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EACH RULE VIOLATION IS A
POTENTIAL ACCIDENT

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K. P. WOOD.....Elko, Nevada
L. E. THOMAS.....Winnemucca, Nevada

TRAINMASTER ROAD FOREMAN OF ENGINES

M. W. HAMMOND.....Salt Lake City, Utah

ROAD FOREMEN OF ENGINES

W. S. COPE.....Portola, Calif.
C. F. FIELDS.....Elko, Nevada

CHIEF TRAIN DISPATCHER

G. W. NAYLOR.....Elko, Nevada

NIGHT CHIEF TRAIN DISPATCHERS

W. C. BOND.....Elko, Nevada
J. H. BROWN.....Elko, Nevada



THE WESTERN PACIFIC RAILROAD CO.



EASTERN DIVISION TIMETABLE

59

EFFECTIVE SUNDAY, SEPTEMBER 28, 1958

AT 12:01 A. M.

PACIFIC STANDARD TIME

FOR THE GOVERNMENT AND INFORMATION
OF EMPLOYEES ONLY

H. C. MUNSON,
Vice-President and General Manager.

G. S. ALLEN,
Superintendent of Transportation.

J. F. LYNCH,
Superintendent.

FIRST SUBDIVISION—Eastward

Symbols Rule 6-A.	Car Capacity of Sidings	Telegraph Office Calls	THIRD CLASS		SECOND CLASS		FIRST CLASS		Distance from San Francisco	Distance from Portola	
			220				18	2			
			Local Freight				California Zephyr	Zephyrette			
			Leave Daily Ex. Sunday				Leave Daily	Leave Mon., Thurs., Sat.			
BKF YPO	Yard	Ki	AM 3.45				AM 6.15	AM 1.45	321.3		
P	120		4.00					1.54	327.5		
P	127		4.25					2.06	339.1		
YP			4.35 AM				6.40	2.11	341.8		
P	127							2.17	345.6		
P	72							2.27	352.5		
P	127							2.40	362.6		
P	84	Hk First- and third-class trains				s 7.20	s 2.55		371.7	
P	125	 must respect schedule shown						3.07	383.5	
I									384.3		
P	125						¹ 7.45	3.20	393.7		
P	125							3.33	404.7		
P	114							3.46	416.3		
P	125							4.03	430.8		
KYP	126	Gr					s 8.30	s 4.20	437.9		
P	125							4.33	451.2		
P	125							¹⁷ 4.45	461.3		
P	125							4.55	470.6		
P	125	 Schedules shown for second-						5.05	479.4	
YP	125	 class trains are for information						5.16	487.6	
P	125	 only.						5.27	496.6	
P	125							5.39	508.6		
P	125						9.40	5.50	519.2		
BK FPY	Yard	Wa					s 9.52 PM	s 6.05 AM	532.3		
			Arrive Daily Ex. Sunday				Arrive Daily	Arrive Mon., Thurs., Sat.			
			220				62	18	2		

Timetable No. 59

September 28, 1958

STATIONS

TO-R	PORTOLA	0.0
	6.2 HAWLEY	6.2
	11.6 CHILCOOT	17.8
	2.7 RENO JCT.	20.5
	3.8 SCOTTS	24.3
	6.9 RED ROCK	31.2
	10.1 DOYLE	41.3
	9.1 HERLONG, (CAL.)	50.4
	11.8 FLANIGAN, (NEV.)	62.2
	0.8 SP X'ING & CONN.	63.0
	9.4 SAND PASS	72.4
	11.0 SANO	83.4
	11.6 REYNARD	95.0
	14.5 PHIL	109.5
	7.1 GERLACH	116.6
	13.3 TREGO	129.9
	10.1 CHOLONA	140.0
	9.3 RONDA	149.3
	8.8 FLOKA	158.1
	8.2 ANTELOPE	166.3
	9.0 JUNGO	175.3
	12.0 GASKELL	187.3
	10.6 RAGLAN	197.9
TO-R	WINNEMUCCA	211.0

Traffic Control System

Special instructions appearing on pages 2 and 3 will apply to both pages where applicable.

RULE 82-A. Is modified to the extent that trains may be authorized at Portola to operate on the Reno Branch.

RULES 83-A and 83-B. Nos. 17 and 18 register by ticket at Portola.

RULE 204. Train orders may be issued to trains at Portola which affect their movement on the Reno Branch.

Gerlach.

When engine crews change at Gerlach, incoming engine crew must deliver train orders and instructions to outgoing crew.

RULE 104. All switches connecting siding with other tracks except main track must be left lined for siding.

Winnemucca.

(a) After having been properly cleared, passenger trains will be governed by signal indication without member of crew contacting train dispatcher but freight trains must not depart until permission is obtained from train dispatcher.

(b) Absolute signals and dual-control switches located at each end of north and south sidings.

(c) North Siding: Is included in signal circuits and must not be occupied or fouled unless authorized by an absolute signal indication, by permission from the train dispatcher, or as outlined in paragraph (f) below.

(d) Certain switches leading into north siding are not electrically-locked—(See Rule 550).

(e) Crossovers to house track and north siding: Main track and inside switch of crossover are individually electrically-locked. Both switches must be released before movement is started and one or both switches must be kept open until the movement is completed.

(f) An engine foreman may permit road crews to use his switching authority for moves, such as engine to or from train, etc., but must insure that there is no hazard by reason of his own switching operations.

FIRST SUBDIVISION—Westward

Distance from San Francisco	Timetable No. 59 September 28, 1958		Distance from Winnemucca		FIRST CLASS			SECOND CLASS					
	STATIONS		17	1	61	81	71						
			California Zephyr	Zephyrette	P. C.	S. L. W.	C. F. S.						
		Arrive Daily	Arrive Sun., Wed., Fri.	Arrive Daily	Arrive Daily	Arrive Daily							
321.3	TO-R	PORTOLA 6.2	211.0	AM 7.10 ^s	PM 9.15 ^s	AM 4.30	AM 10.15	AM 2.00					
327.5		HAWLEY 11.6	204.8	7.00	9.02								
339.1		CHILCOOT 2.7	193.2		8.50								
341.8		RENO JCT. 3.8	190.5	6.45	8.45								
345.6		SCOTTS 6.9	186.7		8.40								
352.5		RED ROCK 10.1	179.8		8.31								
362.6		DOYLE 9.1	169.7		8.20								
371.7		HERLONG, (CAL.) 11.8	160.6	s 6.15	s 8.10								
383.5		FLANIGAN, (NEV.) 0.8	148.8		7.56								
384.3		SP X'ING & CONN. 9.4	148.0										
393.7	Traffic Control System	SAND PASS 11.0	138.6	5.51	7.45 ¹⁸								
404.7		SANO 11.6	127.6	5.40	7.30								
416.3		REYNARD 14.5	116.0		7.18								
430.8		PHIL 7.1	101.5		7.03								
437.9		GERLACH 13.3	94.4	s 5.10	s 6.55	2.00 AM	7.45 AM	11.15 PM					
451.2		TREGO 10.1	81.1		6.36								
461.3		CHOLONA 9.3	71.0		4.45 ²	6.26							
470.6		RONDA 8.8	61.7		6.16								
479.4		FLOKA 8.2	52.9		6.06								
487.6		ANTELOPE 9.0	44.7		5.57								
496.6	JUNGO 12.0	35.7		5.45									
508.6	GASKELL 10.6	23.7		5.32									
519.2	RAGLAN 13.1	13.1		5.20									
532.3	TO-R	WINNEMUCCA	0.0	3.40 AM	5.05 PM	12.01 AM	5.45 AM	9.00 PM					
				Leave Daily	Leave Sun., Wed., Fri.	Leave Daily	Leave Daily	Leave Daily					
				17	1	61	81	71					

