AMATEUR RADIO CLUB OF COLUMBIA COUNTY, INC.

THE ARCCC, INC. WELCOMES YOU!

The meeting will begin at 7 PM

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GENERAL MEETING

MEETING #157

Tuesday, July 1, 2025

7 PM

AMATEUR RADIO CLUB

K4KNS

COLUMBIA COUNTY, GA

INVOCATION

MEETING AGENDA

- Welcome & Introductions
- Presentation: DCC – Digital Command & Ctrl – Rick Bell (WD4KQG)
- Membership Applications
- Monthly Reports
- Upcoming Events
- Business Items
- Committee Updates
- Amateur Radio Club of Augusta
- North Augusta Belvedere Radio Club
- East Central/Columbia County ARES
- AmRRON
- Review Motions and Assignments
- Adjourn

SWAP TABLE

Now at
https://arcccinc.groups.io/g/swapsellortrade/topics

Welcome and Introductions

- Please Sign In on the Attendance Log
  - Please PRINT Legibly

- Introductions
  - QUICKLY Go Around the Room and Provide Your Name and Call Sign

Presentation
DCC – Digital Command & Ctrl

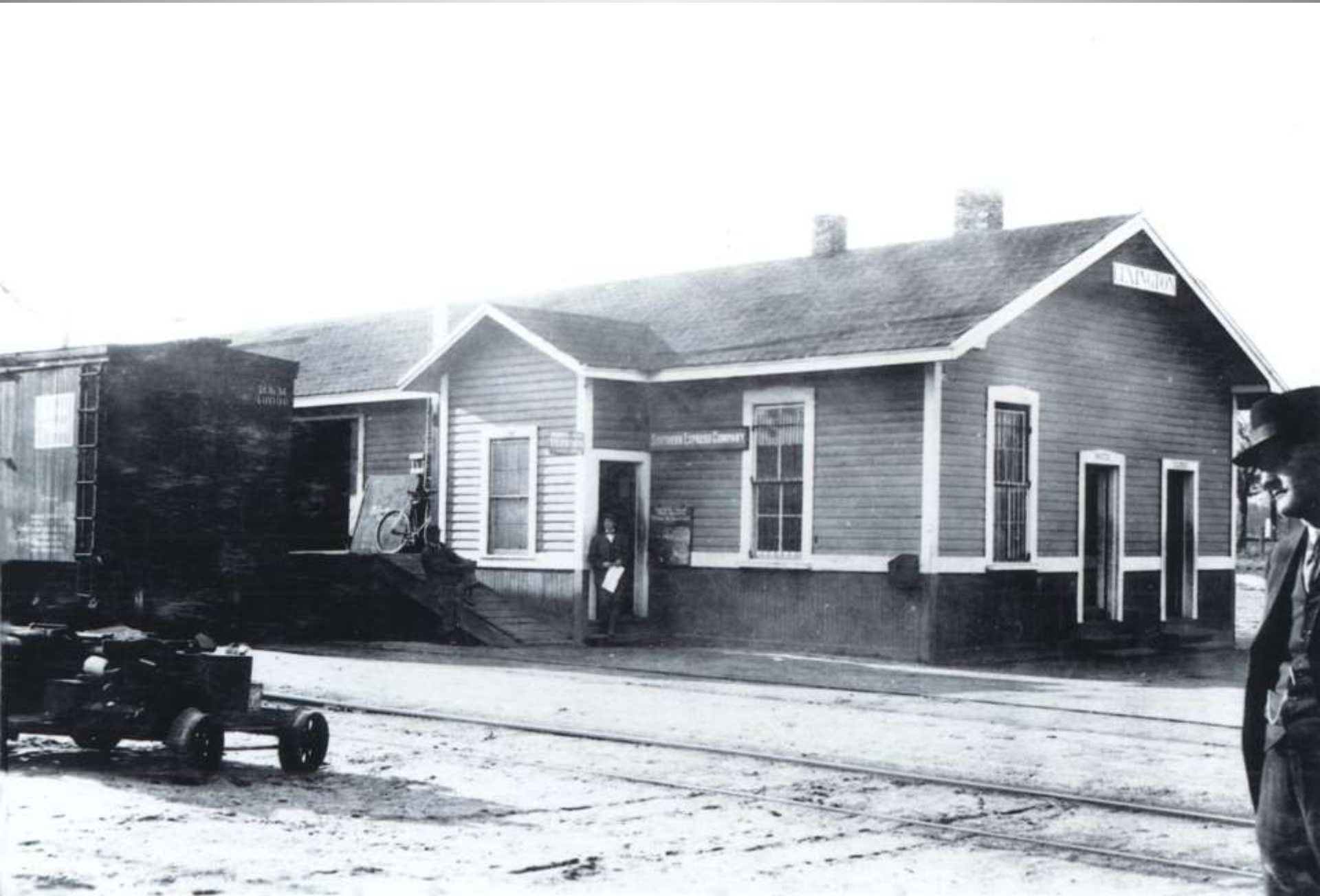
Rick Bell (WD4KQG)

DCC

Digital Command Control

And how I found out about
Prototype Modeling

Lexington, SC c 1903



(STA 238-PL 4G25-3)(4 JUN 44)(41-31326 TYPE-A-35B-1-V
CRASH LANDING

25

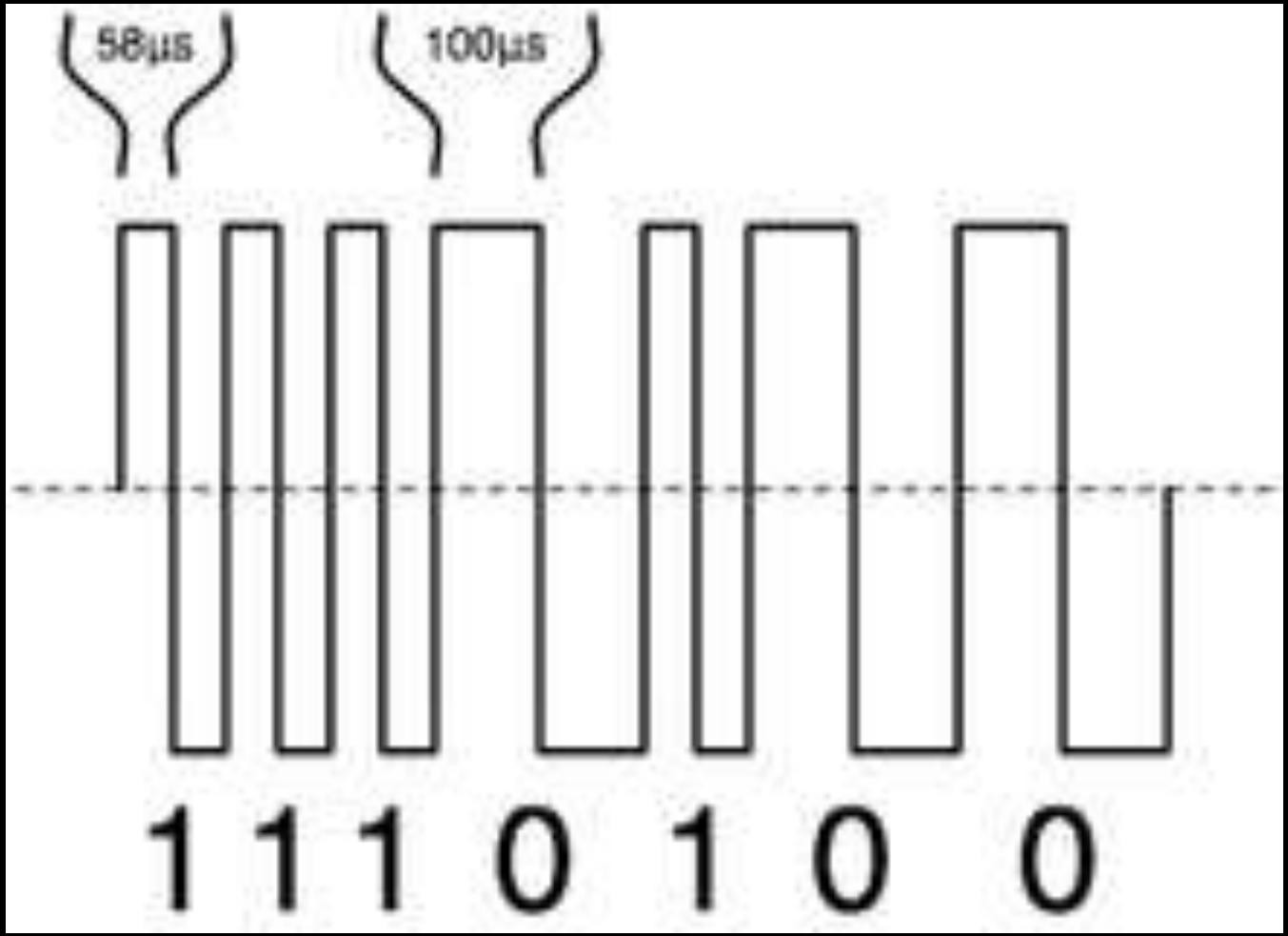
ON
C.W. OSC.
CRYSTAL
OUT
IN
6.0-9.5
MC.
OFF
AVC
MVC
BAND SWITCH
TUNING
INCREASE VOL.
SIGNAL CORPS
RADIO RECEIVER BC-348-R
28 VOLTS D.C.
A
G

BC - 348

Valerie

4219

SOUTHERN
3251
3251
3251R
SOUTHERN
95262
BALLAST SERVICE ONLY


58µs
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1 1 1 0 1 0 0

DT602
E
D
F
LN
Trk
0 1 2 3 4 5 6 7 8 9
Right Throttle Active
sp 0 %
R
0003
Left : 0002
<Rev sp0 %
Press Loco Key then number
Fn+00
L<=>R
Info+
A
B
C
S
1
2
3
4
5
6
7
8
9
0
X

Tsunami2

Sound Selections for Tsunami2 for EMD Diesel Prototypes

Part Numbers: 885001, 885005, 885009, 885013, 885017, 885026, 885809, 885813, 885840

CV 120 Airhorns	CV Value	CV 120 Airhorns	CV Value
Nathan K3LA	0	Leslie A200/S3L Combo	22
Nathan K3HA	1	Leslie RS3L	23
Nathan K3L	2	Leslie RS5T	24
Nathan K5HL	3	Leslie S2M	25
Nathan K5LA (1)	4	Leslie S2M/A200 Combo	26
Nathan K5LA (2)	5	Leslie S2M/S3L Combo	27
Nathan K5LA (3)	6	Leslie S3L	28
Nathan K5LH	7	Leslie S5T	29
Nathan K5LLA	8	Leslie S5T/A200 Combo	30
Nathan M3	9	Wabco A2	31
Nathan M5	10	Wabco AA2	32
Nathan P3	11	Wabco E2 (1)	33
Nathan P5 Early	12	Wabco E2 (2)	34
Nathan P5 Late	13	Wabco B Series 2-Chime	35
Nathan P5A	14	Wabco 10" Air Whistle	36
Nathan P5A 3rd Generation	15	Hancock 4700 Air Whistle	37
Holden M3H	16	Rio Grande Southern Galloping Goose	38
Holden K5H	17	"Aoogah" Klaxon Horn	39
Leslie A125	18	Rail Car Horn	40
Leslie A125/200 Combo	19	Canadian Centennial Horn ("Oh Canada")	41
Leslie A125-3E	20	Leslie S3LR	42*
Leslie A200	21	Leslie RS3K	43*
CV 122 Bells	**CV Value**	**CV 122 Bells**	**CV Value**
ALCO (1)	0-3	Fairbanks-Morse (Brass)	28-31
ALCO (2)	4-7	GE FDL	32-35
ALCO (3)	8-11	Graham White Electronic Bell	36
EMD (1)	12-15	Western Cullen Hayes Gong Bell	37-40
EMD (2)	16-19	Rio Grande Southern Galloping Goose	41-44
EMD (3)	20-23	Canadian Brass Bell	45-48
EMD (4)	24-27	Prime Electronic Bell	49*
CV 123 Prime Movers	**CV Value**	**CV 123 Prime Movers**	**CV Value**
EMD 567 No Transition	0	EMD 645 Turbo	5
EMD 567 Non-Turbo	1	EMD Dual 645 Turbo	6
EMD 567 Turbo	2	EMD 710 Turbo	7
EMD Dual 567	3	EMD 710 G3C-T2	8
EMD 645 Non-Turbo	4		
CV 124 Air Compressors	**CV Value**	**CV 124 Air Compressors**	**CV Value**
Engine Driven	0	GE "GEVO" Series (motor driven)	2
GE "Whooping" (motor driven)	1	EMD Shaft Driven	3
CV 125 Poppet Valve	**CV Value**	**CV 125 Poppet Valve**	**CV Value**
Poppet Valve	0	Electronic Air Dryer	1*

***Note:** Poppet valve defaults vary based on software release.
Sound selections marked with an * are available in Tsunami2 software Version 1.2 decoders that started shipping 10/17. The new software version is indicated with a V1.2 on the lower right, back corner of the package.

