Signals – Attachment 1 Norfolk Southern: Postaccident Test Records

> Pages - 21 (including cover sheet)

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PELL CITY FRA FORMS

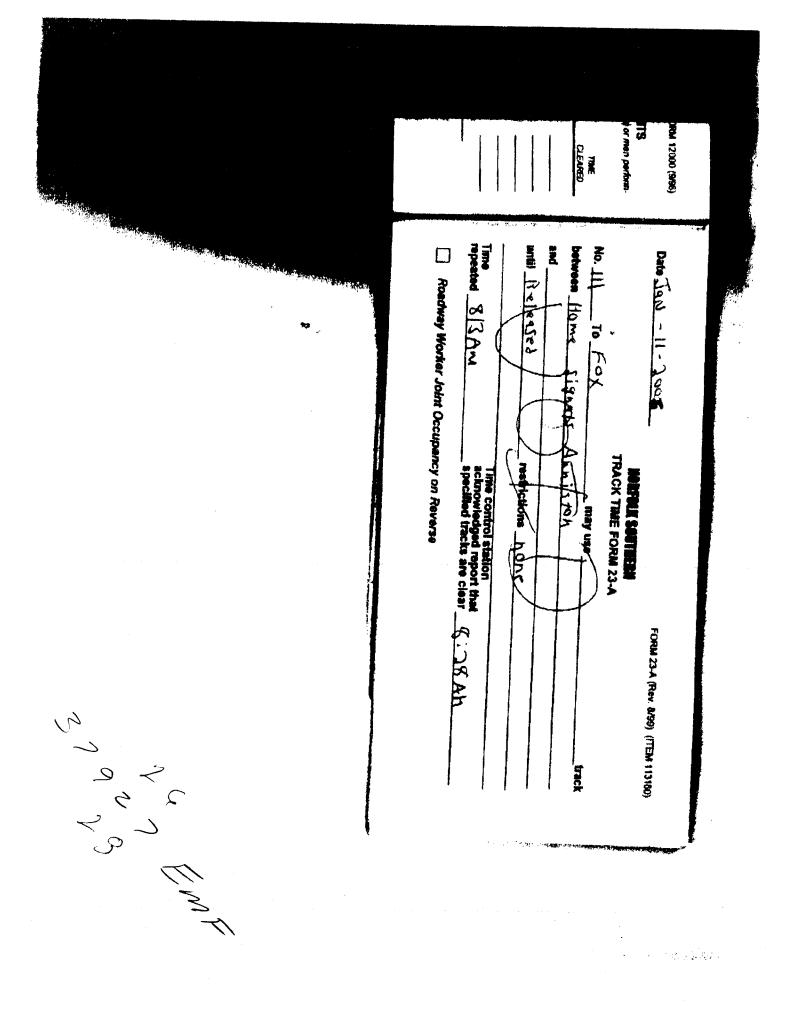
	2-02-07	lies with FRA	Form complies with FRA S-96-05		all be identified) (item shall be id	nce (item sh n compliance	t in complie d and left ir	sted and lef	 A - Adjustments made, test completed and left in compliance (item shall be identified) R - Repair / replacement made, test completed and left in compliance (item shall be identified) N/A - Not applicable 	A - Adjus R - Repai
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g test (in ink)	performing	f employees	Signature o		-	Caldueli	てる		Enter Date and Test Code	(*) Enter
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	1. a. a.		8' 00"	TE	AM255	532 mA	$\mathcal{P}_{\mathcal{O}}$	B-10	ELECTRIC LOCK / DERAIL	763.1
HIFO					340 ml	352 10	D.A.	B-10	PELL CITY INTERMEDIATE	762.8&9
A HIRO			8' 00''	Ē		പ്	relav	B-10	ELECTRIC LOCK / DERAIL	761.9
20			8 ¹ 00"	TE	TK cord		Riversi	B-10	ELECTRIC LOCK / DERAIL	761.75
<i>"11 ~</i>			8' 00"	ΞI				B-10	ELECTRIC LOCK / DERAIL	761.7
5 4/4		4.			conditions)		(wet	B-10	RIVERSIDE INTERMEDIATE	760.4&5
			9"-11"	1TTE	( 1.0A	Ť.	X-mit 2.	B-28		
760480			5' 25"	1TE		ller.	Ben M	B-12 -	COOSA BUNGALOW	757.9
-44-2			8' 00"	, TE	123/06	λe	current	B-10	ELECTRIC LOCK / DERAIL	757.4
H/R IS					nek	ECI H	Coosa	B-28		
			6' 34"	ASR				B-12	EMBRY BUNGALOW	756.1
H C-1/H			8' 00''	TE				B-10	ELECTRIC LOCK / DERAIL	755.7
								B-28		
			6' 05"	ASR				B-12	LINCOLN BUNGALOW	754.1
1-72.06			10' 25"	TE				B-10	ELECTRIC LOCK / DERAIL	753.9
recieta.			8' 56"	Ш				B-10	ELECTRIC LOCK / DERAIL	753.1
ナ								B-10	INTERMEDIATE	751.384
								B-10	EASTABOGA INTERMEDIATE	749.0&1
			8'00	TE				B-10	ELECTRIC LOCK / DERAIL	747.7
		ACTIIAI	SFT	DEVICE						
ITEM ADJUSTED, REPAIRED OR REPLACED	EVICES	ID TIMING D	LEASE AN	TIME RE	* SIGNAL MECH SEMAPHORE & SEARCH LIGHT	SIGNAL	GROUND	ENERGY BUSS	LOCATION & AAR/DOT NUMBER	MILE
		/ 234.265	236.109		36.102	2	.107	236		
		JALLY	ANNU		IONTHS	6 1	TERLY	QUAR		
M.P. 746.5 to M.P. 767.8	RRITORY	TE	F	Pell City, A	EADQUARTERS	H		ALABAMA	DIVISION	
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DES and left in c		0	0	V	Amps		MAX.P.	MIN.D.	DEVICE	SIZE <u>2.5</u>	RESISTANCE 900 OHMS	EST	LOCATION Riverside	VA RULES	וד
compliance		0	0	POL.P.U./W			MAX.P.U. 0.0088 Amps	MIN.D.A. 0.0034 Amps	DEVICE SPECIFICATION	2.5	SWHO 006	AAR/DUI NU. & CITY/CUUNTY,STATE YEAR TEST 3 YEAR TE		FRA RULES 234.263, 236.102, 236.106	<b>RELAY TEST</b>
(item shall		28.8	28.8	1 1	N.OPR		SdL	1 <u>05</u>	<u>ION</u>	Z	S	3 YEAR TEST	M.P.	236.102,	<b>TEST</b>
be identif					%D.A.		MAX.	P,U	2	MODEL NO. A62-308	SERIAL NO. F80-54Q		7 <u>60.5</u>	236.106	
edi		admin	admin		Signature (IN INK)		MAX.P.U. 0 Amps	P.U.W 0 Amps	POLAR	. <u>A62-308</u>	. <u>F80-54Q</u>	4 YEAR TEST			FO
		<u>с</u>	0		TEST							EST <u>YES</u>		ITEM 613677	FORM 11577 (REV. 6/04)