First-class trains must respect schedule shown.

Schedules shown for second-class trains are for information only

Special instructions appearing on pages 2 and 3 will apply to both pages where applicable.

Nos. 1 and 2 will stop on flag at any station to receive or discharge passengers.

SECOND SUBDIVISION—Eastward

Symbols, Rule 6-A.	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS		FIRST CLASS					Distance from San Francisco	Timetable No. 59		Distance from Winnemucca
			62	28	18	22	2	102	September 28, 1958				
									STATIONS				
			G. G. M. F. B.	So. Pacific San Francisco Overland	West. Pac. California Zephyr	Southern Pacific Mail	Western Pacific Zephyrette	So. Pacific City of San Francisco					
			Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Mon., Thurs., Sat.	Leave Daily					
BK FPY	Yard	Wa	PM 3.30		PM 9.55		AM 6.15		532.3		TO-R WINNEMUCCA	0.0	
IP				PM 10.12	10.00	AM 10.05	6.20	AM 1.51	536.0		3.7 WESO (SP Conn.)	3.7	
P	128			10.17	10.05	10.10	6.25	1.57	540.3		4.3 BLISS	8.0	
P	128			10.25	10.11	10.18	6.32	2.03	548.1		7.8 GOLCONDA	15.8	
P									553.8		5.7 PREBLE (SP Conn.)	21.5	
P	115			10.40	10.22	10.33	6.46	2.14	562.4		8.6 RED HOUSE	30.1	
P	129			10.53	10.32	10.45	6.58	2.24	575.1		12.7 ELLISON	42.8	
P				11.07		s 11.02	7.11		589.1		14.0 NORTH BATTLE MT'N	56.8	
P	115			11.09	10.45	11.04	7.13	2.37	590.7		1.6 RENNOX	58.4	
P	128			11.18	10.53	11.14	7.22	2.45	600.6		9.9 KAMPOS	68.3	
P	112			11.27	11.00	11.23	7.30	2.52	609.5		8.9 DUNPHY	77.2	
P	123	Be		11.37	11.08	11.33	s 7.39	3.00	619.5		TO 10.0 BEOWAWE (SP Conn.)	87.2	
P	107			11.44	11.14	11.42	7.46	3.06	626.9		7.4 CLURO	94.6	
P									630.5		3.6 BARTH (SP Conn.)	98.2	
P				PM 11.58	11.26	AM 11.56	7.58	3.19	636.2		5.7 PALISADE	103.9	
Yard Limits	I			AM 12.07	11.33	PM 12.07	8.05	3.26	643.4		7.2 WEST CARLIN (SP Conn.)	111.1	
	P	C		s 12.11 12.21	11.36	s 12.10 12.20	s 8.08	s 3.30 3.35	644.6		R 1.2 CARLIN	112.3	
				12.24	11.39	12.23	8.11	3.38	646.0		1.4 EAST CARLIN (SP Conn.)	113.7	
Yard Limits	P	128		12.34	11.49	12.33	8.21	3.48	656.3		10.3 HUNTER	124.0	
	BK FPY	Yard	Kn Di	PM 6.30	s 12.43 AM	s 11.59 PM	s 12.42 PM	s 8.30 AM	s 3.58 AM	665.4	TO-R 9.1 ELKO (SP Conn.)	133.1	
				Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Mon., Thurs., Sat.					
				62	28	18	22	2	102				

Special instructions appearing on pages 4 and 5 will apply to both pages where applicable.

No. 22 stop daily at Golconda to discharge United States mail.

No. 28 will stop on flag at North Battle Mountain to receive revenue passengers for Ogden or beyond, and to discharge revenue passengers from Reno or beyond.

No. 22 will stop on flag at Beowawe to receive or discharge revenue passengers.

RULE 82-A. Train orders may be issued at Winnemucca governing movements east of T.C.S. limits.

RULES 83-A and 83-B. No. 18 register by ticket at Elko.

RULE 97. Eastward extra trains must have train order or clearance authority for movement before leaving interlocking limits, Weso.

RULES 82-A and 540. Weso. Westward trains may leave Weso without contacting the train dispatcher when westward interlocking signal indicates PROCEED and will retain their identity Weso to Winnemucca.

Winnemucca.

(a) After having been properly cleared, passenger trains will be governed by signal indication without member of crew contacting train dispatcher but freight trains must not depart until permission is obtained from train dispatcher.

(b) Absolute signals and dual-control switches located at each end of north and south sidings.

(c) North Siding: Is included in signal circuits and must not be occupied or fouled unless authorized by an absolute signal indication, by permission from the train dispatcher, or as outlined in paragraph (f) below.

(d) Certain switches leading into north siding are not electrically-locked—(See Rule 550).

(e) Crossovers to house track and north siding: Main track and inside switch of crossover are individually electrically-locked. Both switches must be released before movement is started and one or both switches must be kept open until the movement is completed.

(f) An engine foreman may permit road crews to use his switching authority for moves, such as engine to or from train, etc., but must insure that there is no hazard by reason of his own switching operations.

