR/MULDEX ASSEMBLY (COMPONENTS)																A
B																	B
C																	C
D																	D
E																	E
F																	F
G																	G
H																	H
I																	I
J																	J
K																	K

COAXIAL CONNECTOR (PLUG):			MULDEX:			REGENERATOR:		
<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>	<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>	<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
P3	B1/E6	8589-0837, SPC (4.4 INCHES)	MULDEX1	B1/I10	1CHMULDEX	REG1	B1/B10	SL560 APD, AT&T
P9	B1/D6							
P4A	B1/E7							
P4B	B1/D7	8589-0837, SPC (11.4 INCHES)						
P2	B1/E9							
P5	B1/D9	8589-0837, SPC (10-12 INCHES)						
P6	B1/G6							
P7	B1/G9	8589-0837, SPC (3-5 INCHES)						

LINE BUILD OUT (LBO) (SEE NOTE 305):		
<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
ATT1	B2/C8	AT-ST-U-05-Y (5 dB) FIBER SOLUTIONS, INC
ATT2	B2/D7	AT-ST-U-12-Y (12 dB) FIBER SOLUTIONS, INC
ATT3	B2/G9	AT-ST-U-00-Y (0 dB) FIBER SOLUTIONS, INC

OPTICAL CONNECTOR (PLUG):		
<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
P1	B2/C9	953-101-5006, AMPHENOL ST connector (attach to CU1 gray MM regenerator receive fiber cable)
P10	B2/G9	953-101-5006, AMPHENOL ST connector (attach to CU2 yellow SM regenerator transmit fiber cable)
P11	B2/F8	AAMAM-AT0001; 3M, p/o EU2 blue fiber SM ST-cable assembly (1-meter)
P12	B2/C9	

TITLE			
REGENERATOR/MULDEX ASSEMBLY			
TREMTECH	DWG SD-COMMOD-01	ISSUE 1	SHEET C1

ATTACHMENT C: REGENERATOR/MULDEX

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
A	REGENERATOR/MULDEX ASSEMBLY																	A
	(NOTES)																	
B	CIRCUIT NOTES: 101. OPERATING VOLTAGE RANGE: 23 VDC DROP FOR 1.2 TO 1.8 AMPERES (1.6 AMPERES IS THE NOMINAL OPERATING CURRENT). 102. REGENERATOR OPTICAL INPUT POWER: PIN RECEIVER: -14 TO -31 DBM APD RECEIVER: -21 TO -36 DBM (SEE NOTE 305) 103. ETHERNET OUTPUT SIGNAL LEVEL: -19 BOL (-20 EOL) TO -14 DBM; ETHERNET INPUT SIGNAL LEVEL: -14 DBM MAX; -30 MIN (SEE NOTE 306) 104. OPERATING TEMPERATURE RANGE: 0 TO + 45 DEGREES-C (EXPECTED TO BE IN THE +3 TO +10 DEGREE-C RANGE AT OCEAN BOTTOM APPLICATIONS).					EQUIPMENT NOTES: 101. WIRING SHALL BE AS FOLLOWS CU XXXXXX COAX CABLE EQUIPPED WITH RIGHT ANGLE SMA CONNECTORS CU1 50/125 3MM FIBER WITH COLORED JACKETS FIBER WITH COLORED AS INDICATED EU1 1015/1230 180 GAUGE WIRE WITH COLORED JACKETS AS INDICATED 202. OPTICAL FIBERS EQUIPPED WITH ST CONNECTORS ATTACHED TO THE REGENERATOR ARE NOMINALLY 2-METERS IN LENGTH. 203. THE P9/P10 COAXIAL CABLE JUMPER IS APPLIED TO THE MULDEX JACKS J5/J1 DURING THE REGENERATOR/MULDEX ASSEMBLY. 204. ALL FIBER OR WIRE CONNECTIONS SHOWN WITH DASHED LINES, THE OPTICAL PATCH PANEL AND THE LINE ELECTRICAL CONNECTING TERMINALS ARE NOT PART OF THE REGENERATOR/MULDEX ASSEMBLY. 205. REGENERATOR/MULDEX ASSEMBLY SHOULD BE MOUNTED TO ALLOW VERTICAL AIR FLOW FOR THE MULDEX ICS.					INFORMATION NOTES: 301. UNLESS OTHERWISE SPECIFIED: RESISTANCE VALUES ARE IN OHMS; CAPACITANCE VALUES ARE IN MICROFARADS; INDUCTANCE VALUES ARE IN MILLIHENRIES; VALUES PRECEDED BY + OR - ARE IN VOLTS. 302. FEATURE OR OPTION: 303. RECORD OF CHANGES: 304. THE MINIMUM INPUT POWER LEVELS INTO THE REGENERATOR HAVE 3 DB OF MARGIN TO A 10E-9 BIT ERROR RATE. THIS MARGIN SHOULD BE RESERVED FOR UNKNOWNNS AT THIS TIME. 305. ATT1 IS USED TO INSURE THAT THE MAXIMUM INPUT POWER LEVEL TO THE REGENERATOR IS KEPT BELOW -14 DBM FOR A PIN RECEIVER AND -21 DBM FOR AN APD RECIEVER. ATT2 IS USED TO INSURE THAT THE INPUT POWER LEVEL IS KEPT BELOW -19 DBM FOR A SL280 REPEATER; AND -14 OR -21 DBM INTO A SL560 REPEATER EQUIPPED WITH A PIN OR APD RECEIVER. ATT3 IS NORMALLY 0 DB FOR A MIDSPAN LOOP (P12 CONNECTED DIRECTLY TO THE PATCH PANEL. 306. THE MINIMUM INPUT POWER LEVELS INTO THE MULDEX HAVE A MINIMUM 3 DB OF MARGIN TO 2x10E-10 BIT ERROR RATE. THIS MARGIN SHOULD BE RESERVED FOR UNKNOWNNS AT THIS TIME.					B		
C																		C
D																		D
E																		E
F																		F
G																		G
H																		H
I																		I
J																		J
K	DRAFT-1													TITLE REGENERATOR/MULDEX ASSEMBLY TREMTECH DWG SD-COMMOD-01 ISSUE SHEET 1 D1				K
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	