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	IDENTIFIED ITEM				1/23/2006 R	1/23/2006 N		TEST DATE	V IO	P.U. 0	D.A. 0	17	1 1	DEVICE DESIGNATION 7604H	1 YEAR TEST	DIVISION <u>Alabama</u>		
					0	0.0044	D.A.		0 Amps	0.008 Amps	0.004 Amps	NEUTRAL	17PE <u>B-1</u>	Т <u>7604Н</u>		labama		S SOUT
TEST CODES					D	0.0074	P.U.	TEST Amps	-					RE	<b>2 YEAR TEST</b>	LOCATIC AAR/DO	FR	NORFOLK SOUTHERN
UES					0		₹	Amps		MAX.P.	MIN.D./	DEVICE	SIZE 2.5	RESISTANCE 900 OHMS	ST	LOCATION <u>Riverside</u>	A RULES	71
					э	0	POL.P.U./W			MAX.P.U. 0.0088 Amps	MIN.D.A. 0.0034 Amps	DEVICE SPECIFICATION	2.5	900 OHMS	3 Y	AAR/DOT NO. & CITY/COUNTY.STATE	FRA RULES 234.263, 236.102, 236.106	<b>RELAY TEST</b>
					28 R	28.8	VOLTS	N.OPR		Sd	SQ	ON		ŝ	3 YEAR TEST	M.P.	236.102,	<b>TEST</b>
		_						"%D.A.		MAX.I	P.U	P	MODEL NO. <u>A62-308</u>	SERIAL NO. F80-J58		760.5	236.106	
					admin	admin	(114	Sig		MAX.P.U. 0 Amps	P.U.W 0 Amps	POLAR	. <u>A62-308</u>	. F80-J58				
								Signature		100	100				4 YEAR TEST YES			FORM
				6	<b>)</b>	0		TEST							T <u>YES</u>		ITEM 613677	FORM 11577 (REV. 6/04)