Default Values

Tsunami2

Sound Selections for Tsunami2 for EMD-2 Diesel

Tsunami2 EMD-2 Part Numbers: 885021, 885022, 885023, 885024, 885025, 885030, 885823, 885824

CV 120 Airhorns	CV Value	CV 120 Airhorns	CV Value
Nathan K3LA	0	Leslie A200/S3L Combo	22
Nathan K3HA	1	Leslie RS3L	23
Nathan K3L	2	Leslie RS5T	24
Nathan K5HL	3	Leslie S2M	25
Nathan K5LA (1)	4	Leslie S2M/A200 Combo	26
Nathan K5LA (2)	5	Leslie S2M/S3L Combo	27
Nathan K5LA (3)	6	Leslie S3L	28
Nathan K5LH	7	Leslie S5T	29
Nathan K5LLA	8	Leslie S5T/A200 Combo	30
Nathan M3	9	Wabco A2	31
Nathan M5	10	Wabco AA2	32
Nathan P3	11	Wabco E2 (1)	33
Nathan P5 Early	12	Wabco E2 (2)	34
Nathan P5 Late	13	Wabco B Series 2-Chime	35
Nathan P5A	14	Wabco 10" Air Whistle	36
Nathan P5A 3rd Generation	15	Hancock 4700 Air Whistle	37
Holden M3H	16	Rio Grande Southern Galloping Goose	38
Holden K5H	17	"Aoogah" Klaxon Horn	39
Leslie A125	18	Rail Car Horn	40
Leslie A125/200 Combo	19	Canadian Centennial Horn ("Oh Canada")	41
Leslie A125-3E	20	Leslie S3LR	42
Leslie A200	21	Leslie RS3K	43
CV 122 Bells	**CV Value**	**CV 122 Bells**	**CV Value**
ALCO (1)	0-3	Fairbanks-Morse (Brass)	28-31
ALCO (2)	4-7	GE FDL	32-35
ALCO (3)	8-11	Graham White Electronic Bell	36
EMD (1)	12-15	Western Cullen Hayes Gong Bell	37-40
EMD (2)	16-19	Rio Grande Southern Galloping Goose	41-44
EMD (3)	20-23	Canadian Brass Bell	45-48
EMD (4)	24-27	Prime Electronic Bell	49*
CV 123 Prime Movers	**CV Value**	**CV 123 Prime Movers**	**CV Value**
EMD 567 12 Cylinder No Transition	0	EMD 645F 16 Cylinder Turbo	4
EMD 567C 16 Cylinder Non-Turbo	1	EMD 645E 20 Cylinder Turbo	5
EMD 645E 12 Cylinder Non-Turbo	2	EMD 710G 12 Cylinder	6
EMD 645E 12 Cylinder Turbo	3	EMD 710G 16 Cylinder	7
CV 124 Air Compressors	**CV Value**	**CV 124 Air Compressors**	**CV Value**
Engine Driven	0	GE "GEVO" Series (motor driven)	2
GE "Whooping" (motor driven)	1	EMD Shaft Driven	3
CV 125 Poppet Valve	**CV Value**	**CV 125 Poppet Valve**	**CV Value**
Poppet Valve	0	Electronic Air Dryer	1

Default Values

Tsunami2

Sound Selections for Tsunami2 for ALCO Diesel Prototypes

Part Numbers: 885003, 885007, 885011, 885015, 885019, 885028, 885815, 885811, 885815, 885842

CV 120 Airhorns	CV Value	CV 120 Airhorns	CV Value
Nathan K3LA	0	Leslie A200/S3L Combo	22
Nathan K3HA	1	Leslie RS3L	23
Nathan K3L	2	Leslie RS5T	24
Nathan K5HL	3	Leslie S2M	25
Nathan K5LA (1)	4	Leslie S2M/A200 Combo	26
Nathan K5LA (2)	5	Leslie S2M/S3L Combo	27
Nathan K5LA (3)	6	Leslie S3L	28
Nathan K5LH	7	Leslie S5T	29
Nathan K5LLA	8	Leslie S5T/A200 Combo	30
Nathan M3	9	Wabco A2	31
Nathan M5	10	Wabco AA2	32
Nathan P3	11	Wabco E2 (1)	33
Nathan P5 Early	12	Wabco E2 (2)	34
Nathan P5 Late	13	Wabco B Series 2-Chime	35
Nathan P5A	14	Wabco 10" Air Whistle	36
Nathan P5A 3rd Generation	15	Hancock 4700 Air Whistle	37
Holden M3H	16	Rio Grande Southern Galloping Goose	38
Holden K5H	17	"Aoogah" Klaxon Horn	39
Leslie A125	18	Rail Car Horn	40
Leslie A125/200 Combo	19	Canadian Centennial Horn ("Oh Canada")	41
Leslie A125-3E	20	Leslie S3LR	42*
Leslie A200	21	Leslie RS3K	43*
CV 122 Bells	**CV Value**	**CV 122 Bells**	**CV Value**
ALCO (1)	0-3	Fairbanks-Morse (Brass)	28-31
ALCO (2)	4-7	GE FDL	32-35
ALCO (3)	8-11	Graham White Electronic Bell	36
EMD (1)	12-15	Western Cullen Hayes Gong Bell	37-40
EMD (2)	16-19	Rio Grande Southern Galloping Goose	41-44
EMD (3)	20-23	Canadian Brass Bell	45-48
EMD (4)	24-27	Prime Electronic Bell	49*
CV 123 Prime Movers	**CV Value**	**CV 123 Prime Movers**	**CV Value**
ALCO 539 Turbo	0	ALCO 251C v12 Super Charged	5
ALCO 539 Non-Turbo	1	ALCO 251C v12 Century Series	6
ALCO 244 Turbo	2	ALCO 251C v16	7
ALCO 251A i6	3	ALCO 251C v16 Super Charged	8
ALCO 251C v12	4		
CV 124 Air Compressors	**CV Value**	**CV 124 Air Compressors**	**CV Value**
Engine Driven	0	GE "GEVO" Series (motor driven)	2
GE "Whooping" (motor driven)	1	EMD Shaft Driven	3
CV 125 Poppet Valve	**CV Value**	**CV 125 Poppet Valve**	**CV Value**
Poppet Valve	0	Electronic Air Dryer	1*

***Note:** Poppet valve defaults vary based on software release.
Sound selections marked with an * are available in Tsunami2 software Version 1.2 decoders that started shipping 10/17. The new software version is indicated with a V1.2 on the lower right, back corner of the package.

Default Values

Tsunami2™ Digital Sound Decoder

Diesel Technical Reference

Software Release 1.2**

** Previous software versions included

Rev. E 03/09/20

Contents

Primary CVs 6

CV 1: Primary Address 6
CV 2: Vstart 7
CV 3: Baseline Acceleration Rate 8
CV 4: Baseline Deceleration Rate 9
CV 5: Vhigh 10
CV 6: Vmid 11
CV 7: Manufacturer Version (Read-Only) 12
CV 8: Manufacturer ID 13
CV 10: EMF Feedback Cutout 14
CV 11: Packet Time-Out Value 15
CV 12: Alternate Power Source 16
CV 13: Analog Mode Function Enable 1 17
CV 14: Analog Mode Function Enable 2 18
CV 15: CV Unlock Code 19
CV 16: CV Lock ID 20
CVs 17-18: Extended Address 21
CV 19: Consist Address 22
CV 21: Consist Function Enable 1 23
CV 22: Consist Function Enable 2 24
CV 23: Consist Acceleration Rate 25
CV 24: Consist Deceleration Rate 26
CV 25: Speed Table Enable 27
CV 29: Configuration Data 1 28
CV 30: Error Information 29
CV 31: CV Index 1 30
CV 32: CV Index 2 31
CVs 33-46: Function Status CVs 32
CV 33: F0(f) Output Location 33
CV 34: F0(r) Output Location 34
CV 35: F1 Output Location 35
CV 36: F2 Output Location 36
CV 37: F3 Output Location 37
CV 38: F4 Output Location 38
CV 39: F5 Output Location 39
CV 40: F6 Output Location 40
CV 41: F7 Output Location 41
CV 42: F8 Output Location 42
CV 43: F9 Output Location 43
CV 44: F10 Output Location 44
CV 45: F11 Output Location 45
CV 46: F12 Output Location 46

Lighting Effect CVs 47

CVs 49-56: Hyperlight Effect Select 47
CV 57: Forward Direction Enable 51
CV 58: Reverse Direction Enable 52
CV 59: Hyperlight Flash Rate 53
CV 60: Grade-Crossing Hold Time 54
CV 61: Brightness Register 1 55
CV 62: Brightness Register 2 56
CV 63: Dimmer Level 57
CV 64: Master Brightness 58

Speed Table CVs **59**
CV 66: Forward Motor Trim 59
CVs 67-94: Custom Speed Table 60
CV 95: Reverse Motor Trim 61
User Information CVs **62**
CV 105: User Identifier 1 62
CV 106: User Identifier 2 63
Sound Control CVs **64**
CV 112: Sound Configuration 1 64
CV 113: Quiet Mode Time-Out Period 65
CV 114: Engine Exhaust Control 66
CV 116: Dynamic Brake Rate 68
CV 117: Independent Brake Rate 69
CV 118: Train Brake Rate 70
CV 119: Max Engine Recovery Speed 71
CV 120: Airhorn Select 72
CV 121: Alternate Airhorn Select 73
CV 122: Bell Select 74
CV 123: Prime Mover Select 75
CV 124: Air Compressor Select 76
CV 125: Poppet Valve Select 77
CV 126: Coupler Select 78
CV 128: Master Volume 79
CVs 129-160: Primary Mixer Volume Levels 80
CVs 161-192: Reverb Mixer 82
CV 193: Auto-Bell On Set Point 84
CV 194: Auto-Bell On Time 85
CV 195: Coach Door Count 86
CV 196: Brake Sensitivity 87
CV 197: Analog Mode Auto-Sound Enable 88
CV 198: DCC Mode Auto-Sound Enable 89
CV 200: Poppet Valve Release Rate 90
CVs 201-208: Fireman Ed Probability CVs 91
Advanced Motor Control CVs **92**
CV 209: PID Kp Parameter 92
CV 210: PID Ki Parameter 93
CV 211: Low-Speed Compensation 94
CV 212: BEMF Feedback Intensity 95
CV 213: BEMF Sample Period 96
CV 214: BEMF Sample Aperture Time 97
CV 215: BEMF Reference Voltage 98
CV 216: Motor Speed Step Deadband 99
CV 217: Motor Control Register 100
CV 218: Analog Mode Motor Start Voltage 101
CV 219: Analog Mode Engine Start Voltage 102
CV 220: Constant Brake Distance 103
Audio Control CVs **104**
CV 223: Prime Mover Pitch Shift 104
CV 224: High-Pass Filter Cutoff Frequency 105
CV 225: Equalizer Control Register 106
CVs 226-232: Cut/Boost Controls 107
CV 233: Reverb Control Register 108
CV 234: Reverb Output Level 109

CV 235: Reverb Delay Time 110
CV 236: Reverb Feedback Gain Level 111

Analog Function Enable CVs 112

CV 241: Analog Mode Function Enable 3 112
CV 242: Analog Mode Function Enable 4 113
CV 243: Analog Mode Function Enable 5 114

Consist Function Enable CVs 115

CV 245: Consist Function Enable 3 115
CV 246: Consist Function Enable 4 116
CV 247: Consist Function Enable 5 117

Indexed CV Page 1 118

CVs 1.257-1.512: Extended Function Mapping CVs 118
CVs 1.257-1.384: Effect Map Registers 120
CVs 1.385-1.512: Effect Auxiliary Map Registers 122

Indexed CV Page 2 123

CVs 2.289-2.320: Alternate Mixer Volume Levels 123
CVs 2.503-2.512: DDE Control CVs 125
CV 2.503: DDE Load Offset 125
CV 2.504: DDE Load Slope 126
CV 2.507: DDE Prime Mover Low Volume Limit 127
CV 2.508: DDE Prime Mover High Volume Limit 128
CV 2.509: DDE Attack Time Constant 129
CV 2.510: DDE Release Time Constant 130
CV 2.511: DDE Throttle Sensitivity 131
CV 2.512: DDE Load Sensitivity 132

Indexed CV Page 3 133

CVs 3.257-3.258: Clickety-Clack Effect CVs 133
CV 3.257: Clickety-Clack Configuration 133
CV 3.258: Clickety-Clack Sound Scalar 134
CVs 3.270-3.273: Gas Turbine Electric (GTEL) CVs 135
CV 3.270: Turbine "Backfire" Configuration 135
CV 3.271: Turbine Start Speed Step 136
CV 3.272: Turbine Speed Step Limit 137
CV 3.273: Turbine Timeout 138

All Aboard!

Some CVs use individual bits to control multiple features. This allows up to 8 distinct features to be controlled by a single CV. As the bit variables can take on only one of two values (0 or 1), they are usually used to control features that are either OFF or ON (i.e., disabled or enabled).

Tip: *Think of bits as light switches to turn ON or OFF various features.*

Each bit (0-7) carries a "weight" within the structure of a CV. Beginning with a bit weight of 1 for bit 0 (located farthest to the right, as CVs are interpreted from right to left) and doubling in value for each successive bit (i.e., bit 0 = 1, bit 1 = 2, bit 2 = 4, bit 3 = 8, bit 4 = 16, bit 5 = 32, bit 6 = 64., and bit 7 = 128). The sum, or total, of these bit weights represents the value entered into the CV for programming.

Note: *An alternative method to using basic addition would be to compare the bit structure (1s and 0s) to the table located in Appendix A. In this example we would locate the binary value 00100010 and use the decimal or hex value found next to it when programming the CV.*

CV Programming Tool

To make the process of calculating CV values as easy as possible, we've included an interactive CV programming tool with this manual. This tool will calculate the value to be programmed into any CV based upon the individual bits that have been turned ON or OFF. We recommend using this tool along with the bit configuration charts found in the *Tsunami2 Diesel Technical Reference* as a guide for programming.

If viewing this document digitally (i.e. computer, tablet or smart phone) you may simply enter a "1" or "0" into any of the bit fields below. The CV value will automatically be calculated based on which bits are turned on.

If referencing this manual in print form, write the 1s and 0s in the bit boxes and use the associated bit weights as a way to manually calculate the value, similar to the example referenced below.

BIT POSITION	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	CV VALUE
ON/OFF	0	0	0	0	0	0	0	0	0
BIT WEIGHT	128	64	32	16	8	4	2	1	

CV 29: Configuration Data 1

Description

CV 29 contains miscellaneous configuration bits.

Bit 7							Bit 0
0	0	EAM	STE	0	APS	F0	DIR

DIR: Direction
0 = Normal direction
1 = Inverted direction

F0: F0 Location
0 = 14 speed-step mode enabled
1 = 28/128 speed-step mode enabled

APS: Alternate Power Source Enable
0 = NMRA-digital only
1 = Alternate power source enabled (CV 12)

STE: Speed Table Enable
0 = 3-point speed table enabled (CVs 2, 5 & 6)
1 = Linear/28-point speed table (CV 25)

EAM: Extended Address Mode Enable
0 = Primary address enabled (CV 1)
1 = Extended address enabled (CVs 17-18)

0: Reserved

Note: *Command stations that do not support the extended address can interfere with normal operation if bit 5 of CV 29 is programmed inadvertently. In this situation, connect the decoder to a programming track and set bit 5 of CV 29 to 0.*

Default Value: 2
Related CVs: CV 1 (Primary Address)
CV 2 (Vstart)
CV 5 (Vhigh)
CV 6 (Vmid)
CV 12 (Alternate Power Source)
CVs 17-18 (Extended Address)
CV 25 (Speed Table Enable)
CVs 67-94 (Custom Speed Table)

Example

Let's assume we would like to set CV 29 (Configuration Data 1) so that 28/128 speed-step mode and extended (long) addressing are enabled. We would use the following steps to calculate the value:

1. To configure these features we see that bit 1 (F0) and bit 5 (EAM) should both be ON (set to 1), with all other bits OFF (set to 0). The bits to be enabled are highlighted in the description.