SECOND SUBDIVISION—Westward

Distance from San Francisco	Timetable No. 59 September 28, 1958	Distance from Elko	FIRST CLASS			SECOND CLASS							
			17	1		81	71	61					
			California Zephyr	Zephyrette		S. L. W.	C. F. S.	P. C.					
STATIONS			Arrive Daily	Arrive Sun., Wed., Fri.		Arrive Daily	Arrive Daily	Arrive Daily					
532.3	TO-R WINNEMUCCA 3.7	133.1	AM 3.37	PM 4.55		AM 5.30	PM 8.45	PM 11.45					
536.0	WESO (SP Conn.) 4.3	129.4	AM 3.32	PM 4.50									
540.3	BLISS 7.8	125.1											
548.1	GOLCONDA 5.7	117.3											
553.8	PREBLE (SP Conn.) 8.6	111.6											
562.4	RED HOUSE 12.7	103.0											
575.1	ELLISON 14.0	90.3											
589.1	NORTH BATTLE MT'N 1.6	76.3											
590.7	RENOX 9.9	74.7											
600.6	KAMPOS 8.9	64.8											
609.5	DUNPHY 10.0	55.9											
619.5	TO BEOWAWE (SP Conn.) 7.4	45.9											
626.9	CLURO 3.6	38.5											
630.5	BARTH (SP Conn.) 5.7	34.9											
636.2	PALISADE 7.2	29.2											
643.4	WEST CARLIN (SP Conn.) 1.2	22.0											
644.6	R CARLIN 1.4	20.8											
646.0	EAST CARLIN (SP Conn.) 10.3	19.4											
656.3	HUNTER 9.1	9.1											
665.4	TO-R ELKO (SP Conn.)	0.0	1.30 AM	2.20 PM		2.45 AM	5.45 PM	9.00 PM					
			Leave Daily	Leave Sun., Wed., Fri.		Leave Daily	Leave Daily	Leave Daily					
			17	1		81	71	61					

Be governed by current
timetable, bulletins and rules of
Southern Pacific Company, on
SP track between Elko and
Weso.

First-class trains must
respect schedule shown.

Schedules shown for
second-class trains are for
information only.

Special instructions appearing on pages 4 and 5 will apply to both pages where applicable.

Nos. 1 and 2 will stop on flag at any station to receive or discharge passengers.

RULE 72. Second-class trains have no superiority.

THIRD SUBDIVISION—Eastward

		SECOND CLASS		FIRST CLASS					Distance from San Francisco	Timetable No. 59 September 28, 1958		Distance from Elko
		62		22	2	102	28	18		STATIONS		
		G. G. M. F. B.		Southern Pacific Mail	Western Pacific Zephyrette	So. Pacific City of San Francisco	So. Pacific San Francisco Overland	West. Pac. California Zephyr				
		Leave Daily		Leave Daily	Leave Mon., Thurs., Sat.	Leave Daily	Leave Daily	Leave Daily				
Yard / Lmts.	Symbol, Rate 6-A.	Car Capacity of Slidings	Telegraph Office Calls	PM 7.15	PM 12.45	AM 9.00	AM 3.58	AM 12.44	AM 12.05	665.4	TO-R ELKO (SP Conn.)	0.0
	BK FPY	Yd.	Kn Di								7.9 PARDO	7.9
	P	115			12.57	9.12	4.08	12.53	12.13	673.3	10.0 ELBURZ	17.9
	P	117			1.11	9.25	4.18	1.04	12.23	683.3	1.0 SP CONNECTION	18.9
	P									684.3	4.1 HALLECK	23.0
	P	104			1.17	9.31	4.23	1.09	12.27	688.4	11.6 DEETH	34.6
	P	114			s 1.29	9.43	4.32	1.19	12.37	700.0	1.0 SP CONNECTION	35.6
	P									701.0	12.6 ALAZON (SP Conn.)	48.2
	IP				1.45 PM	9.58	4.45 AM	1.32 AM	12.50	713.6	4.1 WELLS	52.3
	P	125	We			s 10.05				717.7	10.4 RUBY	62.7
	P	125				10.16				728.1	10.1 VENTOSA	72.8
	P	125				10.27				738.2	9.0 SPRUCE	81.8
	YP	125				10.37				747.2	10.3 SAGE	92.1
	P	125				10.51				757.5	8.4 NN CROSSING	100.5
	I									765.9	0.5 SHAFTER	101.0
	YP	125	Fa			s 11.05			1.35	766.4	6.0 SILVER ZONE	107.0
	P	125				11.14				772.4	8.7 CLIFSIDE	115.7
	P	125				11.28				781.1	7.8 PILOT	123.5
	P	125				11.41				788.9	9.7 OLA, (NEV.)	133.2
	P	125				AM 11.52				798.6	7.7 TO-R WENDOVER, (UTAH)	140.9
	BK FPY	Yd.	Wn	11.00 PM		s 12.05 PM			2.29 AM	806.3		
				Arrive Daily	Arrive Daily	Arrive Mon., Thurs., Sat.	Arrive Daily	Arrive Daily	Arrive Daily			
				62	22	2	102	28	18			

Special instructions appearing on pages 6 and 7 will apply to both pages where applicable.

No. 18 stop at Wendover to discharge passengers, and will stop on flag to receive passengers destined to points where scheduled to stop.

RULES 83-A and 83-B. No. 18 register by ticket at Elko. Nos. 17 and 18 register by ticket at Wendover.

RULES 510-A and 548. Westward freight trains having instructions to cut off helper at MP 752.6, must stop with rear of train in immediate vicinity of grade signal 7526. After helper engine is detached it must occupy track circuit extending 500 feet west of grade signal 7526 and crew member must contact train dispatcher for permission to move eastward. Train dispatcher will display proceed indication on signal 7526 to authorize eastward movement.

In event grade signal 7526 fails to display a proceed indication promptly, train dispatcher must be notified. If train dispatcher knows there is no opposing movement between MP 752.6, and Sage, he may instruct engineer to proceed at restricted speed to the next governing signal. If there is lack of communication, helper engine will move westward to the absolute signal at east switch Spruce and contact train dispatcher.

Alazon. RULE 82-A and 540. Eastward trains may leave Alazon without contacting the train dispatcher when eastward interlocking signal indicates PROCEED and will retain their identity Alazon to Wendover.

Wells. Engines must not exceed 10 MPH on straight track and 5 MPH on turnouts in UP yard.

Shafter. Engines must not exceed 10 MPH on straight track and 5 MPH on turnouts in NN yard and are prohibited from using NN rip track.

Wendover. After having been properly cleared, passenger trains will be governed by signal indication without member of crew contacting train dispatcher but freight trains must not depart until permission is obtained from train dispatcher.