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	FR	A RULE	FRA RULES 234.263, 236.102, 236.106	236.102,	236.106		ITEM 613677
DIVISION <u>Alabama</u>	LOCATIC AAR/DO	LOCATION Riverside	LOCATION <u>Riverside</u> M AAR/DOT NO. & CITY/COUNTY,STATE	M.P.	. 760.5		
1 YEAR TEST	2 YEAR TEST	ST	3 Y	<b>3 YEAR TEST</b>		4 YEAR TEST YES	EST YES
DEVICE DESIGNATION 7605D	RE	SISTANCE	RESISTANCE 900 OHMS	6	SERIAL NO. <u>F80-015</u>		
TYPE B-1		SIZE 2.5	2.5	3	MODEL NO. A62-308	). <u>A62-308</u>	
		DEVIC	DEVICE SPECIFICATION				
NEUTRAL				1	177	POLAR	
D.A. 0.004 Amps		MIN.D.	MIN.D.A. 0.0034 Amps	SQ	P.(	P.U.W 0 Amps	
P.U. 0.008 Amps		MAX.P	MAX.P.U. 0.0088 Amps	S	MAX	MAX.P.U. 0 Amps	
W 0 Amps							
TEST DATE	TEST Amps	Amps		N.OPR	%D.A.	Signature	TEST
D.A.	P.U.	۶	POL.P.U.W	VOLTS			
1/23/2006 N 0.0044	0.0073	0	0	28.8		admin	c
1/23/2006 R 0	0	0	0	28.8		admin	c
IDENTIFIED ITEM							
	TEST CODES	DES					
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N/A - Not applicable						Form complies with FRA S-96-05	FRA S-96-05

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TEST CODES C - Test completed, left in compliance A - Adjustments made, test completed and left in compliance (item shall be identified) R - Repair/Replacements made, test completed and left in compliance (item shall be identified)	IDEN IFIED ITEM					1/23/2006		TEST DATE	٤	P.U.	D.A.			Т	DESIGNATION	<b>1 YEAR TEST</b>	<b>DIVISION</b> Alabama		
oleted, left nts made, t					ת 0		D.A.		0 Amps	0.008 Amps	0.004 Amps	NEUTRAL		<b>TYPE</b> <u><b>B</b>-1</u>	10N 7605H		Alabama		
TEST CODES in compliance est completed and							P.U.	TES		<u>80</u>	05				_	2 YEAR TEST			NORFOLK SOUTHERN
CODES ce ed and left li					0	0	<	TEST Amps		MAX.	MIN.C		DEVIC	SIZ	RESISTANCE 900 OHMS	TEST	LOCATION Riverside	FRA RULE	
n complianc					0	0	POL.P.U.W			MAX.P.U. 0.0088 Amps	MIN.D.A. 0.0034 Amps		DEVICE SPECIFICATION	SIZE 2.5	E 900 OHMS	PAR TEST 3 YEAR TE		FRA RULES 234.263, 236.102, 236.106	RELAY TEST
e (item shall					28.8	28.8	N NOLIS	N.OPR		mps	mps	;	-	2	(0)	3 YEAR TEST	M.P.	, 236.102,	IESI
l be identif								%D.A. FOR AC		MAX.	P.U	סו		MODEL NO. A62-308	SERIAL NO. F80-036		. 760.5	236.106	
fied)					admin	admin		Sign (IN		MAX.P.U. 0 Amps	P.U./W 0 Amps	POLAR		). A62-308	. F80-036				
								Signature (IN INK)								4 YEAR TEST YES			FORI
					0	0		TEST								ST YES		ITEM 613677	FORM 11577 (REV. 6/04)