Bit 7							Bit 0
		EAM	STE		APS	F0	DIR

DIR: Direction
- 0 = Normal direction
- 1 = Inverted direction

F0: F0 Location
- 0 = 14 speed-step mode enabled
- 1 = 28/128 speed-step mode enabled

APS: Alternate Power Source Enable
- 0 = NMRA-digital only
- 1 = Alternate power source enabled (CV 12)

STE: Speed Table Enable
- 0 = 3-point speed table enabled (CVs 2, 5 & 6)
- 1 = Linear/28-point speed table (CV 25)

EAM: Extended Address Mode Enable
- 0 = Primary address enabled (CV 1)
- 1 = Extended address enabled (CVs 17-18)

2. Write down the individual bit states (1 for ON and 0 for OFF) as shown below:

bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
0	0	1	0	0	0	1	0

3. Next, determine the weight for each enabled bit. For this example are weights are 2 and 32.

bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
0	0	1	0	0	0	1	0
128	64	32	16	8	4	2	1

4. Add all bit weights to obtain the value for the CV. Bit weights are only counted when the bit is ON (set to 1). If the bit is OFF (set to 0), do not add that bit weight to the total. Add 32 and 2 together to obtain the value of 34 for CV 29.

bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
0	0	1	0	0	0	1	0

0 + 0 + 32 + 0 + 0 + 0 + 2 + 0 = 34

5. Using your command station enter a value of 34 into CV 29 for programming.

Table A. Quick-Reference Table for CV 29 Values

Address Type	Use Speed Tables?	Analog Mode?	Speed Steps	Locomotive Direction	CV 29 Value
Primary (CV1)	No	No	14	Normal	0
Primary (CV1)	No	No	14	Reversed	1
Primary (CV1)	No	No	28/128	Normal	2
Primary (CV1)	No	No	28/128	Reversed	3
Primary (CV1)	No	Yes	14	Normal	4
Primary (CV1)	No	Yes	14	Reversed	5
Primary (CV1)	No	Yes	28/128	Normal	6
Primary (CV1)	No	Yes	28/128	Reversed	7
Primary (CV1)	Yes	No	14	Normal	16
Primary (CV1)	Yes	No	14	Reversed	17
Primary (CV1)	Yes	No	28/128	Normal	18
Primary (CV1)	Yes	No	28/128	Reversed	19
Primary (CV1)	Yes	Yes	14	Normal	20
Primary (CV1)	Yes	Yes	14	Reversed	21
Primary (CV1)	Yes	Yes	28/128	Normal	22
Primary (CV1)	Yes	Yes	28/128	Reversed	23
Extended (CV17:18)	No	No	14	Normal	32
Extended (CV17:18)	No	No	14	Reversed	33
Extended (CV17:18)	No	No	28/128	Normal	34
Extended (CV17:18)	No	No	28/128	Reversed	35
Extended (CV17:18)	No	Yes	14	Normal	36
Extended (CV17:18)	No	Yes	14	Reversed	37
Extended (CV17:18)	No	Yes	28/128	Normal	38
Extended (CV17:18)	No	Yes	28/128	Reversed	39
Extended (CV17:18)	Yes	No	14	Normal	48
Extended (CV17:18)	Yes	No	14	Reversed	49
Extended (CV17:18)	Yes	No	28/128	Normal	50
Extended (CV17:18)	Yes	No	28/128	Reversed	51
Extended (CV17:18)	Yes	Yes	14	Normal	52
Extended (CV17:18)	Yes	Yes	14	Reversed	53
Extended (CV17:18)	Yes	Yes	28/128	Normal	54
Extended (CV17:18)	Yes	Yes	28/128	Reversed	55

DecoderPro: All Entries

File Edit Settings Actions SPROG Programmer Window Help

New Loco | Identify | Help | Off | On Programming Track: SPROG Programmer | Mode: Direct Bit

ID	Icon	Decoder Model	Road Number	Road Name	Manufacturer	Model	Owner	Date Modified	Last Opera
GP7- RIGGS		ECO-PNP Diesel	106	ACL	ATLAS		SONNY RIGGS	Mar 24, 2021, ...	
GP7-WHITE		TSU-2200 EMD-2 Diesels	514	L&N	LIFE LIKE		JOSEPH WHITE	Oct 29, 2019, ...	
GP9 NEELY		TSU-4400 EMD Diesels	427	L&N	ATLAS O		STEVE NEELY	Mar 11, 2024, ...	
GP9 NEELY-1		TSU-4400 EMD Diesels	430	L&N	ATLAS O		STEVE NEELY	Mar 11, 2024, ...	
GP9-PERKINS		D13W	1926	SEABOARD	P2K LL		ANTHONY PERKINS	Jan 7, 2021, 1...	Jul 1, 2021
GP9-PERKINS-1		D13W	1923	SEABOARD	P2K LL		ANTHONY PERKINS	Jan 7, 2021, 2...	
GP9-SHIRLEY		DH126D	4727	N&W	ATHERN BB		HENRY SHIRLEY	Aug 26, 2019,...	
GP9-WHITE		TSU-2200 EMD-2 Diesels	514	L&N	LIFE LIKE		JOSEPH WHITE	Sep 12, 2019, ...	
GP30 BELL		TSU-2200 EMD Diesels	2590	SOUTHERN	P2K MILWAUKEE		Rick Bell	Oct 11, 2022, ...	
GP30- WHITE		TSU-PNP EMD Diesels	6939	B&O	LIFE LIKE		JOSEPH WHITE	Sep 18, 2019, ...	
GP35 STAPLES		TSU-4400 EMD Diesels	3007	WESTERN PACIFIC	ATLAS O		BRENAN STAPLES	Aug 30, 2021,...	
GP38 MACDONALD		D13W	4159	NORFOLK and WESTERN	LIFE LIKE	HIGH NOSE	HANK MCDONALD	Oct 5, 2020, 1...	
GP38 REYNOLDS		DH126D	5194	NORFOLK SOUTHERN (CG)	ATHEARN	HIGH NOSE	LANNIE REYNOLDS	May 20, 2021,...	
GP38 DCCIAS		TSU-21PNEM8 EMD Diesels	2733	SOUTHERN	ATLAS		DCCIAS	Nov 14, 2023,...	
GP38 DCCIAS-1		TSU-21PNEM8 EMD Diesels	2760	SOUTHERN	ATLAS		DCCIAS	Nov 17, 2023,...	
GP38 DCCIAS-2		BLU-PNP8 EMD Diesels	2743	SOUTHERN	ATLAS		DCCIAS	Jan 15, 2024, ...	
GP38 DCCIAS-3		TSU-PNP8 EMD Diesels	2735	SOUTHERN	ATLAS		DCCIAS	Jan 22, 2024, ...	
GP38 MACDONALE-2		D13W	4159	NORFOLK and WESTERN	LIFE LIKE	HIGH NOSE	HANK MCDONALD	Oct 5, 2020, 2...	
GP38-2 REYNOLDS		TSU-GN2200 GP38-2	5095	NORFOLK SOUTHERN	ATHEARN	GENESIS	LANNIE REYNOLDS	May 25, 2021,...	
GP38-2 SHIRLEY		DH126D	5246	NORFOLK SOUTHERN	ATHEARN		HENRY SHIRLEY	Jul 13, 2020, ...	
GP38-2 SHIRLEY-2		DH126P	5246	NS (SOUTHERN)	ATHEARN		HENRY SHIRLEY	Sep 9, 2020, 3...	
GP38-2-BELL		TSU-PNP EMD Diesels	5027	SOUTHERN	GENESIS		Rick Bell	Mar 17, 2020, ...	
GP40 INSERRA		DN166I3	8955	PORT HARBOR	ATLAS	GP40	PATRICK INSERRA	Dec 12, 2024, ...	
GP40-2 CREAMER		ECO-SoundValue EMD GP40	3057	NS	BACHMANN		KEVIN CREAMER	May 1, 2024, ...	
GP40-REYNOLDS		TSU-2200 EMD Diesels	1388	NS N&W	ATLAS		LANNY REYNOLDS	May 19, 2021,...	
GP40P-2-TAYLOR		TSU-21PNEM EMD Diesels	1375	UP	GENESIS		RUSTY TAYLOR	Nov 5, 2020, ...	
GP40P-2-TAYLOR-2		TSU-21PNEM EMD Diesels	1373	UP	GENESIS		RUSTY TAYLOR	Nov 4, 2020, ...	

ID: 2-6-0 BANKS
Road Name: COLORADO AND SOUTHERN
Road Number: 21
Manufacturer: BACHMANN
Owner: BRANSFORD BANKS
Model: ON30
DCC Address: 21
Decoder Family: Tsunami2 Steam
Decoder Model: TSU-1100 Steam-2
Filename: 2_6_9.xml

On Programming Track
Edit Only

Program...
Labels & Media... | Throttle

Service Mode Programmer SPROG Programmer Is Online | No Operations Mode Programmer Available | Programmer Status: Idle | Active Profile: My JMRI Railroad

Create New Loco

File Roster

On Programming Track: SPROG Programmer Mode: Direct Bit

Decoder installed:

- Blunami Diesel
  - BLU-21PNEM8 Alco Diesels
  - BLU-21PNEM8 Baldwin Diesels
  - BLU-21PNEM8 EMD Diesels
  - BLU-21PNEM8 EMD-2 Diesels
  - BLU-21PNEM8 GE Diesels
  - BLU-2200 Alco Diesels
  - BLU-2200 Baldwin Diesels
  - BLU-2200 EMD Diesels
  - BLU-2200 EMD-2 Diesels
  - BLU-2200 GE Diesels
  - BLU-4408 Alco Diesels
  - BLU-4408 Baldwin Diesels
  - BLU-4408 EMD Diesels
  - BLU-4408 EMD-2 Diesels
  - BLU-4408 GE Diesels
  - BLU-PNP8 Alco Diesels
  - BLU-PNP8 Baldwin Diesels
  - BLU-PNP8 EMD Diesels
  - BLU-PNP8 EMD-2 Diesels

Read type from decoder (All / Matched Only)

Create Basic Roster Entry

Roster ID <new loco>

Short (one byte) address

Long (two byte) address

Active Address: 2379

Analog (DC) Operation NMRA Digital only

Read Write Save

Open Comprehensive Programmer

idle

66.67% Doc: 3M/3M

Create New Loco

File Roster

On Programming Track: SPROG Programmer Mode: Direct Bit

Decoder installed:

- PpP Digital
- Public-domain and DIY
- QSIndustries
- QElectronics GmbH
- RR-CirKits
- Rautenhaus Digital Vertrieb
- Electroniscript, inc
- SPROG DCC
- SoundTraxx (Throttle-Up)
  - Blunami Diesel
    - BLU-21PNEM8 Alco Diesels
    - BLU-21PNEM8 Baldwin Diesels
    - BLU-21PNEM8 EMD Diesels
    - BLU-21PNEM8 EMD-2 Diesels
    - BLU-21PNEM8 GE Diesels
    - BLU-2200 Alco Diesels
    - BLU-2200 Baldwin Diesels
    - BLU-2200 EMD Diesels
    - BLU-2200 EMD-2 Diesels
    - BLU-2200 GE Diesels
    - BLU-4408 Alco Diesels
    - BLU-4408 Baldwin Diesels
    - BLU-4408 EMD Diesels
    - BLU-4408 EMD-2 Diesels
    - BLU-4408 GE Diesels
    - BLU-PNP8 Alco Diesels
    - BLU-PNP8 Baldwin Diesels
    - BLU-PNP8 EMD Diesels
    - BLU-PNP8 EMD-2 Diesels
    - BLU-PNP8 GE Diesels
    - BLU PNP8
  - Blunami Electric
  - Blunami Steam
  - DSD diesel
  - DSD Steam

Read type from decoder ◉ All ○ Matched Only

Create Basic Roster Entry

Roster ID <new loco>

○ Short (one byte) address

◉ Long (two byte) address

Active Address:

2379

Analog (DC) Operation NMRA Digital only

Read Write Save

Open Comprehensive Programmer

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

ID:	SD60M STAHLY
Road Name:	UP
Road Number:	2379
Manufacturer:	
Owner:	TERRY STAHLY
Model:	
DCC Address:	2379 DCC Long
Throttle Speed Limit:	100 %
Comment:	
Decoder Family:	Blunami Diesel
Decoder Model:	BLU-PNP8 EMD-2 Diesels
Decoder Comment:	
Date Modified:	Feb 3, 2025, 3:54:12 PM

Save to Roster | Reset to defaults

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

- ○ Short (one byte) address
- ◉ Long (two byte) address

Active Address: 2379

Primary Address: 3

Extended Address: 2379

Address Format: Long (two byte) address

Locomotive Direction: normal

Speed Steps: 28/128 speed step format (recommended)

Power Source Conversion: NMRA Digital only

User ID #1 - Major version #: 0

User ID #2 - minor version #: 0

Manufacturer ID: 0

Manufacturer Version No: 0

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

Acceleration Rate	0
Deceleration Rate	0
Motor Control BEMF Sample Period (0-31)	9
Auto-Stop Enable	Enabled
Back-EMF Enable	Enabled
Motor Kp Coefficient (0-255)	48
Motor Ki Coefficient (0-255)	16
BEMF Cutout (0-127 or 128-255)	0
Low-Speed Compensation (0-255)	180
BEMF Feedback Intensity (0-255)	255
Motor Control Sample Aperture Time (0-15)	6
BEMF Reference Voltage (60-255)	150
Motor Speed Step Deadband (0-127)	0
Motor Recovery Speed (0-255)	204

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

Start

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

Select this button to use settings shown below

(•) Don't use Speed Table, use Start Voltage (Vstart and Vmax)