THIRD SUBDIVISION—Westward

Distance from San Francisco	Timetable No. 59 September 28, 1958	Distance from Wendover	FIRST CLASS			SECOND CLASS								
			1	17		71	61	81						
			Zephyrette	California Zephyr	C. F. S.	P. C.	S. L. W.							
STATIONS			Arrive Sun., Wed., Fri.	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily						
665.4	TO-R ELKO (SP Conn.) 7.9	140.9	PM 1.50	AM 1.25	PM 5.00	PM 8.30	AM 2.15							
673.3	PARDO 10.0	133.0												
683.3	ELBURZ 1.0	123.0												
684.3	SP CONNECTION 4.1	122.0												
688.4	HALLECK 11.6	117.9												
700.0	DEETH 1.0	106.3												
701.0	SP CONNECTION 12.6	105.3												
713.6	ALAZON (SP Conn.) 4.1	92.7	PM 12.59	AM 12.45	PM 4.00	PM 7.30	AM 1.15							
717.7	WELLS 10.4	88.6	s 12.52											
728.1	RUBY 10.1	78.2	12.42											
738.2	VENTOSA 9.0	68.1	12.32											
747.2	SPRUCE 10.3	59.1	12.24											
757.5	SAGE 8.4	48.8	12.12											
765.9	NN CROSSING 0.5	40.4												
766.4	SHAFTER 6.0	39.9	s 12.01 PM	11.55 PM										
772.4	SILVER ZONE 8.7	33.9	11.53 AM											
781.1	CLIFSIDE 7.8	25.2	11.39											
788.9	PILOT 9.7	17.4	11.26											
798.6	OLA, (NEV.) 7.7	7.7	11.12											
806.3	TO-R WENDOVER, (UTAH)	0.0	11.00 AM	11.00 PM	12.45 PM	5.00 PM	10.30 PM							
			Leave Sun., Wed., Fri.	Leave Daily	Leave Daily	Leave Daily	Leave Daily							
			1	17	71	61	81							

Be governed by current
timetable, bulletins and rules
of Southern Pacific Company,
on SP track between Alazon
and Elko.

..... First-class trains must respect
..... schedule shown.
..... Schedules shown for second-
..... class trains are for information
..... only.

Special instructions appearing on pages 6 and 7 will apply to both pages where applicable.

Nos. 1 and 2 will stop on flag at any station to receive or discharge passengers.

RULE 72. Second-class trains have no superiority.

FOURTH SUBDIVISION—Westward

Distance from San Francisco	Timetable No. 59 September 28, 1958		Distance from Roper		FIRST CLASS			SECOND CLASS							
	STATIONS			1	17	71	61	81							
				Zephyrette	California Zephyr	C. F. S.	P. C.	S. L. W.							
			Arrive Sun., Wed., Fri.	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily							
			AM	PM		PM	PM	PM							
806.3	TO-R	WENDOVER 9.2	124.1	10.50	10.59	12.30	4.45	10.15							
815.5		SALDURO 9.6	114.9	10.41											
825.1		ARINOSA 9.8	105.3	10.32											
834.9		BARRO 10.4	95.5	10.23											
845.3		KNOLLS 8.9	85.1	10.14	10.29										
854.2		CLIVE 11.9	76.2	10.06											
866.1		LOW 12.3	64.3	9.55											
878.4		DELLE 14.5	52.0	9.42	9.59										
892.9		ELLERBECK 4.2	37.5	9.25											
897.1		BURMESTER 14.8	33.3	9.20											
911.9		D&RGW TRANSFER 0.2	18.5												
912.1		D&RGW X'ING. 1.1	18.3												
913.2		GARFIELD 11.5	17.2	9.02	9.30										
924.7		BUENA VISTA 1.6	5.7	8.50											
926.3		UP CROSSING 0.4	4.1												
926.7		UP CROSSING 0.5	3.7												
927.2		POLLARD JCT. 0.2	3.2	8.43	9.18										
927.4		D&RGW CROSSING 0.6	3.0												
928.0	TO-R	SALT LAKE CITY (U. D.) 0.7	2.4	8.40 AM	9.15 PM										
928.7		UP CROSSING 1.7	1.7												
930.4	TO-R	ROPER (Salt Lake City)	0.0												
				Leave Sun., Wed., Fri.	Leave Daily	9.30 AM	2.00 PM	7.30 PM							
						Leave Daily	Leave Daily	Leave Daily							
				1	17	71	61	81							

First-class trains must respect schedule shown.

Schedules shown for second-class trains are for information only.

Special instructions appearing on pages 8 and 9 will apply to both pages where applicable.

Salt Lake City.

Salt Lake City Union Depot and RR Co. Rule No. 1 reads:

"Trains have no timetable superiority between 1st So. and 9th So. Sts., SLCUD Co. trackage on 4th West St., Salt Lake City. Yard engines and other engines occupying these tracks must make way for passenger trains without unnecessarily delaying them. Trains, yard engines and other engines must move on Depot Co. tracks prepared to stop within one-half the range of vision."

Salt Lake City Union Depot and RR Co. Rule No. 3 reads:

"Switchmen and others using SLCUD and RR Co. tracks will be held responsible for leaving switches as found by them when passing in and out of yards unless switches are being handled by Union Depot Co. switchtender. Proceed signal from switchtender to trains entering yard does not necessarily indicate that track to be used is clear."

WP trains have no timetable superiority on WP passenger running track between westward home signal located between 5th and 6th West Sts. and Salt Lake City UD and RR Co. trackage.

Unless otherwise directed No. 18 will use track 3, Salt Lake City Union Depot.

Whistle and bell must be restricted to minimum use prescribed by rule or law, except in emergencies.

No. 17 stop at Wendover to discharge passengers, and will stop on flag to receive passengers destined to points where scheduled to stop. Nos. 1 and 2 will stop on flag at any station to receive or discharge passengers.

Eastward FIRST SUBDIVISION "A"—LOYALTON BRANCH Westward

	Symbols, Rule 6-A.	Car Capacity of Slidings	Telegraph Office Calls						
					Distance from Hawley	↓	Timetable No. 59 September 28, 1958	Distance from Loyalton	
							STATIONS		
	P	120			0.0		HAWLEY	11.8	
Yard Limits {		Yard	Yn		11.8		11.8 LOYALTON	↑ 0.0	

RULE 201. Train order authority is not required on Loyalton Branch and all movements on branch must be made at yard speed.

Eastward FIRST SUBDIVISION "B"—RENO BRANCH Westward

	Symbols, Rule 6-A.	Car Capacity of Slidings	Telegraph Office Calls	SECOND CLASS						THIRD CLASS	
				220	Local Freight	Distance from Reno Junction	Timetable No. 59 September 28, 1958	Distance from Reno		219	Local Freight
				Leave Daily	Ex. Sunday		STATIONS			Arrive Daily	Ex. Sunday
Yard Limits {	YP	56		AM	4.40	0.0	RENO JUNCTION	33.1		AM	10.50
		12			5.10	10.1	10.1 PEAVINE, (CAL.)	23.0		10.18	
		15			5.30	16.2	6.1 COPPERFIELD, (NEV.)	16.9		9.59	
		25			5.39	18.8	2.6 ANDERSON	14.3		9.51	
		Spur 1E15			5.47	21.3	2.5 MARTIN	11.8		9.43	
		Spur 1W 23			6.15	30.7	9.4 VAUGHN MILL No. 1	2.4		9.15	
		Spur 1W 24			6.20	31.2	0.5 VAUGHN MILL No. 2	1.9		9.10	
		Spur 1W 24			6.23	31.42	0.22 ROCKY MOUNT No. 1	1.68		9.07	
		4			6.24	31.5	0.08 FRATEX	1.6		9.06	
		Spur 1E 40			6.25	31.57	0.07 ROCKY MOUNT No. 2	1.53		9.05	
Yard Limits {	KO	Yard	Rd	6.30	AM	33.1	1.53 RENO	0.0		9.00	AM
				Arrive Daily	Ex. Sunday		TO-R			Leave Daily	Ex. Sunday
				220						219	

RULE 82-A. Is modified to the extent that trains may be authorized at Portola to operate on the Reno Branch.