FORM CS5

	S NOR	SOUTHERN		<b>RELAY TEST</b>	EST		FORM	FORM 11577 (REV. 6/04)
		FR	A RULE	FRA RULES 234.263, 236.102, 236.106	236.102,	236.106		ITEM 613677
DIVISION Alabama	labama		LOCATION Riverside	LOCATION Riverside M	M.P.	760.5		
<b>1 YEAR TEST</b>		2 YEAR TEST	ST ST	3 YI	3 YEAR TEST		4 YEAR TEST YES	r <u>Yes</u>
DESIGNATION	Zm  S	RES	SISTANCE	RESISTANCE 900 OHMS	S	ERIAL NO	SERIAL NO. F80-00R	
ТҮР	TYPE <u>B-1</u>	1	SIZE 2.5	2.5	Z	IODEL NO	MODEL NO. A62-308	
			DEVIC	DEVICE SPECIFICATION				
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¥ Q	0 Amps							
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1/23/2006 R	0	0	0	0	28.8		admin	С
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IDENTIFIED ITEM	<b>≤</b>							
		TEST CODES	)ES					
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A - Adjustments made, test completed and left in compliance (item shall be identified)	made, test	completed a	Ind left in	compliance (i	tem shall	be identi	fied)	
N/A - Not applicable	ible						Form complies with FRA S-96-05	A S-96-05

R - Repair/Replacements made, test completed and left in compliance (item shall be identified) N/A - Not applicable Form complies with FRA S-96-05 A - Adjustments made, test completed and left in compliance (item shall be identified) C - Test completed, left in compliance **TEST DATE IDENTIFIED ITEM 1 YEAR TEST** 1/23/2006 1/23/2006 DEVICE DESIGNATION <u>1EAD</u> **DIVISION** Alabama P.U. D.A. ٤ πz TYPE B-1 0 Amps 0.008 Amps 0.004 Amps NEUTRAL 0.0041 D.A 0 **2 YEAR TEST TEST CODES** 0.0072 P.U. AAR/DOT NO. & CITY/COUNTY, STATE LOCATION Coosa 0 TEST Amps **RESISTANCE 900 OHMS** FRA RULES 234.263, 236.102, 236.106 ≶ MAX.P.U. 0.0088 Amps 0 0 MIN.D.A. 0.0034 Amps DEVICE SPECIFICATION SIZE 2.5 POL.P.U.W 0 0 **3 YEAR TEST** N.OPR 28.8 28.8 M.P. MODEL NO. A62-308 SERIAL NO. F80-17R %D.A. 757.9 MAX.P.U. 0 Amps P.U.W 0 Amps POLAR admin admin Signature (IN INK) 4 YEAR TEST YES TEST ITEM 613677 ဂဂ

B BOUTHERN

RELAY TEST

FORM 11577 (REV. 6/04)

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# **RELAY TEST**

FORM 11577 (REV. 6/04)

TEST CODES C - Test completed, left in compliance A - Adjustments made, test completed and left in compliance (item shall be identified) R - Repair/Replacements made, test completed and left in compliance (item shall be identified) N/A - Not applicable	IDENTIFIED ITEM			1/23/2006	1/23/2006		TEST DATE		סי	D			DESIGN	<b>1 YEAR TEST</b>	DIVISION	
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l compliance				0	0	POL.P.U.W			MAX.P.U. 0.0088 Amps	MIN.D.A. 0.0034 Amps	DEVICE SPECIFICATION	2.5	RESISTANCE 900 OHMS	3 \	LOCATION Coosa M	•
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fiad)				admin	admin		Signature		MAX.P.U. 0 Amps	P.U.W 0 Amps	POLAR	MODEL NO. <u>A62-308</u>	SERIAL NO. F80-N70	4 YEAR TEST		
				0	0		TEST							TEST <u>Yes</u>		

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**RELAY TEST** FRA RULES 234.263, 236.102, 236.106

FORM 11577 (REV. 6/04)