To turn off, use Speed Table pane

Vstart	0
Vmid	128
Vhigh	255

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

Select this button to use a Speed Table for Speed Control

Use Speed Table

To turn off, use Basic Speed Control pane

Speed Table Selection: Linear/3-Point Speed Table

Speed Table

9	18	27	36	45	55	64	73	82	91	100	109	118	127	137	146	155	164	173	182	191	200	209	219	228	237	246	255

Force Straight | Match ends | Constant ratio curve | Log curve | Shift left | Shift right

Forward Trim 0 Reverse Trim 0

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

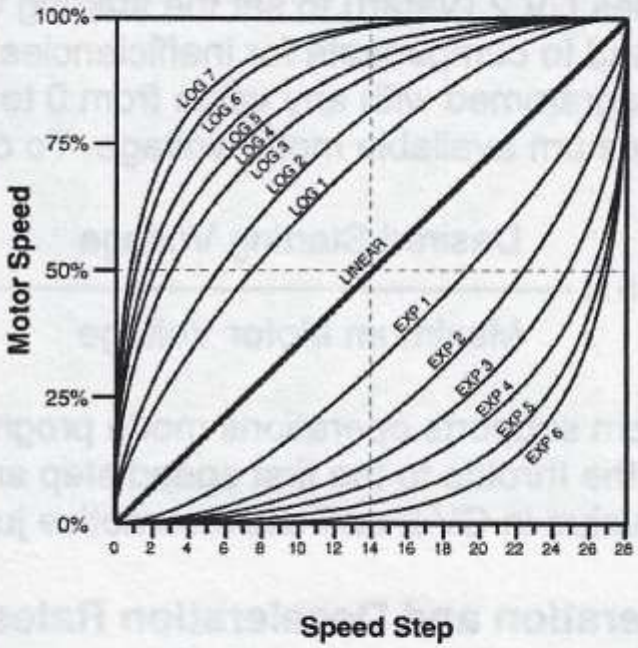
On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Preset Speed Tables

CV 25 (Speed Table Select) is used to select which speed curve will be used by the DSD. CV 25 may be programmed with any value between 2 and 15 to select one of the preset speed curves shown in the illustration. The exact throttle response for each curve is shown graphically below.

Speed Table Selection	
CV 25	**Speed Curve Type**
2	Straight LIne
3	Logarithmic Curve 1
4	Logarithmic Curve 2
5	Logarithmic Curve 3
6	Logarithmic Curve 4
7	Logarithmic Curve 5
8	Logarithmic Curve 6
9	Logarithmic Curve 7
10	Exponential Curve 1
11	Exponential Curve 2
12	Exponential Curve 3
13	Exponential Curve 4
14	Exponential Curve 5
15	Exponential Curve 6
16	User Loadable Speed Table



Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

Tsunami2 and Econami Extended Function Map

Any check marks on the Legacy Function Map pane will override these settings!

Use this sheet to determine which functions will control which outputs

	Extended Function Mapping	Forward Driving	Reverse Driving	Forward Standing	Reverse Standing	Emergency Stop Button
Headlight	F0	☐	☐	☐	☐	☐
Backup Light	F0	☐	☐	☐	☐	☐
FX3 Effect	F24	☐	☐	☐	☐	☐
FX4 Effect	F25	☐	☐	☐	☐	☐
FX5 Effect	F26	☐	☐	☐	☐	☐
FX6 Effect	F27	☐	☐	☐	☐	☐
FX7 Effect	F28	☐	☐	☐	☐	☐
FX8 Effect	F28	☐	☐	☐	☐	☐
Dimmer	F7	☐	☐	☐	☐	☐
Mute	F8	☐	☐	☐	☐	☐
Independent/Train Brake	F11	☐	☐	☐	☐	☐
Half Speed	F14	☐	☐	☐	☐	☐
Momentum Override	F14	☐	☐	☐	☐	☐
Grade Crossing Signal	F9	☐	☐	☐	☐	☐
Forward Whistle Signal	Disable	☐	☐	☐	☐	☐

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

Grade Crossing Signal	F9	☐	☐	☐	☐	☐
Forward Whistle Signal	Disable	☐	☐	☐	☐	☐
Reverse Whistle Signal	Disable	☐	☐	☐	☐	☐
Stop Whistle Signal	Disable	☐	☐	☐	☐	☐
Brake Select	F12	☐	☐	☐	☐	☐
Alternate Mixer	Disable	☐	☐	☐	☐	☐
RPM+	F5	☐	☐	☐	☐	☐
RPM-	F6	☐	☐	☐	☐	☐
Airhorn	F2	☐	☐	☐	☐	☐
Bell	F1	☐	☐	☐	☐	☐
Dynamic Brake	F4	☐	☐	☐	☐	☐
Short Airhorn	F3	☐	☐	☐	☐	☐
Straight-to-Eight	F10	☐	☐	☐	☐	☐
General Service	F18	☐	☐	☐	☐	☐
HEP Mode	F16	☐	☐	☐	☐	☐
Cab Chatter	F22	☐	☐	☐	☐	☐
Coupler	F13	☐	☐	☐	☐	☐
Coupler Release	F13	☐	☐	☐	☐	☐
Handbrake	F15	☐	☐	☐	☐	☐
Sander Valve	F21	☐	☐	☐	☐	☐
All Aboard/Coach Doors	F23	☐	☐	☐	☐	☐
Steam/HEP Generator	F20	☐	☐	☐	☐	☐
Fuel Loading	F17	☐	☐	☐	☐	☐

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

Forward Whistle Signal	Disable	☐	☐	☐	☐	☐
Reverse Whistle Signal	Disable	☐	☐	☐	☐	☐
Stop Whistle Signal	Disable	☐	☐	☐	☐	☐
Brake Select	F12	☐	☐	☐	☐	☐
Alternate Mixer	Disable	☐	☐	☐	☐	☐
RPM+	F5	☐	☐	☐	☐	☐
RPM-	F6	☐	☐	☐	☐	☐
Airhorn	F2	☐	☐	☐	☐	☐
Bell	F1	☐	☐	☐	☐	☐
Dynamic Brake	F1	☐	☐	☐	☐	☐
Short Airhorn	F2	☐	☐	☐	☐	☐
Straight-to-Eight	F3	☐	☐	☐	☐	☐
General Service	F4	☐	☐	☐	☐	☐
HEP Mode	F5	☐	☐	☐	☐	☐
Cab Chatter	F6	☐	☐	☐	☐	☐
Coupler	F7	☐	☐	☐	☐	☐
Coupler Release	F8	☐	☐	☐	☐	☐
Handbrake	F22	☐	☐	☐	☐	☐
Sander Valve	F13	☐	☐	☐	☐	☐
All Aboard/Coach Doors	F13	☐	☐	☐	☐	☐
Steam/HEP Generator	F15	☐	☐	☐	☐	☐
Fuel Loading	F21	☐	☐	☐	☐	☐
Straight-to-Idle	F23	☐	☐	☐	☐	☐
E-Brake App.	F20	☐	☐	☐	☐	☐
	F17	☐	☐	☐	☐	☐
	F19	☐	☐	☐	☐	☐
	Disable	☐	☐	☐	☐	☑

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

LIGHTING EFFECTS AND CONTROLS

Headlight F0(f) Effect Selection	Dimmable headlight	FX3 Effect Selection	On/Off	FX5 Effect Selection	Double flash strobe	FX7 Effect Selecti	
Headlight F0(f) Phase Selection	Use phase A (normal)	FX3 Phase Selection	Use phase A (normal)	FX5 Phase Selection	Use phase A (normal)	FX7 Phase Selecti	
Headlight F0(f) Grade Crossing Logic	Disabled	FX3 Grade Crossing Logic	Disabled	FX5 Grade Crossing Logic	Disabled	FX7 Grade Crossing Lo	
Headlight F0(f) Light Type	LED	FX3 Light Type	LED	FX5 Light Type	LED	FX7 Light Ty	
Headlight F0(f) Forward Directional Control	☑	FX3 Forward Directional Control	☑	FX5 Forward Directional Control	☑	FX7 Forward Directional Cont	
Headlight F0(f) Reverse Directional Control	☐	FX3 Reverse Directional Control	☑	FX5 Reverse Directional Control	☑	FX7 Reverse Directional Cont	
Backup Light F0(r) Effect Selection	Dimmable headlight	FX4 Effect Selection	On/Off	FX6 Effect Selection	On/Off	FX8 Effect Selecti	
Backup Light F0(r) Phase Selection	Use phase A (normal)	FX4 Phase Selection	Use phase A (normal)	FX6 Phase Selection	Use phase A (normal)	FX8 Phase Selecti	
Backup Light F0(r) Grade Crossing Logic	Disabled	FX4 Grade Crossing Logic	Disabled	FX6 Grade Crossing Logic	Disabled	FX8 Grade Crossing Lo	
Backup Light F0(r) Light Type	LED	FX4 Light Type	LED	FX6 Light Type	LED	FX8 Light Ty	
Backup Light F0(r) Forward Directional Control	☐	FX4 Forward Directional Control	☑	FX6 Forward Directional Control	☑	FX8 Forward Directional Cont	
Backup Light F0(r) Reverse Directional Control	☑	FX4 Reverse Directional Control	☑	FX6 Reverse Directional Control	☑	FX8 Reverse Directional Cont	

Hyperlight Flash Rate (0-15) 2

Grade Crossing Hold Time (0-15) 4

Brightness 1 Level (0-255)

153

Brightness 2 Level (0-255)

153

Dimmer Level (0-255)

153

Master Brightness Level (0-255)

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

LIGHTING EFFECTS AND CONTROLS

on	Dimmable headlight	FX3 Effect Selection	On/Off	FX5 Effect Selection	Double flash strobe	FX7 Effect Selection	Type I ditch light
on	Use phase A (normal)	FX3 Phase Selection	Use phase A (normal)	FX5 Phase Selection	Use phase A (normal)	FX7 Phase Selection	Use phase A (normal)
gic	Disabled	FX3 Grade Crossing Logic	Disabled	FX5 Grade Crossing Logic	Disabled	FX7 Grade Crossing Logic	Enabled
pe	LED	FX3 Light Type	LED	FX5 Light Type	LED	FX7 Light Type	LED
rol	☑	FX3 Forward Directional Control	☑	FX5 Forward Directional Control	☑	FX7 Forward Directional Control	☑
rol	☐	FX3 Reverse Directional Control	☑	FX5 Reverse Directional Control	☑	FX7 Reverse Directional Control	☐
on	Dimmable headlight	FX4 Effect Selection	On/Off	FX6 Effect Selection	On/Off	FX8 Effect Selection	Type I ditch light
on	Use phase A (normal)	FX4 Phase Selection	Use phase A (normal)	FX6 Phase Selection	Use phase A (normal)	FX8 Phase Selection	Use phase B (opposite)
gic	Disabled	FX4 Grade Crossing Logic	Disabled	FX6 Grade Crossing Logic	Disabled	FX8 Grade Crossing Logic	Enabled
pe	LED	FX4 Light Type	LED	FX6 Light Type	LED	FX8 Light Type	LED
rol	☐	FX4 Forward Directional Control	☑	FX6 Forward Directional Control	☑	FX8 Forward Directional Control	☑
rol	☑	FX4 Reverse Directional Control	☑	FX6 Reverse Directional Control	☑	FX8 Reverse Directional Control	☐

Hyperlight Flash Rate (0-15) 2

Grade Crossing Hold Time (0-15) 4

Brightness 1 Level (0-255)

153

Brightness 2 Level (0-255)

153

Dimmer Level (0-255)

153

Master Brightness Level (0-255)

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

LIGHTING EFFECTS AND CONTROLS

on	Dimmable headlight	FX3 Effect Selection	On/Off	FX5 Effect Selection	Double flash strobe	FX7 Effect Selection	Type I ditch light
on	Use phase A (normal)	FX3 Phase Selection	On/Off	[illegible]	[illegible] (normal)	FX7 Phase Selection	Use phase A (normal)
gic	Disabled	FX3 Grade Crossing Logic	Dimmable headlight	FX5 Grade Crossing Logic	Disabled	FX7 Grade Crossing Logic	Enabled
pe	LED	FX3 Light Type	Mars light	FX5 Light Type	LED	FX7 Light Type	LED
rol	☑	FX3 Forward Directional Control	Pyle Gyralite	FX5 Forward Directional Control	☑	FX7 Forward Directional Control	☑
rol	☐	FX3 Reverse Directional Control	Oscillating headlight	FX5 Reverse Directional Control	☑	FX7 Reverse Directional Control	☐
			Single flash strobe				
			Double flash strobe				
			Western-Cullen D312 rotary beacon				
on	Dimmable headlight	FX4 Effect Selection	On/Off	FX6 Effect Selection	On/Off	FX8 Effect Selection	Type I ditch light
on	Use phase A (normal)	FX4 Phase Selection	Use phase A (normal)	FX6 Phase Selection	Use phase A (normal)	FX8 Phase Selection	Use phase B (opposite)
gic	Disabled	FX4 Grade Crossing Logic	Disabled	FX6 Grade Crossing Logic	Disabled	FX8 Grade Crossing Logic	Enabled
pe	LED	FX4 Light Type	LED	FX6 Light Type	LED	FX8 Light Type	LED
rol	☐	FX4 Forward Directional Control	☑	FX6 Forward Directional Control	☑	FX8 Forward Directional Control	☑
rol	☑	FX4 Reverse Directional Control	☑	FX6 Reverse Directional Control	☑	FX8 Reverse Directional Control	☐

Determines the effect generated from the FX3 light output

Hyperlight Flash Rate (0-15) 2

Grade Crossing Hold Time (0-15) 4

Brightness 1 Level (0-255) 153

Brightness 2 Level (0-255) 153

Dimmer Level (0-255) 153

Master Brightness Level (0-255)

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

LIGHTING EFFECTS AND CONTROLS

on Dimmable headlight
on Use phase A (normal)
gic Disabled
pe LED
rol ☑
rol ☐

FX3 Effect Selection On/Off
FX3 Phase Selection
FX3 Grade Crossing Logic
FX3 Light Type
FX3 Forward Directional Control
FX3 Reverse Directional Control