No. 220 may leave Reno Jct. without clearance.

RULE 204. Train orders may be issued to trains at Portola which affect their movement on the Reno Branch.

Rocky Mount No. 2. No derail, keep hand brakes set and do not leave cars east of first road crossing.

DERAIL located on main track at MP 31.64 which is 370 feet east of Rocky Mount No. 2, must be lined and locked for main track except when switching is being done on Vaughn Mill No. 1, Vaughn Mill No. 2, Rocky Mount No. 1, or on Rocky Mount No. 2 spurs. This derail must first be opened and locked open while switching is being done and not be relined for main track until switching is completed and cars properly coupled to engine, and have been charged to full air pressure.

Reno. Movements over street crossings east and west of Nevada Transportation Company warehouse must be protected by flagman.

Trains or engines must approach East 6th Street carefully. This crossing is protected by flasher lights and bell signals.

Flasher light and bell signals, 4th St.—Engines or cars must stop clear of outer edge of sidewalks on either side of 4th Street, before entering or occupying crossing from either direction at either crossing, except when moving westward from SP Transfer on East Street. This to provide 20 seconds elapsed time between times engines or cars enter signal circuits and actually enter street intersections, as required by Nevada State Law.

Whenever necessary to spot engines or cars within 100 feet west of West 4th Street sidewalk on SP Interchange (East Street) track, movement must first be made eastward on track to a point not less than 25 feet beyond east sidewalk of 4th Street; thence return westward and spot at point desired anywhere within 100 foot limit mentioned above. With this exception, cars or engines must not be spotted within signal circuit limits.

Eastward FOURTH SUBDIVISION "A"—ELLERBECK BRANCH Westward

				↓		↑	
				Distance from Ellerbeck		Distance from Dolomite	
				Timetable No. 59 September 28, 1958			
				STATIONS			
	P			0.0	ELLERBECK	4.7	
		Spur 1E 17		0.9	0.9 USS&R Co Spur	3.8	
	Y			2.7	1.8 WYE	2.0	
		8		3.7	1.0 FLUX	1.0	
		Spur 1E 3		4.7	1.0 DOLOMITE	0.0	

RULE 201. Train order authority is not required on Ellerbeck Branch and all movements on branch must be made at yard speed.

USS&R Co. Spur is on 1% grade, has derail 192 feet from switch. Engines or cars must not pass beyond PROTECTIVE SIGN. Cars left there must be properly secured.

WYE. East switch east leg of Wye must be left lined for straight track as derail.

FLUX. Solar Salt Co., spur track, west connected, located 175 feet west of old west switch at Flux, length 675 feet. Derail installed.

Eastward FOURTH SUBDIVISION "B"—TOOELE BRANCH Westward

				↓		↑	
				Distance from Burmester		Distance from Warner	
				Timetable No. 59 September 28, 1958			
				STATIONS			
	YP	125	Bx	0.0	TO BURMESTER	15.5	
		22		7.0	7.0 MARSHALL	8.5	
		Spur 1W 25		13.5	6.5 Conn. Tooele Ordnance Depot	2.0	
	Y	77		15.5	2.0 WARNER	0.0	

SPECIAL INSTRUCTIONS

ALL SUBDIVISIONS

All times as shown for trains at Stations on schedule pages are Pacific Standard Time. Trains will continue to operate on Pacific Standard Time during period that Daylight Saving Time is in effect.

RULE 10-J. Yellow round speed-control boards indicate the maximum permissible speed of California Zephyr and City of San Francisco trains.

RULE S-17. Outside of T.C.S. territory care must be taken to see that flag protection is furnished ahead when taking siding to meet trains unless it is definitely known that train is clear of the main track. After train comes to rest in the siding, the head end must receive a stop signal from the rear end indicating that train is clear of the main track. Until such signal has been received by head end, headlight will be displayed and flag protection provided. This does not in any way relieve the approaching train from complying with provisions of Rule S-90. Figures indicating "Car Capacity of Sidings" are number of cars, based on average allowance of 48 feet per car, that tracks will hold between clearance points, plus 250 feet for engine and caboose.

RULE 34. The fireman on a freight train must not leave the forward cab while train is in motion unless authorized by the engineer, who must give four short sounds of alarm gong to indicate that head brakeman must immediately come forward and comply with Rule 34 before fireman leaves and until return of fireman. When third seat is available, head brakeman will ride in forward cab.

RULE S-72. WESTWARD TRAINS ARE SUPERIOR TO EASTWARD TRAINS OF THE SAME CLASS.

RULES 82-A, 95 and 97. Trains will be authorized at Portola, Winnemucca, Wendover, Roper and Salt Lake City by clearance. Trains originating at intermediate stations within T.C.S. limits will be authorized verbally by train dispatcher except at a station where an operator is on duty.

Conductor, or engineer if there is no conductor, of a train authorized verbally must ascertain from train dispatcher what instructions are outstanding as to track conditions on that part of the system over which movement is to be made.

RULE 101-B. When tracks are covered by water and it is known they are safe for movement, engines may be operated over them only if the water is below the traction motor frames, not exceeding 5 MPH.

RULE 105. Sidings within T.C.S. limits, except north siding Winnemucca, are not included in signal circuits between clearance points.

RULE 110. Where stops are made for other reasons, inspection of train must be made as often as practicable. When weather conditions restrict visibility, the conductor will designate additional stops for inspection that, in his judgment, are necessary.

RULE 342. When operating RDC 375 and 376 in T. C. S. or block signal territory every precaution must be taken when using sand to prevent coming to a stop with wheels resting on layers of sand. Conditions permitting, sand should be shut off at least two car lengths in advance of the point where car finally stops. When conditions require sand to be used until car is stopped, immediately after stopping the engineer or hostler will sound signal 14 (b), and upon receiving proceed signal from trainmen or hostler helper will move car forward at least fifteen (15) feet. Trainmen must not permit passengers to detrain or entrain until after second stop is made.