ITEM 613677

Image: Source interview       CLAT I ICS I         FRA RULES 234.263, 236.102, 236.102       FRA RULES 234.263, 236.102, 236.102         Image: Strength interview       ARCOTION C. 8 citry/country, strate       Image: Strength interview         Image: Strength interview       Image: Strength interview       Strength interview       Strength interview         Image: Strength interview       Image: Strength interview       Strength interview       Strength interview       Strength interview         Image: Strength interview       Image: Strength interview       Image: Strength interview       Strength interview       Strength interview       Strength interview         Image: Strength interview       Image: Strength interview       Image: Strength interview       Strength interview       Strength interview       Strength interview         Image: Strength interview       Image: Strength interview       Image: Strength interview       Strength interview       Strength interview       Strength interview         Image: Strength interview       Image: Strength interview       Image: Strength interview       Strength interview       Strength interview       Strength interview         Image: Strength interview       Image: Strength interview       Image: Strength interview       Image: Strength interview       Strength interview       Strength interview         Image: Strength interview       Image: Strength	NCLAT IDENTIFIE     NCLAT IDENTIFIE     NCLAT IDENTIFIE     NOTIFIE     NUITING       IVEAR TEST     1 YEAR TEST     2 YEAR TEST     3 YEAR TEST     4 YEAR TEST     4 YEAR TEST       IVEAR TEST     2 YEAR TEST     3 YEAR TEST     4 YEAR TEST     4 YEAR TEST     4 YEAR TEST       IVEAR TEST     2 YEAR TEST     3 YEAR TEST     4 YEAR TEST     4 YEAR TEST     4 YEAR TEST       IVEAR TEST     1 YEAR TEST     1 YEAR TEST     4 YEAR TEST     4 YEAR TEST     4 YEAR TEST       IVEAR TEST     NEUTRAL     SIZE 2 JEAR     MODEL NO. 560-M18     MODEL NO. 560-M18     1 YEAR TEST       IVEAR TEST     NEUTRAL     SUBSTANCE SECOLOHINS     MODEL NO. 560-M18     MODEL NO. 560-M18     1 YEAR TEST       IVEAR TEST     MEXTRAL     SUBSTANCE SECOLOHINS     MODEL NO. 560-M18     MODEL NO. 560-M18     1 YEAR TEST       IVEAR TEST     MIN.D.A. 0.0038 Ams     MAX.P.U. 0.4038 Ams     MAX.P.U. 0.40ms     MAX.P.U. 0.40ms       W     0.0005     0     28.8     admin     CODE       IVEAR TEST     NOPE     NO.PR     NO.PR     NO.PR     NO.PR       IVEAR TEST CODES     ITEST CODES     ITEST CODES     ITEST CODES     ITEST CODES       C - Test compliance     Itest compliance (Item shall be identified)     Itelentified)     Itelentified) <th>C - Test completed, A - Adjustments ma R - Repair/Replacen N/A - Not applicable</th> <th>IDENTIFIED ITEM</th> <th></th> <th></th> <th>$\left  \right$</th> <th></th> <th>1/23/2006</th> <th></th> <th>TEST DATE</th> <th>×</th> <th>P.U.</th> <th>D.A.</th> <th>_</th> <th>-</th> <th>DESIGNATION</th> <th>1 YEAR TEST</th> <th></th> <th></th>	C - Test completed, A - Adjustments ma R - Repair/Replacen N/A - Not applicable	IDENTIFIED ITEM			$\left  \right $		1/23/2006		TEST DATE	×	P.U.	D.A.	_	-	DESIGNATION	1 YEAR TEST		
FRA RULES 234.263, 236.102, 236.106         LOCATION Coose         ARRIDT NO. & CITY/COUNTY, STATE         2 VEAR TEST         SIZE 2.5       MODEL NO. E80-M18         SERIAL NO. E80-M18         MIN.D.A. 0.0034 Amps         MAX.P.U. 0.0088 Amps         MAX.P.U. 0.0088 Amps         MAX.P.U. 0.0088 Amps         MAX.P.U. 0.0088 Amps         MAX.P.U. 0.Amps         MAX.P.U. 0.Amps         MAX.P.U. 0.Amps         MAX.P.U. 0.Amps         MAX.P.U. 0.Amps         MAX.P.U. 0.Amps         COLS <td>VIK) VEAR</td> <th>pleted, left in nts made, te</th> <td>TEM</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>D.A.</td> <td></td> <td></td> <td></td> <td></td> <td>NEUTRAL</td> <td>YPE <u>B-1</u></td> <td>FION <u>1EBG</u></td> <td></td> <td></td> <td>800</td>	VIK) VEAR	pleted, left in nts made, te	TEM						D.A.					NEUTRAL	YPE <u>B-1</u>	FION <u>1EBG</u>			800
NELATION       N.C.LATICZI         ION       Coosa       M.P.       757.9         DT       NO. & CITY/COUNTY,STATE       SERIAL NO. E80.M18         SIZE       2.5       MODEL NO. A62.308         DEVICE SPECIFICATION       POLAR       POLAR         MIN.D.A.       0.0034 Amps       MAX.P.U. 0.0088 Amps       MAX.P.U. 0.A62.308         MAX.P.U.       0.0034 Amps       MAX.P.U. 0.A62.308       MAX.P.U. 0.A62.308         MAX.P.U.       0.0034 Amps       MAX.P.U. 0.A62.308       MAX.P.U. 0.A62.308         MAX.P.U.       0.0034 Amps       MAX.P.U. 0.A62.308       MAX.P.U. 0.A62.308         MAX.P.U.       0.0034 Amps       MAX.P.U. 0.Amps       MAX.P.U. 0.Amps         MAX.P.U.       0.0088 Amps       MAX.P.U. 0.Amps         MAX.P.U.       0.028.8       admin         0       0       28.8       admin         10       10       10       10       10         10       10       10       10       10	VK) VEAR	TEST CO I compliance st completed made. test co					5	0.0075	P.U.	TEST			100			R	AAR/DO 2 YEAR T	F	
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1 LCO I 236.102, 236.106 M.P. <u>757.9</u> ,STATE YEAR TEST NODEL NO. <u>F80-M18</u> MODEL NO. <u>680-M18</u> NOPR N.OPR VOLTS POLAR P.U.W <u>0 Amps</u> P.U.W <u>0 Amps</u> MAX.P.U. <u>0 Amps</u> MAX.P.U. <u>0 Amps</u> 100 100 100 100 100 100 100 10	VEAR VEAR	compliance					0	0	POL.P.U.M			³ .U. <u>0.0088 An</u>	.A. 0.0034 An	E SPECIFICAT	2.5	SWHO 006		S 234.263,	
. <u>757.9</u> . <u>757.9</u> NODEL NO. <u>E80-M18</u> NODEL NO. <u>A62-308</u> P.U.W <u>0 Amps</u> MAX.P.U. <u>0 Amps</u> MAX.P.U. <u>0 Amps</u> MAX.P.U. <u>0 Amps</u> (IN Here shall be identified)	VEAR VEAR	(item shal				10.0	3 1			N.OPR		108	1DS	ION			M.F (,STATE YEAR TES	236.102	
fied)	VK) YEAR	l be identi								~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		MAX	P.1		MODEL NO	SERIAL NO	-	, 236.106	! ! !
	VK) YEAR	fied)						admin	NI)	Sign		.P.U. 0 Amps	J.W 0 Amps	OLAR	D. <u>A62-308</u>	D. <u>F80-M18</u>			