Engine exhaust flicker
Firebox flicker
Smart firebox flicker
Dyno/Diesel-light
Auto dim forward
Auto dim reverse
Brake light
On/off - brightness 1

FX5 Effect Selection Double flash strobe
FX5 Phase Selection Use phase A (normal)
FX5 Grade Crossing Logic Disabled
FX5 Light Type LED
FX5 Forward Directional Control ☑
FX5 Reverse Directional Control ☑

FX7 Effect Selection Type I ditch light
FX7 Phase Selection Use phase A (normal)
FX7 Grade Crossing Logic Enabled
FX7 Light Type LED
FX7 Forward Directional Control ☑
FX7 Reverse Directional Control ☐

on Dimmable headlight
on Use phase A (normal)
gic Disabled
pe LED
rol ☐
rol ☑

FX4 Effect Selection On/Off
FX4 Phase Selection Use phase A (normal)
FX4 Grade Crossing Logic Disabled
FX4 Light Type LED
FX4 Forward Directional Control ☑
FX4 Reverse Directional Control ☑

FX6 Effect Selection On/Off
FX6 Phase Selection Use phase A (normal)
FX6 Grade Crossing Logic Disabled
FX6 Light Type LED
FX6 Forward Directional Control ☑
FX6 Reverse Directional Control ☑

FX8 Effect Selection Type I ditch light
FX8 Phase Selection Use phase B (opposite)
FX8 Grade Crossing Logic Enabled
FX8 Light Type LED
FX8 Forward Directional Control ☑
FX8 Reverse Directional Control ☐

Hyperlight Flash Rate (0-15) 2
Grade Crossing Hold Time (0-15) 4

Brightness 1 Level (0-255)
153

Brightness 2 Level (0-255)
153

Dimmer Level (0-255)
153

Master Brightness Level (0-255)

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

LIGHTING EFFECTS AND CONTROLS

on Dimmable headlight
on Use phase A (normal)
gic Disabled
pe LED
rol ☑
rol ☐

FX3 Effect Selection On/Off
FX3 Phase Selection
FX3 Grade Crossing Logic
FX3 Light Type
FX3 Forward Directional Control
FX3 Reverse Directional Control

Engine exhaust flicker
Firebox flicker
Smart firebox flicker
Dyno/Diesel-light
Auto dim forward
Auto dim reverse
Brake light
On/off - brightness 1

FX5 Effect Selection Double flash strobe
FX5 Phase Selection Use phase A (normal)
FX5 Grade Crossing Logic Disabled
FX5 Light Type LED
FX5 Forward Directional Control ☑
FX5 Reverse Directional Control ☑

FX7 Effect Selection Type I ditch light
FX7 Phase Selection Use phase A (normal)
FX7 Grade Crossing Logic Enabled
FX7 Light Type LED
FX7 Forward Directional Control ☑
FX7 Reverse Directional Control ☐

on Dimmable headlight
on Use phase A (normal)
gic Disabled
pe LED
rol ☐
rol ☑

FX4 Effect Selection On/Off
FX4 Phase Selection Use phase A (normal)
FX4 Grade Crossing Logic Disabled
FX4 Light Type LED
FX4 Forward Directional Control ☑
FX4 Reverse Directional Control ☑

FX6 Effect Selection On/Off
FX6 Phase Selection Use phase A (normal)
FX6 Grade Crossing Logic Disabled
FX6 Light Type LED
FX6 Forward Directional Control ☑
FX6 Reverse Directional Control ☑

FX8 Effect Selection Type I ditch light
FX8 Phase Selection Use phase B (opposite)
FX8 Grade Crossing Logic Enabled
FX8 Light Type LED
FX8 Forward Directional Control ☑
FX8 Reverse Directional Control ☐

Hyperlight Flash Rate (0-15) 2
Grade Crossing Hold Time (0-15) 4

Brightness 1 Level (0-255)
153

Brightness 2 Level (0-255)
153

Dimmer Level (0-255)
153

Master Brightness Level (0-255)

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

Consist Acceleration Adjustment: 0

Advanced Consist Address: 0

Consist Acceleration Adjustment Sign: Adjustment Added

Locomotive Direction In Consist: normal

Consist Deceleration Adjustment: 0

Consist Deceleration Adjustment Sign: Adjustment Added

Will decoder respond to function requests at consist address?

Consist Address Active For FL in Forward	Locomotive Address Only
Consist Address Active For FL in Reverse	Locomotive Address Only
Consist Address Active For F1	Locomotive Address Only
Consist Address Active For F2	Locomotive Address Only
Consist Address Active For F3	Locomotive Address Only
Consist Address Active For F4	Locomotive Address Only
Consist Address Active For F5	Locomotive Address Only
Consist Address Active For F6	Locomotive Address Only
Consist Address Active For F7	Locomotive Address Only
Consist Address Active For F8	Locomotive Address Only
Consist Address Activation for F9	Locomotive Address Only
Consist Address Activation for F10	Locomotive Address Only
Consist Address Activation for F11	Locomotive Address Only
Consist Address Activation for F12	Locomotive Address Only
Consist Address Active For F13	Locomotive Address Only
Consist Address Active For F14	Locomotive Address Only
Consist Address Active For F15	Locomotive Address Only
Consist Address Active For F16	Locomotive Address Only
Consist Address Active For F17	Locomotive Address Only
Consist Address Active For F18	Locomotive Address Only
Consist Address Active For F19	Locomotive Address Only
Consist Address Active For F20	Locomotive Address Only
Consist Address Active For F21	Locomotive Address Only
Consist Address Active For F22	Locomotive Address Only
Consist Address Active For F23	Locomotive Address Only
Consist Address Active For F24	Locomotive Address Only
Consist Address Active For F25	Locomotive Address Only
Consist Address Active For F26	Locomotive Address Only
Consist Address Active For F27	Locomotive Address Only
Consist Address Active For F28	Locomotive Address Only
Consist Automatic Effects - FWDD	Effect Function Controlled
Consist Automatic Effects - REVD	Effect Function Controlled
Consist Automatic Effects - FWDS	Effect Function Controlled
Consist Automatic Effects - REVS	Effect Function Controlled
Consist Automatic Effects - ESTP	E-Brake sound FX enabled

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Consist Example

Consider a common diesel lash-up consisting of three engines: #4088, #5239, and #6361. Let's suppose we want to operate these three engines as a single unit with consist address 40. The dynamic brake (F4) and audio mute (F8) functions should work on all engines. However, we want the headlight (F0(f)), horn (F2), and bell (F1) to work only on the lead unit, #4088, and the backup light (F0(r)) to work only on the trailing unit, #6361. Additionally, the trailing unit is backward-facing.

Engine Address	4088	5239	6361
Direction	Normal	Normal	Reverse
CV 19	40	40	168
CV 21	139	136	136
CV 22	1	0	1

Engine #4088 - This is the lead engine. Because it is facing forward, CV 19 is simply programmed with 40, the new consist address. Referring to the Consist Function Enable registers, we program CV 21 with the sum of the values corresponding to F1, F2, F4, and F8 (1 + 2 + 8 + 128 = 139). Likewise, CV 22 is programmed to 1, the value corresponding to F0(f).

Engine #5239 - This is the middle engine. Because it is also facing forward, CV 19 is programmed with the new consist address of 40. Using the Consist Function Enable registers again, we program CV 21 with the sum of the values corresponding to F4 and F8 (8 + 128 = 136). CV 22 is programmed to 0 since no lights are needed on this engine.

Engine #6361 - This is the trailing engine. Because it is facing backward, CV 19 is programmed with the new consist address of 168 (40 + 128 = 168). Using the Consist Function Enable registers, we program CV 21 with the sum of the values corresponding to F4 and F8 (8 + 128 = 136). CV 22 is programmed to 1, the value corresponding to the backup light, F0(r).

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

Packet Time Out Value (0-255) 0

CV Unlock Register (0-7) 0
CV Lock ID Code (0-7) 0
CV Lock Enable Normal operation (no locking)
Independent Brake Rate 0
Independent Brake Rate Sign Add value to baseline braking rate (increases braking delay)
Train Brake Rate 0
Train Brake Rate Sign Add value to baseline braking rate (increases braking delay)
Dynamic Brake Rate 0
Dynamic Brake Rate Sign Add value to baseline braking rate (increases braking delay)
Constant Brake Distance (0-255) 0

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

Engine Notch Rate	Engine RPM increases every 7 speed steps
Engine RPM Interlock	Under manual control, no movement until engine starts
Engine Auto Start Enable	Disable
Dynamic Brake Mode	Dynamic Brakes operate independently of engine RPMs
Prime Mover Select	EMD 710G 16 Cylinder
Airhorn Select	Leslie RS3L
Auxiliary Airhorn Select	Short Horn
Bell Select	EMD 1: medium-fast
Grade-Crossing Bell Enable	Disable
Air Compressor Select	EMD Shaft Driven
Coupler Select	Medium coupler
Coupler Release Function Polarity	Coupler release activated when function is turned off
Coach Door Count	1 slam
Emergency Stop	Emergency stop engine idle
Low-pressure alarm bell	Enabled
Poppet Valve Select	Electronic Air Dryer
Generator Select	Steam Generator
True-Idle Enable	Disabled

Clickety-Clack Axles per Truck	2 axles per truck
Clickety-Clack Trucks per Car	2 trucks per car

Quiet Mode Timeout Period (Seconds): 0

Poppet Valve Release Rate: 25

Prime Mover Pitch Shift: 128

Clickety-Clack Sound Scalar: 0

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

Master Volume Control	146
Airhorn Volume	150
Bell Volume	60
Prime Mover Volume	150
Air Compressor Volume	100
Dynamic Brake Volume	125
Radiator Fans Volume	75
Alarm Bell Volume	35
Coupler Volume	128
Train Brake Apply/Release Volume	128
Independent Brake Apply Volume	100
Independent Brake Release Volume	95
Poppet Valve Volume	128
Steam Generator Volume	200
Cab Doors Volume	128
Relay Clicks Volume	128
E-Brake App Volume	70
Glad Hand Release Volume	150
All Aboard!/Coach Doors Volume	192
Clickety Clack Volume	0
Sander Valve Volume	10
Fuel Loading Volume	50
Air Conditioner Volume	20
Wrenches Volume	50
Pneumatic Oilers Volume	40
Toilet Flush Volume	45
Cab Chatter Volume	60

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

CV	Value (Decimal)	State	Read	Write	Compare
1	3	From file	Read	Write	Compare
2	0	From file	Read	Write	Compare
3	0	From file	Read	Write	Compare
4	0	From file	Read	Write	Compare
5	255	From file	Read	Write	Compare
6	128 Vhigh	From file	Read	Write	Compare
7	0	From file	Read	Write	Compare
8	0	From file	Read	Write	Compare
10	0	From file	Read	Write	Compare
11	0	From file	Read	Write	Compare
12	1	From file	Read	Write	Compare
13	0	From file	Read	Write	Compare
14	3	From file	Read	Write	Compare
15	0	From file	Read	Write	Compare
16	0	From file	Read	Write	Compare
17	201	From file	Read	Write	Compare
18	75	From file	Read	Write	Compare
19	0	From file	Read	Write	Compare
21	0	From file	Read	Write	Compare
22	0	From file	Read	Write	Compare
23	0	From file	Read	Write	Compare
24	0	From file	Read	Write	Compare
25	2	From file	Read	Write	Compare

Read changes on sheet | Write changes on sheet | Compare changes on sheet | Read full sheet | Write full sheet | Compare full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Service Mode Programmer SPROG Programmer is Online | No Operations Mode Programmer Available | Programmer Status: Idle | Active Profile: My JMRI Railroad

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

Turning on the Alternate Mixer function will enable the alternate mixer in place of the primary mixer and adjust volume levels to the settings in CVs 2.289-2.320. Turning off the alternate mixer function will enable the primary mixer in place of the alternate mixer and adjust volume levels to the settings in CVs 129-160 (Primary Mixer Volume Levels).

Assign the Alternate Mixer function to a function key through the Function Map (unassigned by default)

Airhorn Alt Volume	112
Bell Alt Volume	42
Prime Mover Alt Volume	75
Air Compressor Alt Volume	50
Dynamic Brake Alt Volume	62
Radiator Fans Alt Volume	37
Alarm Bell Alt Volume	30
Coupler Alt Volume	64
Train Brake Apply/Release Alt Volume	64
Independent Brake Apply Alt Volume	50
Independent Brake Release Alt Volume	35
Poppet Valve Alt Volume	64
Steam Generator Alt Volume	100
Cab Doors Alt Volume	64
Relay Clicks Alt Volume	64
E-Brake App Alt Volume	35
Glad Hand Release Alt Volume	75
All Aboard!/Coach Doors Alt Volume	96
Clickety-Clack Alt Volume	75
Sander Valve Alt Volume	5
Fuel Loading Alt Volume	25
Air Conditioner Alt Volume	10
Pneumatic Oilers Alt Volume	20
Toilet Flush Alt Volume	10
Cab Chatter Alt Volume	30

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Service Mode Programmer SPROG Programmer is Online | No Operations Mode Programmer Available | Programmer Status: Idle | Active Profile: My JMRI Railroad

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

SEVEN BAND EQUALIZER

High-Pass Filter Cutoff Frequency

20

Equalizer Control Micro Speaker (under 1 inch)

62 Hz Cut/Boost

128

125 Hz Cut/Boost

128

250 Hz Cut/Boost

128

500 Hz Cut/Boost

128

1K Hz Cut/Boost

128

2K Hz Cut/Boost

128

4K Hz Cut/Boost

128

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Service Mode Programmer SPROG Programmer is Online | No Operations Mode Programmer Available | Programmer Status: Idle | Active Profile: My JMRI Railroad