RULE 509. When a train becomes disabled in a block between stations, and the conductor or engineer has given train dispatcher assurance it is unable to proceed, the train dispatcher may, after an understanding has been reached with the conductor or engineer of the disabled train, verbally authorize another train in opposing direction to enter the block under flag protection to relieve the disabled train. When a train is reported disabled to the train dispatcher, it must thereafter not be moved in either direction until relief train has arrived, or unless otherwise instructed by the train dispatcher.

RULE 540. Traffic Control System extends between Portola and Eastward Interlocking Home Signal, Weso (MP 535.5) and between Westward Interlocking Home Signal, Alazon (MP 713.7) and Eastward Interlocking Home Signal Pollard Jct. (MP 927.2).

RULE 547. When a train is standing or switching in a block at a station, train dispatcher may authorize another train to flag into the block to perform work. Crew of train so authorized must have an understanding with crew of train occupying the block before entering and must fully protect their movements against any movements by the train originally occupying the block.

RULE 550. When a train or engine is to clear the main track at an electrically-locked switch, after it has entered the block in which the switch is located, the train dispatcher must hold all signals governing movement into that block at STOP and apply red tags to the levers controlling such signals. When movement is clear of main track and switch again normal, crew member will then report to train dispatcher that train or engine is clear. Until crew member so reports train dispatcher must not remove red tags from levers controlling the signals involved.

RULE 825. Modified to extent that diesel engines not exceeding two units, may be used behind 400 and 600 series cabooses.

RULE 826. When necessary to handle a car ahead of engine between stations, it must be chained to engine unless air brakes are cut in and operative.

RULE 830. When setting out cars with hot boxes at intermediate points trainmen must make sure that fire from burning or blazing packing has not been communicated to body of the car or lading.

Where conditions warrant a member of the crew must go underneath and make very close inspection of car flooring to make sure that there is no smouldering fire therein.

RULE 831. When steam shovels, cranes, pile drivers, ditchers, spreaders, or similar equipment are handled in trains, other than work trains in service, they must be placed on rear, unless otherwise directed. If picked up at a point where they cannot be placed on rear, they may be placed on head end and switched to rear at first station where possible to do so.

RULE 1011. When engine is not detached from train on the California Zephyr at Portola, Gerlach or Elko, or on the Zephyrette at Gerlach, it will not be necessary for outgoing enginemen to check supplies or equipment.

AIR BRAKE RULES

RULE 15. Superseded by the following:

STANDARD AIR PRESSURE FOR MAIN RESERVOIRS — Freight locomotives 135 pounds, passenger locomotives and RDC cars 140 pounds; reducing valve for independent air brake, 35-40 pounds. Safety valves will be set at 68 pounds.

STANDARD BRAKE PIPE PRESSURE — Freight and mixed trains 80 pounds and passenger trains including RDC cars 110 pounds. Minimum differential brake pipe and main reservoir with brake valve in running position, 15 pounds.

RULE 22. On eastward freight trains between Silver Zone and Wendover, an understanding must be had between conductor and engineer as to number of retainers necessary to control train and they must be used accordingly. When retainers are used a 10 minute stop must be made at Pilot for train inspection and to permit heat to equalize in wheels.

RULE 24-B. On California Zephyr trains, if motive power is changed at any intermediate station or terminal, or continuity of brake pipe is disturbed, air brake test must be made.

At Portola, Gerlach and Elko, the incoming engineer, after making station stop, must make a 20 pound brake pipe reduction with the automatic brake. Observation will be made that rear brakes apply. On receipt of proper signal the outgoing engineer will release brakes. Observation will be made to note that rear brakes release.

On other passenger trains at points where terminal tests are made, when the continuity of the brake pipe is not disturbed, or motive power not changed, the incoming engineer, after making station stop, must apply the train brakes with a 15 pound brake pipe, reduction immediately after stopping and without waiting for a signal.

The brake pipe leakage must be noted, then the reduction increased to a total of 20 pounds. The incoming engineer will notify the outgoing engineer the amount of brake pipe leakage.

Release of the train brakes will be made upon receiving the proper release signal.

OPERATION OF TRAINS AND ENGINES BETWEEN EAST AND WEST TRAIN YARD SWITCHES PORTOLA

(A) When signal aspect per Rule 288 is displayed by automatic signals between east train yard switch, MP 322.13, and west train yard switch, MP 320.25, authorizes yard switching or engine movements on the main track within these limits and is an indication the electrically-locked switches within these limits have been unlocked by the train dispatcher. Complete instructions for operation of electrically-locked switches are posted in telephone box located vicinity of switches.

(B) The absence of signal aspect per Rule 288, or its removal, is an indication that the train dispatcher desires the main track cleared for through train movements. Howlers controlled by the train dispatcher are located throughout the yard, and when operated the main track must be cleared immediately.

(C) In addition, train dispatchers will furnish information to operator as to times passenger trains are expected to reach Portola. Employees in charge of yard engines, light engines, and similar moves must ascertain from operator whether these trains are due before occupying main track and not delay them.

(D) When main track is used on authority of signal aspect per Rule 288, all movements must be made at yard speed.

(E) When a westward train or engine is stopped at absolute signal at east train yard switch, MP 322.13 or an eastward train or engine is stopped at absolute signal at west train yard switch, MP 320.25 by a STOP indication and train or engine is instructed by the train dispatcher to proceed under flag protection per Rule 509(A)2, it must be preceded by a flagman. When next signal in advance can be seen displaying aspect per Rule 288, and intervening track to such signal can be seen to be clear, train or engine may pick up flagman and proceed at yard speed.

(F) Eastward absolute signals at west train yard switch are under electrically-coordinated joint control of train dispatchers for the Third Subdivision, Western Division and First Subdivision, Eastern Division.

Permission to take switch or derail at west end train yard in hand-throw must be obtained from Western Division train dispatcher. Western Division train dispatcher will in turn contact Eastern Division train dispatcher for his concurrence.

When west train yard switch is in hand-operated position, derailling switch, if used, must also be hand operated.

(G) Train washer located on main track between west pocket track switch and east switch west siding.

Automatic Signals 3210 and 3211 located adjacent to washer are equipped with marker lights indicating the position of washing arches.

All indications displayed by these signals are subject to the restrictions imposed by the marker lights and the following will govern:

LUNAR: Washer clear — Movement may be made through washer not exceeding 10 MPH.

PURPLE: Washing position — Restricted clearance. All trains and engines to be washed STOP and then proceed not exceeding 2 MPH.

Lunar light must be displayed for all non-washing movements. If lunar light not displayed for non-washing movements, trains and engines must STOP, check all washing arches, see they are locked in clear, then movement may be made through washer not exceeding 10 MPH.