R - Repair/Replacements made, test completed and left in compliance (item shall be identified) N/A - Not applicable C - Test completed, left in compliance A - Adjustments made, test completed and left in compliance (item shall be identified) IDENTIFIED ITEM **1 YEAR TEST FEST DATE** 1/23/2006 DEVICE DESIGNATION <u>1NWC</u> **DIVISION** Alabama D.A. P.U. ٤ NORFOLK BOUTHERN TYPE <u>B-1</u> πz 0.0115 Amps 0.0058 Amps 0.0115 Amps NEUTRAL 0.006 **D.A** 0 **2 YEAR TEST TEST CODES** 0.0105 P.U. LOCATION Coosa AAR/DOT NO. & CITY/COUNTY,STATE 0 **TEST Amps** RESISTANCE 500 OHMS FRA RULES 234.263, 236.102, 236.106 MAX.P.U. 0.01265 Amps 0 ∘≶ MIN.D.A. 0.00493 Amps DEVICE SPECIFICATION SIZE 2.5 **RELAY TEST** POL.P.U.W 0 0 **3 YEAR TEST** N.OPR LOCAL VOLTS 23 23 M.P. SERIAL NO. <u>G80-001</u> MODEL NO. A62-122 %D.A. FOR AC 757.9 MAX.P.U. 0 Ampa P.U.W 0 Amps POLAR admin Form complies with FRA S-96-05 Signature (IN INK) 4 YEAR TEST YES FORM 11577 (REV. 6/04) ITEM 613677 റ ဂ