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

DYNAMIC DIGITAL EXHAUST CONTROLS

Throttle Sensitivity
10

Load Sensitivity
0

Attack Time Constant
215

Release Time Constant
215

Prime Mover Low Volume Limit
0

Prime Mover High Volume Limit
255

DDE Load Offset
60

DDE Load Slope
150

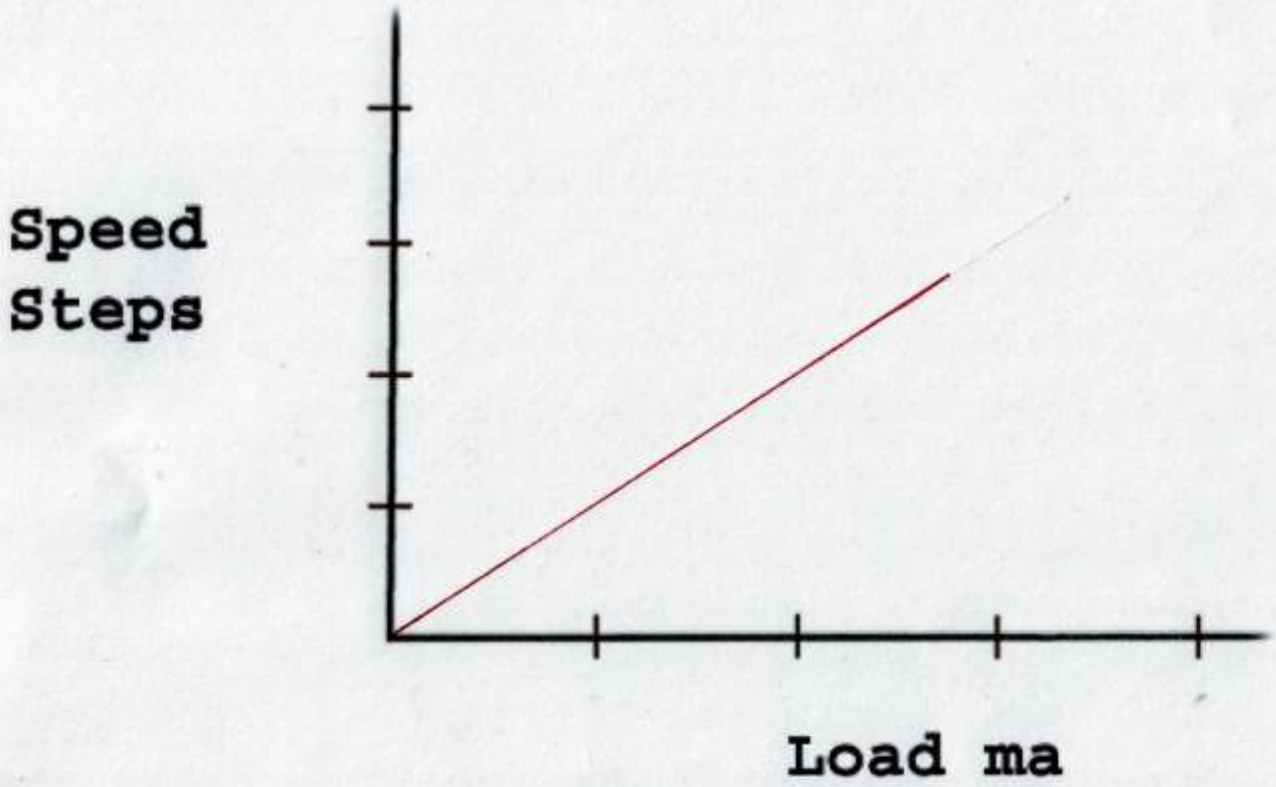
Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Service Mode Programmer SPROG Programmer is Online | No Operations Mode Programmer Available | Programmer Status: Idle | Active Profile: My JMRI Railroad


Speed
Steps
Load ma

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

DYNAMIC DIGITAL EXHAUST CONTROLS

Throttle Sensitivity: 10

Load Sensitivity: 0

Attack Time Constant: 215

Release Time Constant: 215

Prime Mover Low Volume Limit: 0

Prime Mover High Volume Limit: 255

DDE Load Offset: 60

DDE Load Slope: 150

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Service Mode Programmer SPROG Programmer is Online | No Operations Mode Programmer Available | Programmer Status: Idle | Active Profile: My JMRI Railroad

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

DYNAMIC DIGITAL EXHAUST CONTROLS

Throttle Sensitivity: 10

Load Sensitivity: 0

Attack Time Constant: 215

Release Time Constant: 215

Prime Mover Low Volume Limit: 0

Prime Mover High Volume Limit: 255

DDE Load Offset: 60

DDE Load Slope: 150

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Service Mode Programmer SPROG Programmer is Online | No Operations Mode Programmer Available | Programmer Status: Idle | Active Profile: My JMRI Railroad

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

AUTOMATIC SOUND CONTROL

Automatic Bell Enable ☐ Automatic Bell Enable (Analog Mode) ☐

Automatic Brake Squeal Enable ☐ Automatic Brake Squeal Enable (Analog Mode) ☐

These CVs allow the user to set the parameters for the Automatic Sound Control features.

Auto-Bell On Set Point: 1

Auto-Bell On Time: 15

Poppet Valve Release Rate: 25

Brake Squeal Sensitivity: 3

Set the probability that the various sound effects will occur the next time the locomotive is stopped. A setting of zero effectively turns off an effect. A setting of 255 enables the effect at every stop.

Cab Doors Event Probability: 128

Cab Chatter Event Probability: 64

Fuel Loading Event Probability: 0

Toilet Flush Event Probability: 32

Wrenches Event Probability: 128

Air Conditioner Event Probability: 128

Pneumatic Oilers Event Probability: 128

Relay Clicks Event Probability: 128

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Service Mode Programmer SPROG Programmer is Online | No Operations Mode Programmer Available | Programmer Status: Idle | Active Profile: My JMRI Railroad

Programming: SD60M STAHLY

File Reset Window Help

Roster Entry | Basic | Motor | Basic Speed Control | Speed Table | Function Map | Lights | Analog Controls | Consist | Advanced | Sound | Sound Levels | CVs | Alt Sound Levels | Equalizer | DDE | Reverb | ASC | Legacy Function Map | ID

The CVs in this pane can be used to map a limited range of effects to functions F0-F12 and are included to remain consistent with NMRA Standards for DCC Configuration Variables (S-9.2.2, p.7).

Note: CVs 33-46 are set to values of 0 by default, offer a secondary method of function mapping, and are not used to determine Tsunami 2's or Econami's default function assignments.

Any check marks on this pane will override settings on the main Function Map pane!

Use this sheet to determine which functions will control which outputs

Description	Output wire or operation														
	1 White	2 Yellow	3 FX3	4 FX4	Airhorn	Bell	Dynamic Brakes	Short Horn	Straight to 8	General Service	Dimming	Mute	HEP Mode	Ind/Train Brake	Coupler
Forward Headlight F0(f)	☐	☐	☐	☐	☐	☐	☐	☐							
Reverse Headlight F0(r)	☐	☐	☐	☐	☐	☐	☐	☐							
Function 1	☐	☐	☐	☐	☐	☐	☐	☐							
Function 2	☐	☐	☐	☐	☐	☐	☐	☐							
Function 3			☐	☐		☐	☐	☐	☐	☐	☐				
Function 4			☐	☐		☐	☐	☐	☐	☐	☐				
Function 5			☐	☐		☐	☐	☐	☐	☐	☐				
Function 6			☐	☐		☐	☐	☐	☐	☐	☐				
Function 7							☐	☐	☐	☐	☐	☐	☐	☐	
Function 8							☐	☐	☐	☐	☐	☐	☐	☐	
Function 9							☐	☐	☐	☐	☐	☐	☐	☐	
Function 10								☐	☐	☐	☐	☐	☐	☐	☐
Function 11								☐	☐	☐	☐	☐	☐	☐	☐
Function 12								☐	☐	☐	☐	☐	☐	☐	☐

Read changes on sheet | Write changes on sheet | Read full sheet | Write full sheet

Read changes on all sheets | Write changes on all sheets | Read all sheets | Write all sheets

On Programming Track: SPROG Programmer Mode: Direct Bit

idle

Service Mode Programmer SPROG Programmer is Online | No Operations Mode Programmer Available | Programmer Status: Idle | Active Profile: My JMRI Railroad

DEMO TIME

Presentation
DCC – Digital Command & Ctrl

THANK YOU!!!

Rick Bell (WD4KQG)

UPCOMING EVENTS (1)

- ~~01-07-2025 ARCCC, Inc. General Meeting~~
- ~~01-09-2025 ARCCC, Inc. BOD Meeting~~
- ~~01-11-2025 Greenwood Hamfest~~
- ~~01-11-2025 CSRAHamExams Exam Session (Last one till March)~~
- ~~01-25/26-2025 Winter Field Day~~
- ~~02-04-2025 ARCCC, Inc. General Meeting~~
- ~~02-07/09-2025 Orlando Hamcation~~
- ~~02-15-2025 ARCA Swapmeet~~
- ~~02-22-2025 Dalton, GA Hamfest~~
- ~~03-04-2025 ARCCC, Inc. General Meeting (Battery Care)~~
- ~~03-07/08-2025 Charlotte, SC Hamfest~~
- ~~03-08-2025 CSRAHamExams Exam Session~~
- ~~03-15-2025 Sevier County, TN Hamfest~~

UPCOMING EVENTS (2)

- ~~04-01-2025 ARCCC, Inc. General Meeting (Meshtastic)~~
- ~~04-05-2025 Ridge Amateur Radio Club Tailgate Batesburg-Leesville~~
- ~~04-05-2025 Raleigh, NC Hamfest~~
- ~~04-12-2025 CSRAHamExams Exam Session~~
- ~~04-19-2025 W4RTO Ham Tailgate (American Legion 26)~~
- ~~05-03-2025 Columbia County Public Safety and Preparedness Fair~~
- ~~05-06-2025 ARCCC, Inc. General Meeting (RTSystems)~~
- ~~05-10-2025 CSRAHamExams Exam Session~~
- ~~05-16/18-2025 Hamvention~~
- ~~06-03-2025 ARCCC, Inc. General Meeting (Rocket Machine Worx)~~
- ~~06-07-2025 Atlanta Hamfest~~
- ~~06-14-2025 CSRAHamExams Exam Session~~
- ~~06-28/29-2025 ARRL Field Day~~

UPCOMING EVENTS (3)

- 07-01-2025 ARCCC, Inc. General Meeting (DCC)
- 07-10-2025 ARCCC, Inc. BOD Meeting
- 07-12-2025 CSRAHamExams Exam Session
- 08-05-2025 ARCCC, Inc. General Meeting (East TN)
- 08-09-2025 CSRAHamExams Exam Session
- 08-16/17-2025 Huntsville, AL Hamfest
- 08-29/31-2025 Shelby, NC Hamfest
- 09-02-2025 ARCCC, Inc. General Meeting (MRC)
- 09-13-2025 CSRAHamExams Exam Session

UPCOMING EVENTS (4)

- 10-07-2025 ARCCC, Inc. General Meeting
- 10-11-2025 CSRAHamExams Exam Session
- 10-17/19-2025 Jamboree-on-the-Air (JOTA)
- 11-01/02-2025 Stone Mountain Hamfest
- 11-04-2025 ARCCC, Inc. General Meeting
- 11-08-2025 CSRAHamExams Exam Session
- 12-02-2025 ARCCC, Inc. Annual Awards and Holiday Party
- 12-13-2025 CSRAHamExams Exam Session

ARCCC, Inc. Upcoming Presentations

- 07-01-2025 – DCC – Digital Command & Ctrl
- 08-05-2025 – East Tennessee (Helene)
- 09-02-2025 – Medical Reserve Corps
- 10-07-2025 – Geochron
- 11-04-2025 – Hamclock
- Ropes and Knots

MEMBERSHIP APPLICATIONS

Are there any ARCCC, Inc. Membership Applications for consideration?

ARCCC, INC. MONTHLY REPORTS

Treasurer's Report

- Update from Treasurer
  - July 2025 Update

Secretary's Report for June 3rd, 2025 meeting:

- [06-03-2025 Meeting Minutes]

ARCCC Monthly Financial Summary	
June 2025	
ARCCC Accounts	**Amount**
South State Bank	$2,552.02
PayPal	$1,144.55
Petty Cash - Treasurer	$0.00
Balance as of 6/1/25	$3,696.57
Expenditures	$284.53
Membership Renewals	$193.56
Other Receipts / Deposits	$10.22
Balance as of 6/30/25	$3,615.82
Less Commitments	
2025 Approved Budget	-$3,247.00
Actuals - Budget thru 6/30/25	$1,705.02
TOTAL AVAILABLE FUNDING	**$2,073.84**

KROGER COMMUNITY REWARDS

- Simply visit www.KrogerCommunityRewards.com
- Login to your existing account or create an account
- Click on Community
- Enter "**DF873**" and **Amateur Radio Club of Columbia County, Inc.** should appear.
- Select our organization and donate!

$10.22 Received!!!