Employees are prohibited from riding on sides or tops of trains, cars or engines while passing through train washer in operating position.

No. 17, California Zephyr, will make station stop so that baggage car will be spotted at west end of hard-surface platform. In event it is too cold to wash train, engineer will be notified accordingly.

(H) After being authorized by clearance, trains must not leave until given permission by train dispatcher after member of crew advises him they are ready to leave, except Nos. 17 and 18 will leave when ready being governed by signal indications.

(I) Derail at west end of west siding is hand-operated independent of switch. Derail will actuate signals on main track when not in derailling position.

(J) Yard track indicators located opposite absolute signals governing movements of eastward or westward freight trains into yard will indicate to such trains the number of the track on which they are to yard their trains.

When indicator is dark yardmaster must be contacted at head-in switch to obtain track assignment.

INTERLOCKING PLANTS AND SIGNALS AND RAILROAD CROSSINGS NOT INTERLOCKED

MP 384.3, SP X'ing & Conn. Interlocking.

When using dual-control switch east end Flanigan siding in hand-throw position, movement must be made in accordance with Rules 545 and 664. Selector lever on dual-control switch is electrically locked. Lock instructions posted in telephone box east end Flanigan. Lock release checks Southern Pacific home signals in stop position.

MP 765.9, NN Crossing. Interlocking.

When using dual-control switch west end Shafter siding in hand-throw position movement must be made in accordance with Rules 545 and 664.

Derail installed on the Nevada Northern connection at clearance point for Shafter siding. Connection switch and derail-equipped with electric locks which normally are in released position. If lock fails to release when padlock is removed, follow instructions in phone booth nearby.

MP 912.1, D&RGW X'ing & Tfr. Interlocking.

MP 926.3, UP Crossing. Interlocking.

MP 926.7, UP Crossing. No Interlocking.

Trains moving between Pollard Jct. and Buena Vista under provisions of Rule 509 must approach crossing at yard speed, and not proceed across this crossing unless it is known to be clear.

MP 927.2, Pollard Jct.

} Grant. Interlocking.

MP 927.4, D&RGW X'ing.

} WP Rules apply.

D&RGW RULE 290.

Aspect.	Name.
Red over red over lunar, or Red over lunar, or Lunar.	Restricting.

Indication.

Proceed at restricted speed:

- (1) Within ABS to next signal governing in the same direction.
- (2) At interlocking outside ABS through interlocking limits.
- (3) Onto non-signaling track until entire train is through turnout.

D&RGW RULE 508. The absence of a light or white light displayed where a color or lunar light should be, on an ABS, must be regarded as the most restrictive indication that can be given by that signal.

The following signals may display lunar aspect: Signal 66A governs movements entering Roper Yard from north and west; Signal 66B governs movements entering spurs lined to south or east-bound track to Roper Yard; Signal 68B governs movements departing Roper Yard to north and west; Signal 72 governs westbound movements out of Roper Yard on the eastbound running track; Signal 74 governs movements west out of Saucer No. 2.

MP 928.7, UP Crossing. Interlocking. WP Rules apply.

SECOND AND THIRD SUBDIVISIONS

USE OF WPRR PORTION OF PAIRED TRACK BETWEEN WESO AND ALAZON INCLUSIVE

(A) Between Weso and Alazon, track of WPRR and SP will be used jointly. All eastward trains of both companies will use WPRR track, and all westward trains of both companies will use SP track, unless otherwise instructed by train order, except as provided in Sections (S) and (W) hereof. Each railroad will be operated under single track rules.

(B) Train dispatchers will use following form of train order to authorize movement of westward train or to create a work Extra.

Example 1: "Eng. run Extra on WP track. to."
This form of order must be given to all opposing trains on WPRR track.

Example 2: "Eng. works Extra on WP track. M.
until. M between. and."
This form of order must be given to trains before entering territory covered.

When moving westward on WPRR track between Alazon and Weso, maximum speed of passenger trains and light engines is 59 MPH, and for freight and mixed trains 49 MPH, but all other speed restrictions must be observed. Unless proceed signal received or it is known that warning devices are operating, such trains and engines must stop approaching road crossings where automatic warning devices are installed, and may proceed after member of crew protects crossing.

(C) **RULE 19.** When the rear car of an SP passenger train is equipped with a combination oscillating red light and auxiliary green marker light, oscillating red light must be displayed by day as well as by night when train is on main track, and when so displayed, will be considered as markers. Oscillating red light must be extinguished and green marker light displayed when train has stopped clear of main track to be met or passed by another train.

(D) **RULES 20 AND 21.** Between Weso and Alazon, sections of SP schedules other than last section will display green lights, illuminated by day and night, but will not display green flags. On SP trains lead engine only will display signals and train indicators.

(E) **RULE 82-A.** SP trains, unless otherwise directed, must not leave Winnemucca without clearance or train order authority for movement on WPRR at Weso.

A clearance authorizing an eastward SP first class train at Winnemucca for movement over the WPRR at Weso will apply only to Carlin, where another clearance must be obtained authorizing train Carlin to Alazon.

(F) **RULES 82-A AND 83** will not apply to SP trains at Elko, but they will be governed by train-order signal, and at Carlin will be governed by train register and second paragraph of Rule 83-B.

(G) **RULES 83-A and 83-B.**

Winnemucca. Eastward SP first-class trains register by ticket at SP Winnemucca. SP operator will transmit registration to WPRR operator Winnemucca who will enter same on register Winnemucca.

Weso. Eastward SP inferior trains arriving Weso when first-class trains are overdue and without having obtained register check of such trains at Winnemucca, may run ahead of such trains Weso to Carlin when interlocking signal at Weso displays PROCEED indication. Under same conditions, eastward WP inferior trains may run ahead of such trains Weso to Elko.

Carlin. Register station for eastward first-class trains only. Registration will be by ticket and SP operator will enter same on joint register SP station Carlin.

An eastward first-class train which does not reach East Carlin within fifteen (15) minutes from its leaving time as registered at Carlin will run expecting to find a train running ahead, East Carlin to Pardo.

Elko. Eastward SP first-class trains register by ticket. Other eastward SP trains will not register.

(H) **RULE 83-B.** When an eastward schedule or section is checked on register at WPRR Winnemucca, or at Imlay, or visual identification is made between Imlay and Weso, such identification or register check may be applied at Weso.

(I) **RULE 83-B.** Second paragraph will not apply at Carlin to work extras and westward extras. Such trains must not leave Carlin until it has been ascertained whether all regular trains due have arrived or left.

(J) **RULE 96.** Sections of regular trains may be created Weso to West Carlin or Carlin.