N/A - Not applicable R - Repair/Replacements made, test completed and left in compliance (item shall be identified) A - Adjustments made, test completed and left in compliance (item shall be identified) C - Test completed, left in compliance **TEST DATE IDENTIFIED ITEM 1 YEAR TEST** 1/23/2006 1/23/2006 DEVICE DESIGNATION <u>1RWC</u> **DIVISION** Alabama P.U. D.A. ٤ z TYPE B-1 ע S BOUTHERN 0.0058 Amps 0.0115 Amps 0.0115 Amps NEUTRAL 0.0062 0 **2 YEAR TEST TEST CODES** 0.0109 P.U. AAR/DOT NO. & CITY/COUNTY,STATE LOCATION Coosa 0 **TEST Amps RESISTANCE 500 OHMS** FRA RULES 234.263, 236.102, 236.106 ۶ 0 0 MAX.P.U. 0.01265 Amps MIN.D.A. 0.00493 Amps DEVICE SPECIFICATION SIZE 2.5 RELAY TEST POL.P.U./W 0 0 **3 YEAR TEST** N.OPR 23 23 M.P. MODEL NO. A62-122 SERIAL NO. G80-N91 %D.A. 757.9 MAX.P.U. 0 Amps P.U.W 0 Amps POLAR admin Form complies with FRA S-96-05 Signature (IN INK) 4 YEAR TEST YES FORM 11577 (REV. 6/04) TEST ITEM 613677 ဂ ဂ

R - Repair/Replacements made, test completed and left in compliance (item shall be identified) N/A - Not applicable Form complies with FRA S-96-05 A - Adjustments made, test completed and left in compliance (item shall be identified) C - Test completed, left in compliance IDENTIFIED ITEM FEST DATE **1 YEAR TEST** 1/23/2006 1/23/2006 DEVICE DESIGNATION 1WBK **DIVISION** Alabama P.U. D.A. ٤ z TYPE <u>B-1</u> π 0 Amps 0.008 Amps 0.004 Amps NEUTRAL 0.0042 0 **2 YEAR TEST TEST CODES** 0.0075 AAR/DOT NO. & CITY/COUNTY,STATE LOCATION Coosa 0 TEST Amps **RESISTANCE 900 OHMS** FRA RULES 234.263, 236.102, 236.106 ₹ MAX.P.U. 0.0088 Amps MIN.D.A. 0.0034 Amps **DEVICE SPECIFICATION** 0 0 SIZE 2.5 POL.P.U.W 0 0 **3 YEAR TEST** N.OPR 28.8 28.8 M.P. SERIAL NO. B80-Q32 MODEL NO. A62-308 %D.A. 757.9 MAX.P.U. 0 Amps P.U.W 0 Amps POLAR admin admin Signature (IN INK) 4 YEAR TEST YES FORM 11577 (REV. 6/04) TEST ITEM 613677 ဂဂ

NO BOUTHERN

RELAY TEST

# ALBHENCNSTTWS10

### **Blocking Summary**

## Subdivision 1bheast

113	between ANNISTON SIDING and ANNISTON SIDING	Simple	ME
111	between ANNISTON MAIN 1 and ANNISTON MAIN 1	Simple	FOX
999	between LARDENT MAIN and ARDREY MAIN	Simple	REED
996	between TALLAPOOSA MAIN and HUBBARD MAIN	Simple	PATTERSON
998	between WINSTON MAIN and CRACKER	Simple	WHITAKER
View Sumn	nary		
284	between SPRING SIDING and VINCENT SIDING	Simple	DISPATCHER
102	between CHILDERSBURG MAIN and LIPSY MAIN	Simple	GILLILAND

End Summary

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111	То	FOX	
between A	NNISTON M	MAIN 1	
and ANNI	STON MAI	NY 4	

Notes **U/R RRESTNONE** 

Placed at	<u>01/11/06 8:13 AM</u>	RTC if
Removed at	01/11/06 8:28 AM	RTC jf

Cancelled by jf



W. J. Scheerer

Chief Engineer

**GE Transportation Systems** Global Signaling

GE Transportation Systems Global Signaling, LLC 2712 S. Dillingham Road, PO Box 600 Grain Valley, Missouri 64029 Telephone: (816) 650-1653 / Dial Comm: *8 217-1653 William.Scheerer@trans.ge.com