Club Callsign Badges

Amateur Radio Club of Columbia County, Ga Name Badge

ARC of Columbia County, Ga
Badge price $13.50

☐ MEGA-STRONG Magnetic Bar $3.75

The SignMan *of Baton Rouge*

Order at this link:
https://thesignman.com/clubs/columbiacogacart.html

Business Items

- **HamClubOnline.com**
  - ****NOTE: Membership Expiration Notices are sent 60 Days prior to the date of expiration.**
  - ****NOTE: There is a 7 Day Grace period where you can pay and not have to reapply for membership.**
  - **ARRL Email Addresses are not valid, please update your email address within HamClubOnline**
    - **ARRL Forwarding Email System is unreliable**

- **Groups.io**
  - **https://groups.io/g/arcccinc**

- **Please email all monthly meeting presentation items to the President no less than 7 days prior to the General Meeting.**

HamClubOnline - Club Self-Check (ARCCC)

Member Statistics:

Active Members	102
Expiring Soon Members	0
Inactive Members	50
Non-Members Affiliates	0

Rank Statistics: (Active Members)

Member	96
Trustee	1
Officer	5
Total	**102**

Member Types Statistics: (Active Memberships)

Family Membership	6
Family Membership (Free)	5
Full Membership	74
Full Membership (Examination Waiver)	1
Honorary Membership	1
Life Membership	14
Total	**101**

Members with Invalid E-Mail Addresses:

Name	Callsign	E-Mail
JOHN T CARTER II	KJ4MC	kj4mc@arrl.net
DONALD DRAWDY	N0FBV	n0fbv@knology.net

Members with Expired Licenses:

Name	Callsign	Lic Exp Date
LINDA P ANTOPOLSKY	N4LDH	2024-12-22

Members without a Membership:

Name	Callsign	Join Date
Gilberto Fernandez Carrillo	W7NCO	2025-06-03

New Members: (Last 90 Days)

Name	Callsign	Join Date
Halam Yisra El	KD8OZQ	2025-04-01
Rick A Klemenz	KR4CEU	2025-04-01
Gunnar A Marshall	KR4DFM	2025-06-03
Gilberto Fernandez Carrillo	W7NCO	2025-06-03

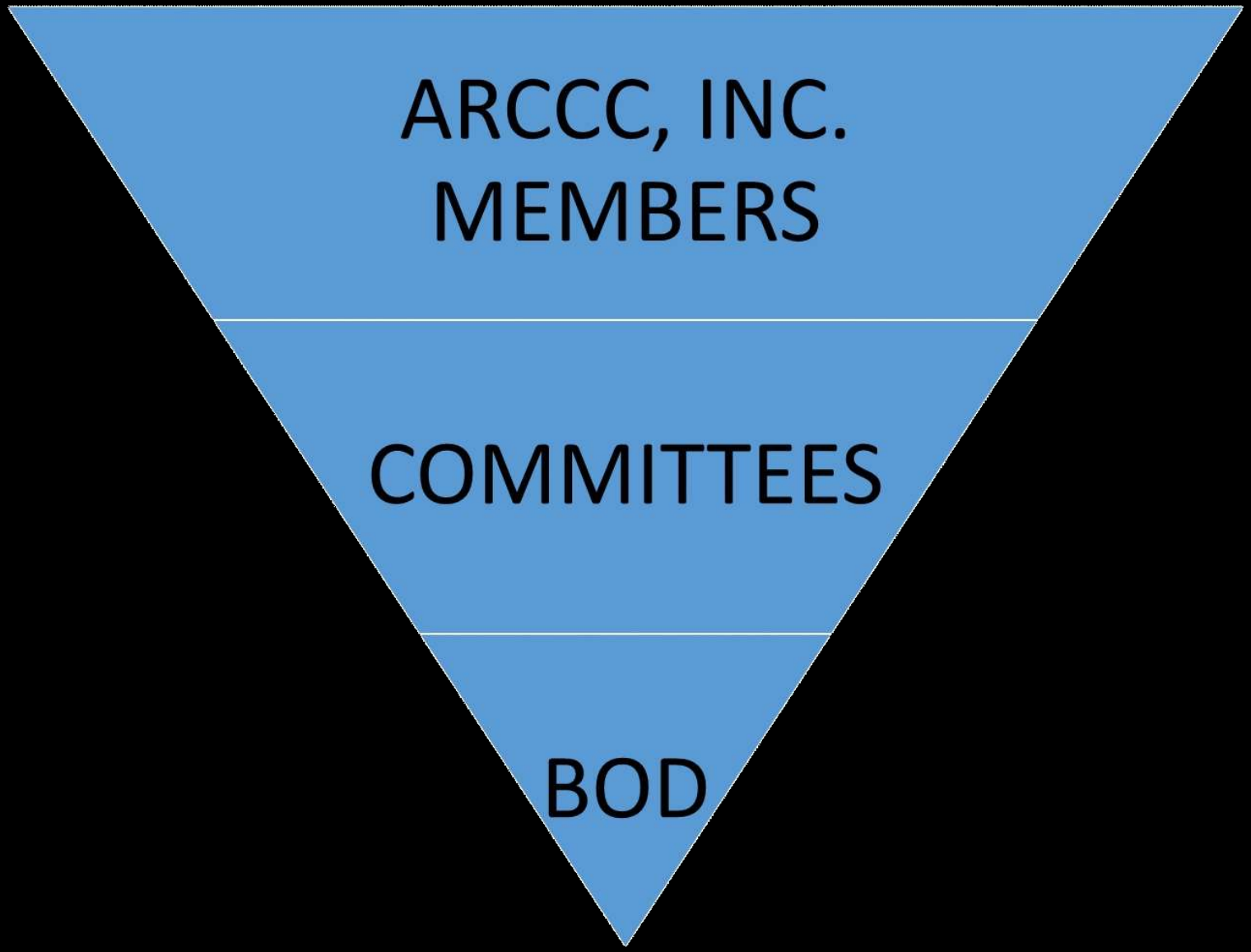
Inactivated Members: (Last 90 Days)

Name	Callsign	Remove Date	By
Andrew B Stanley	KO4DPU	2025-06-04	(HCOL SYSTEM)
Sean K Stanley	KM4NSG	2025-05-31	(HCOL SYSTEM)
CHARLES A PENNINGTON JR		2025-04-27	ERIC J CAGLE KK4ZHT
Michelle M Zavala	KW5WWW	2025-04-25	(HCOL SYSTEM)
Joseph L Longacre	KQ4RYC	2025-06-11	(HCOL SYSTEM)

New Memberships: (Last 90 Days)

Name	Callsign	Membership Type	Amount	Start Date	End Date	Poster	Post Date
Michael R Girosky	KQ4IVE	Full Membership	$25.00	2025-06-01	2026-05-31	Michael R Girosky	2025-04-01
Arthur D Dickerson	KM4UDR	Full Membership	$25.00	2025-05-22	2026-05-21	Arthur D Dickerson	2025-04-01
Jon C Gibbs	KQ4QLC	Full Membership	$25.00	2025-04-02	2026-04-01	Jon C Gibbs	2025-04-02
Thomas W Hardin Jr	KO4FFA	Full Membership	$25.00	2025-04-06	2026-04-06	Thomas W Hardin Jr	2025-04-06
RICHARD L DAVIDSON	KU4WX	Full Membership	$25.00	2025-04-09	2026-04-08	RICHARD L DAVIDSON	2025-04-08
Halam Yisra El	KD8OZQ	Full Membership	$25.00	2025-04-09	2026-04-09	Halam Yisra El	2025-04-09
MARC R WOODWORTH	KR4QT	Full Membership	$25.00	2025-05-02	2026-05-01	MARC R WOODWORTH	2025-04-25
Gunnar A Marshall	KR4DFM	Full Membership	$25.00	2025-05-07	2026-05-07	Gunnar A Marshall	2025-05-07
MICHAEL W SCHAEFER	NY3Y	Full Membership	$25.00	2025-07-14	2026-07-13	MICHAEL W SCHAEFER	2025-05-14
ERIC W BAKSIN	KC9ASC	Full Membership	$25.00	2025-05-24	2026-05-24	ERIC W BAKSIN	2025-05-24
Charles C Terry	KJ4IKZ	Full Membership	$50.00	2025-07-25	2027-07-24	Charles C Terry	2025-05-25
Marc B Powers	KO4QLA	Full Membership	$25.00	2025-05-24	2026-05-23	Marc B Powers	2025-05-25
Edwin E Davis Jr	KQ4SRF	Full Membership	$25.00	2025-06-10	2026-06-09	Edwin E Davis Jr	2025-06-03
George Williams	KN4THO	Full Membership	$25.00	2026-01-27	2027-01-26	George Williams	2025-06-04
Walter A Brumbeloe	W4EFS	Full Membership	$100.00	2025-07-08	2029-07-06	Walter A Brumbeloe	2025-06-05
Jefferson L Williams	KQ4LNS	Full Membership	$25.00	2025-06-09	2026-06-09	Jefferson L Williams	2025-06-09
Susan L Messick	WA0B	Full Membership	$25.00	2025-07-21	2026-07-20	Susan L Messick	2025-06-17

1. Club Menu
2. Main Menu
3. Logoff


ARCCC, INC.
MEMBERS
COMMITTEES
BOD

COMMITTEE UPDATES

Directors provide <u>QUICK UPDATES</u> on their committees

- IT
- Repeater
- Net Control
- Volunteer Examiner
- Constitution and Bylaws
- Field Day
- Asset/Inventory
- Nomination

- Chaplain and Visitation
- Fundraising
- Mentoring
- Outreach

Appointed Positions:

- K4KNS Trustee
- Public Information Officer
- QSL Manager

2025-2026 APPOINTMENTS

- K4KNS Trustee
  - Randall Blumberg (KN4FYG)
- QSL Manager
  - Dan Marshall (N4MI)
- Net Manager
  - Bill Clark (WK4F)
- Presentations
  - Eric Cagle (KK4ZHT)

COMMITTEE UPDATES

- Fund Raising Committee
  - Pull out your tickets!!!

- Fund Raising Ideas are Welcome!

COMMITTEE UPDATES

- Bylaws/Nominations Committee
  - Jim Cunningham (KV4YA) – Co-Director
  - Randall Blumberg (KN4FYG) – Co-Director

COMMITTEE UPDATES

- Finance Committee
  - Randall Blumberg (KN4FYG)
  - David Slabodnick (KO4LDS)

COMMITTEE UPDATES

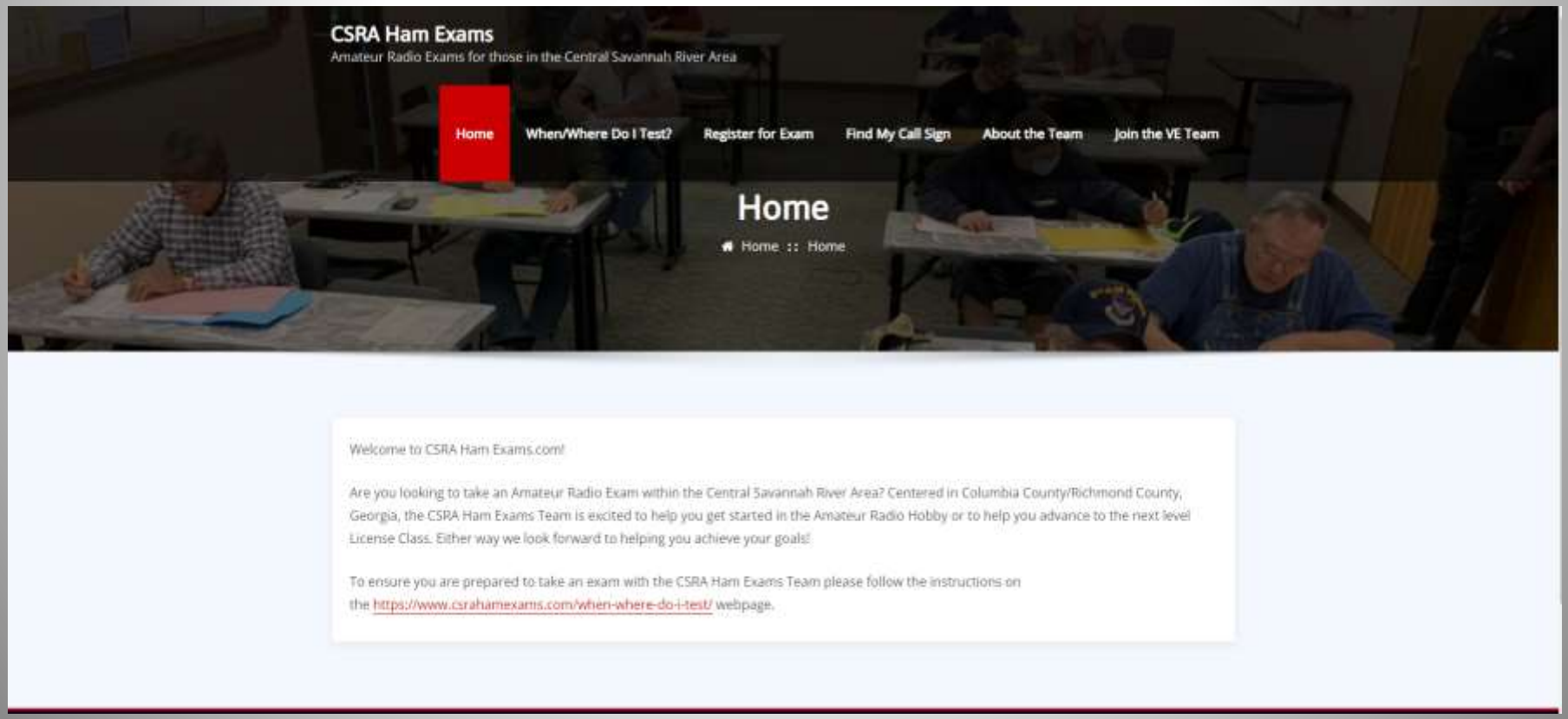
- Outreach Committee
  - Dan Marshall (N4MI)
  - Randall Blumberg (KN4FYG)

COMMITTEE UPDATES

- IT Committee
  - Rusty Welsh (KG4HIR)
  - Randall Blumberg (KN4FYG)
  - Eric Cagle (KK4ZHT)

COMMITTEE UPDATES

- Examinations
- CSRAHamExams.com



COMMITTEE UPDATES

- Repeater Committee
  - Randall Blumberg (KN4FYG) – Co-Director
  - Walter Brumbeloe (W4EFS) – Co-Director

COMMITTEE UPDATES

- Field Day Committee
  - Edwin Davis (KQ4SRF) – 2025-2026 Co-Director
  - Sam Reeder (WW4ZT) – 2024-2025 Co-Director
    - To Join the Field Day Committee
      - You must join via Groups.io
      - https://arcccinc.groups.io/g/fieldday/topics

Edwin (KQ4SRF)

Sam (WW4ZT)

BY THE GOVERNOR OF THE STATE OF GEORGIA

A PROCLAMATION

AMATEUR RADIO WEEK

WHEREAS: Georgia is home to 18,791 Amateur Radio Operators carrying on the legacy of a century of human voice transmitted over the airwaves. Amateur Radio continues to provide a bridge among societies and countries, cultivating friendships and the sharing of ideas; and

WHEREAS: Amateur radio operators statewide have provided countless hours of community service in STEM education such as the Amateur Radio International Space Station program, weather spotting in the Skywarn program of the National Weather Service, and backup communications services to police and fire departments, American Red Cross, local charitable events and other vital organizations throughout the region; and

WHEREAS: Highlighting their immense community impact, Georgia Amateur Radio Operators will lead a nationwide event yearly sponsored by the American Radio Relay League called "Field Day" as an emergency preparedness exercise that will take place between June 28th and 29th, 2025. This event will demonstrate Amateur Radio skills and readiness to provide self-supporting communications without further infrastructure; and

WHEREAS: The State of Georgia recognizes the diligence of the "Hams" who possess immense value in our modern technical world by providing emergency communications when other systems may fail; now

THEREFORE: I, BRIAN P. KEMP, Governor of the State of Georgia, do hereby proclaim June 22 - 29, 2025, as AMATEUR RADIO WEEK in Georgia.

In witness thereof, I have hereunto set my hand and caused the Seal of the Executive Department to be affixed this 19th day of May in the year of our Lord, Two Thousand and Twenty-Five.

GOVERNOR

ATTEST:

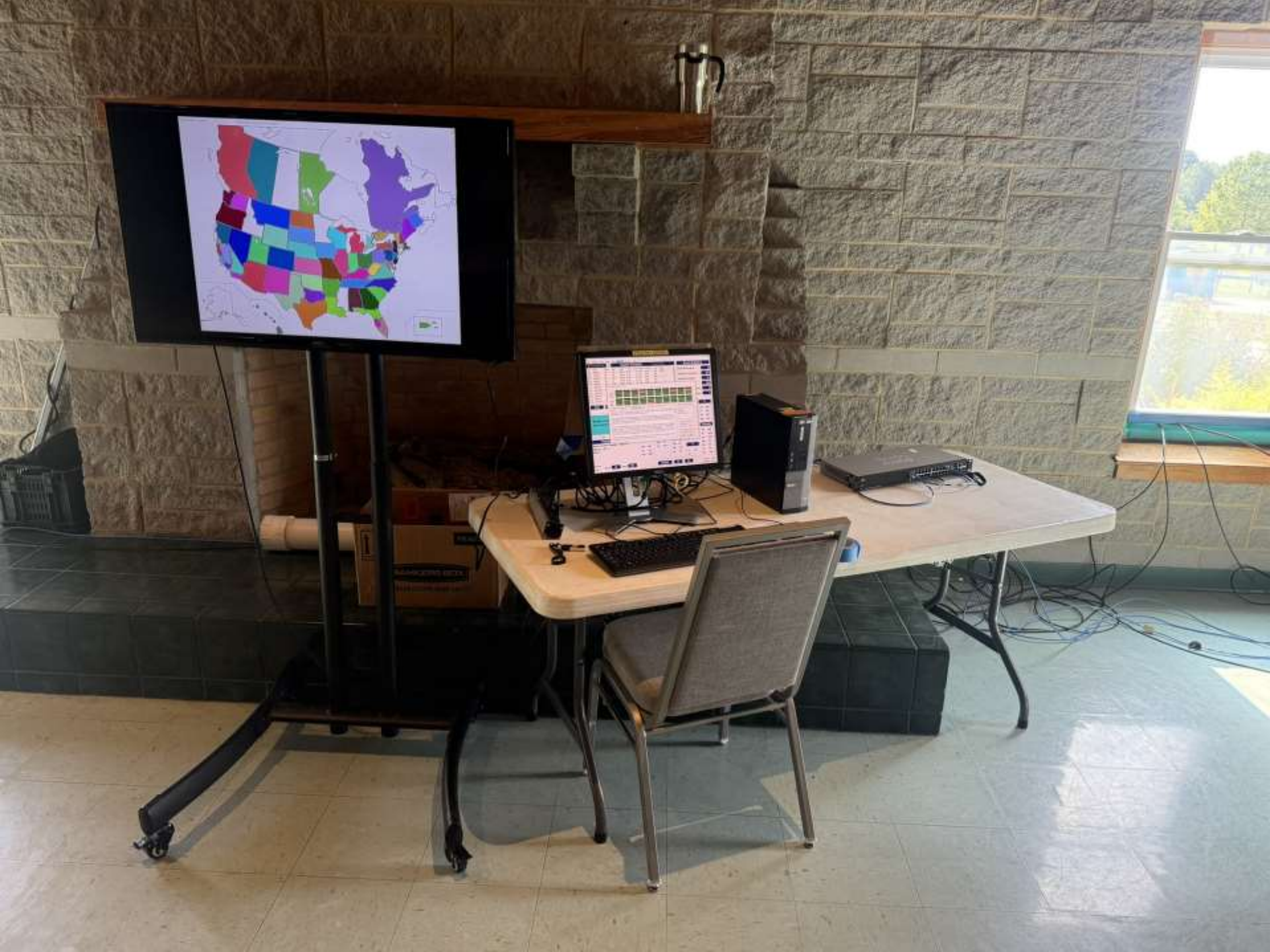
Lauren M. Curry

CHIEF OF STAFF

RADIO CONNECTS

FD25

AMATEUR RADIO
FIELD DAY
PUBLIC WELCOME!



WORK.WRENCH.WH
LITHIUM

N3FJP's ARRL Field Day Contest Log 6.6.9 www.n3fjp.com

File Settings Band Mode View Network Operator Help

Current Band & Mode | Find

Recent Contacts

Last 20 | All

Rec	Call	Class	Sec	Date / Time	Bnd	Mode	Country	Initials	Operator
274	N2XJ	2A	NNJ	06/29 15:02	20	PH	USA	SR	WW4ZT
273	W4UA	4A	NC	06/29 14:47	40	DIG	USA	SW	KK4MED
272	K6SOA	3A	ORG	06/29 14:46	15	PH	USA	DN	KK4CNM
271	W4UV	4A	NC	06/29 14:43	40	DIG	USA	SW	KK4MED
270	KK5W	10A	STX	06/29 14:30	20	PH	USA	RK	KO4KVG
269	W0JH	2A	MN	06/29 14:29	15	PH	USA	DN	KK4CNM
268	W0CET	4A	KS	06/29 14:25	20	PH	USA	RK	KO4KVG
267	N9PWW	1D	IN	06/29 14:24	15	PH	USA	DN	KK4CNM
266	N9BCN	2A	IN	06/29 14:22	20	PH	USA	RK	KO4KVG
265	W2OFQ	4A	WNY	06/29 13:49	20	PH	USA	RTR	KQ4AWB
264	N4SV	1E	IN	06/29 13:47	15	PH	USA	MW	KR4OT

Score Statistics

Total CW Contacts	0
Total Phone Contacts	250
Total DIG Contacts	23
Total QSO Points	296
QSOs / Hr (Last 20 min)	0
QSOs / Hr (Last 60 min)	0

Call	Class	Section

Ready to begin! Please select your band and mode from the menu!

Clear | Spot Last

Possible Duplicates

Any Portion

North Texas Total = 5
Bands: 40 = 1 20 = 2 15 = 2
PH= 5

DX: DX

1: CT, RI, EMA, VT, ME, WMA, NH

2: ENY, NNY, NLI, SNJ, NNJ, WNY

3: DE, MDC, EPA, WPA

4: AL, SC, GA, SFL, KY, TN, NC, VA, NFL, VI, PR, WCF

5: AR, NTX, LA, OK, MS, STX, NM, WTX

6: EB, SCV, LAX, SDG, ORG, SF, PAC, SJV, SB, SV

7: AK, NV, AZ, OR, EWA, UT, ID, WWA, MT, WY

8: MI, WV, OH

9: IL, WI, IN

0: CO, MO, IA, ND, KS, NE, MN, SD

Canada: AB, ONE, BC, ONN, GH, ONS, MB, PE, NB, QC, NL, SK, NS, TER

Total Contacts by Country:

Country	Total	%
USA	262	96
Puerto Rico	5	2
Canada	3	1
US Virgin Is.	2	1
England	1	0

Total = 5

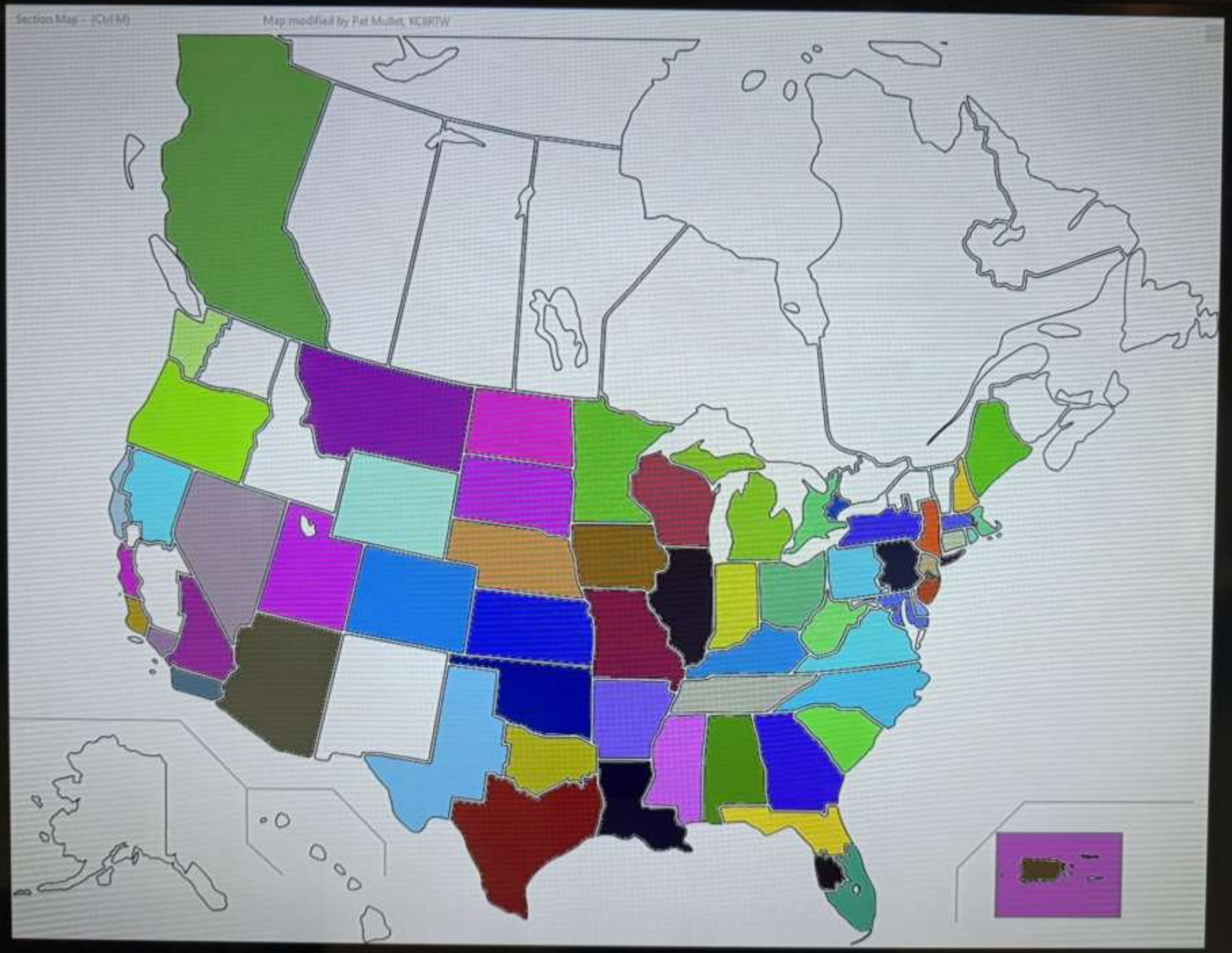
Total Contacts by Band and Mode:

Band	CW	Phone	Dig	Total	%
40	0	61	17	78	29
20	0	51	6	57	21
15	0	122	0	122	45
10	0	16	0	16	6
Total	0	250	23	273	100

Total Contacts by Operator:

Operator	Total	%
KO4UWM	116	42
KR4QT	36	13
KK4MED	34	12
KN4FYG	25	9
WW4ZT	17	6
AI4XF	11	4
KM4DBB	9	3
KQ4AWB	8	3
KQ4SRF	7	3
K4ISG	3	1
KK4CNM	3	1
KO4KVG	3	1
	1	0

Activity Graph - QSOs per Hour Rate (# QSOs over 20 minutes X 3). (Ctrl G)


Section Map - (Ctrl-M)
Map modified by Pat Mullet, KC8RTW

DID YOU KNOW…

Your Logbook WAS Account (K4KNS)

Account Status

WAS Award	New LoTW QSLs	LoTW QSLs in Process	WAS Credits Awarded	Total
Mixed	48	0	0	48
80M	29	0	0	29
40M	42	0	0	42
20M	42	0	0	42
15M	32	0	0	32
10M	19	0	0	19
CW	33	0	0	33
Phone	48	0	0	48
Digital	36	0	0	36
FT8	23	0	0	23
PSK31	24	0	0	24
80M Phone	27	0	0	27
80M CW	3	0	0	3
80M Digital	8	0	0	8
80M PSK31	4	0	0	4
40M Phone	38	0	0	38
40M CW	18	0	0	18
40M Digital	28	0	0	28
40M PSK31	21	0	0	21
20M Phone	40	0	0	40
20M CW	20	0	0	20
20M Digital	19	0	0	19
20M PSK31	9	0	0	9
15M Phone	27	0	0	27
15M CW	11	0	0	11
15M Digital	7	0	0	7
10M Phone	7	0	0	7
10M CW	9	0	0	9
10M Digital	12	0	0	12
Triple Play	117	0	0	117
5-Band	164	0	0	164

* = Award has been issued

- The ARCCC, Inc. is only **1** State Away from WORKING ALL STATES!
- ALASKA
- NEW MEXICO – 06-29-2025

Amateur Radio Club of Augusta

ARCA General Meeting
July 15, 2025 7:00 PM - 8:00 PM
POB-1 (formerly H2U) Building

W4DV.club

North Augusta - Belvedere Radio Club

NABRC General Meeting
July 14, 2025 7:00 PM - 8:00 PM
North Augusta Public Safety Station 2 501 W Five Notch Road North Augusta, SC 29860

K4NAB.org

East Central/Columbia County ARES

Susan Messick, WA0B
East Central District Emergency Coordinator
Columbia County GA ARES Emergency Coordinator

David Slabodnick, KO4LDS
Columbia County GA ARES Assistant Emergency Coordinator

David Corsiglia, WA6TWF
Columbia County GA ARES Assistant Emergency Coordinator

AmRRON

AmRRON

The American Redoubt Radio Operators Network

and The American Preparedness Radio Network (TAPRN)

Steven Kitchings, KN4RVU

REVIEW

- Review motions and assignments
- We would welcome your presentations and ideas for presentations.
- Is there a motion to adjourn the meeting?

AMATEUR RADIO CLUB

K4KNS

COLUMBIA COUNTY, GA

THANK YOU!!!