January 26, 2006

Mr. Brian L. Sykes Chief Engineer, C&S Engineering Norfolk Southern Railway 1200 Peachtree St NE Atlanta, GA 30309-3579

Dear Mr. Sykes,

At your request, two of our senior Engineers Jeff Buckles and Rodger Maurer, were dispatched on Tuesday, to assist Norfolk Southern in the technical review of the performance of Electro Code IIC equipment installed on the Birmingham Subdivision. The equipment reviewed included the ECIICs that control the West track circuit at the Coosa Control Point and the opposite end of the same track circuit at Signal 7604 located at Mile Post 760.4 in Riverside.

The following data was collected:

#### Milepost 760.4 ECIIC serial number 2683

	Mod level		I		1	T T	····	
Module	revision	Serial number	Notes				Recomme	andations
1C 2C	BB	567	OK	· · · · · · · · · · · · · · · · · · ·		t		
2C	Α	3325	OK					<u>↓</u>
35	D	4816	ОК					+
١K	Gold D	6218	Capacitor modif	cation comple	te as per ES	3 02-100	Annly Mo	d Level sticker "F"
5K	Gold D	6649	Capacitor modifi					d Level sticker "F"
6A	none	2353	Mod Level stick	er missina	1			d Level sticker "N"
7K	J	129610774	OK					
BA	A	3689	OK	· · · · · · · · · · · · · · · · · · ·		<u>†</u>		
IOK	none	2738	Electronis as pe	r ESB 02-100	Mod Levels	ker miseinn	Apply Mo	d Level sticker "F"
I 1A	C	2228	OK					
12A	N/A	N/A	Not required	· · · · · · · · · · · · · · · · · · ·		1		<u>↓</u>
13B	B		OK	·		<u> </u>		<u>├───</u>

#### Track circuit analysis

Cleared for an Eastbound move at 11:20 AM

Received Code 4	Code Rate 320 ms	1st pulse width 100ms	2nd pulse width 100ms	period 2.520s					
Transmitted Code 1		120ms		2.520s					
Behind train number 5529 (BNSF) at 11:44 AM									
Received Code 1		120ms		2.500s					
Transmitted Code 2	700ms			2.500s					



Module	Mod level revision	Serial number	Notes		1		Recomm	andationa	
1C	BB	566/568	OK .				Recomm	endations	
2C	A	3537	OK		+			+	
3E	N/C	1240	ОК		1				
3E 4K	none	4260	Capacitor modif	cation complete	as per ESB	02-100	Apply Mo	d Level stick	or "E"
5K	Gold D	6308	Capacitor modif	ication complete	as per ESB	02-100	Apply Mod Level sticker "F"		
6A	none	2356	Mod Level stick		1			d Level stick	
7K	none	8962348	ОК		1			d Level stick	
8A	Α	3694	ОК					d Level alon	
10K	N/A	N/A					·		
11A	С	2141	OK		+				
12A	В	1840	ОК		1			+	
13B	A	1727	OK		1				

#### **Coosa Control Point ECIIC West track circuit**

#### Track circuit analysis

Cleared for an Eastbound move at 5:20 PM

Received	Code Rate	1st pulse width	2nd pulse width	period
Code 4	320 ms	220ms	140ms	2.500s
	020 110	220113	140015	2.0005

#### Conclusions:

The Electro Code IIC equipment reviewed was operating as intended. Track circuit analysis indicates that code pulses applied to the rail meet original factory specifications. Mod Level revisions meet the minimum requirements as described in the Electro Code IIC Minimum Mod Level Guide document number 100464-009. Although some modules in the above tables did not have the Mod Level sticker attached to the PC board assembly, a review of the electronic components and circuits by GETS GS engineers validated that the equipment meets the minimum mod level requirements. The appropriate stickers should be applied as recommended above.

GETS GS is prepared to assist Norfolk Southern Railway with further analysis of the equipment reviewed should NS consider removing the subject equipment and submitting it to GETS GS for lab examination. Feel free to contact us with any comments or questions you may have.

Best regards,

W. J. Scheerer Chief Engineer

Cc: Chuck Johnson Gregg Estelle Bob Bremmer Jeff Buckles Rodger Maurer