(K) **RULE 97.** Eastward extras between Weso and Alazon may be authorized by clearance as follows:

Eastward SP extras may be authorized by clearance issued at SP Winnemucca which will confer authority to run extra Weso to Carlin.

Eastward SP extras may be authorized by clearance at Carlin and will confer authority to run extra Carlin to Alazon.

Eastward WPRR extras may be authorized by clearance at Winnemucca and will confer authority to run extra Winnemucca to Elko.

Eastward WPRR extras may be authorized by clearance at Elko and will confer authority to run extra Elko to Alazon.

Any other eastward extra movements must be authorized by train order.

When necessary to annul the authority of an extra which has been authorized by clearance, a train order will be issued in the following form:

"Eng. is annulled as an Extra from"

(L) **RULE 204.** Train orders may be issued to eastward SP trains at SP Winnemucca which will affect their movement between Weso and Carlin.

Train orders may be issued to eastward SP trains on Second Subdivision which will affect their movement on the Third Subdivision between Elko and Alazon.

(M) **RULE 221.** First and second paragraphs apply only to eastward SP trains at Elko.

(N) **RULES 509 and 510.** When a block signal indicates "stop" (in either direction) trains will be governed by Rules 509 or 510.

Signals in paired track territory which are not equipped with number plates are "stop" signals. When these signals display "stop" indication, member of crew will contact train dispatcher in accordance with Rule 509.

At Preble, Barth, Elburz and Deeth, when signals indicate "stop" and train dispatcher knows there is no opposing movement involved, he may verbally authorize train to proceed at restricted speed to the next governing signal.

When member of crew is unable to contact train dispatcher within five minutes, train may proceed at restricted speed to the next governing signal without sending a flagman ahead.

(O) **Westward Automatic Block Signal System Circuits.**

(a) Signals 6511 (200 feet east of Tunnel 42) and 6497 (200 feet east of Tunnel 41); "Block System Limit" sign opposite Signal 6490, controlled from 3750 feet east of East Carlin detour switch.

(b) Signals 6369 (100 feet east of Tunnel 40) and 6357 (624 feet east of Tunnel 39); "Block System Limit" sign opposite Signal 6352, controlled from 2400 feet east of MP 632.

(c) Signals 6313 (3650 feet west of MP 632) and 6287 (200 feet east of Tunnel 38); "Block System Limit" sign opposite Signal 6274, controlled from 1000 feet east of MP 623.

(P) **West Carlin.** Main track detour switch at MP 643.4 is interlocked.

Interlocking limits extend from home signal MP 643.4, located 100 feet west of remote-controlled switch, to dwarf home signal, located 350 feet east on main track, governing westward movements, and to dwarf home signal, located 350 feet east on detour, governing westward movements to main track.

If signals indicate "stop" be governed by Rule 663. If route is not properly lined, call signal operator and obtain authority to operate this dual-controlled switch by hand.

West Carlin detour extends from remote-controlled switch on WPRR main track at West Carlin to connection with SP main track at west end of Carlin yard.

(Q) When trains on which crew changes are made at Carlin, are departing, they must move at restricted speed until reaching a point where next signal indication can be clearly seen and intervening track can be seen to be clear.

(R) East Carlin. Detour extends from east icehouse lead on SP to East Carlin on WPRR. Spring switch at junction is normally lined for WPRR main track. Westward trains or engines must stop and examine switch points before moving over this switch.

Signal 6458 on East Carlin detour, 700 feet west of spring switch, normally displays "stop" indication. Approach clearing circuit extends 1000 feet west of Signal 6458 and is indicated by Approach Circuit sign, and is equipped with timing device which will require 80 seconds for signal to clear after train enters circuit. Eastward trains or engines from SP must not enter approach clearing circuit until first-class and other superior trains on WPRR track have passed East Carlin, unless letter "M" is illuminated in indicator on Signal 6458, or until flag protection against eastward trains has been provided on WPRR main track. If eastward train is seen or known to be approaching, train on detour must not foul WPRR main track until approaching train has passed or comes to a stop.

Eastward trains or engines on WPRR track finding Signal 6460 displaying "stop" indication, must, in addition to provisions of Rule 510, provide flag protection against eastward movements from East Carlin detour to WPRR main track, unless detour is seen to be clear.

Flashing white light located on instrument case 20 feet west of west switch East Detour to WPRR track at Carlin indicates that "M" indicator located on Signal 6458 is illuminated and when flashing, confirms authority to move over approach circuit on detour.

When letter "M" is illuminated an eastward SP extra train is authorized to run ahead of eastward first-class and other superior trains East Carlin to Pardo, but must observe any restrictions that may be imposed by Signal 6458 or other signals. Train dispatcher must be informed in advance of any known condition that will delay the inferior train or prevent it from making usual speed after it has been given "M" indication to proceed. First-class and other superior trains must run expecting to find inferior trains moving in advance East Carlin to Pardo on authority of the "M" indication.

This does not relieve inferior trains from providing flag protection if stopped or delayed.

(S) Eastward SP freight trains and other trains when so directed, also engines moving between WPRR and SP yards will use East Carlin and/or West Carlin detours.

(T) Elko. Crossover, Third St. WPRR Elko yard. Inside siding switch of crossover electrically-locked. Release of electric lock must be obtained before main track switch is lined. Instructions for operating the lock are posted in electric lock case.

Dwarf signal governing westward movements, located between main track and siding, at MP 665.5. Approach lighting circuit starts 300 feet east of Signal 6655.

(U) Spring switch, 12th Street, east end of old main track, WPRR Elko yard. Eastward trains leaving Elko on old main track over spring switch may proceed on timetable or train order authority in accordance with signal aspect displayed by Signal 6660. Emergency push buttons are placed at Signals 6660 and 6662. Instructions for operating push buttons are posted in push button housings.

Telephone located on instrument case south side of tracks opposite Signal 6662 for purpose of contacting train dispatcher when signal east end of old main track Elko does not clear promptly.

Westward trains and engines must stop and examine switch points before moving over spring switch, East Elko.

Dwarf signal located 250 feet west of spring switch at east end old main track Elko, governs movements against current of traffic on main track to dwarf signal 6655 located at 4th St., Elko.

(V) East detour extends from SP siding to WPRR freight yard, Elko.

(W) Westward WPRR freight trains and other trains when so directed, also engines moving between WPRR and SP yards will use East Elko and/or West Elko detours.

(X) Weso. Interlocking. Remote controlled by WPRR train dispatcher. Interlocking signals governing westward movement to WPRR are absolute.

Westward inferior WPRR trains must arrive Weso sufficiently in advance of superior WPRR trains to avoid delaying them between Weso and Winnemucca.

Switches on SP end of crossovers are dual-control. Permission of WPRR train dispatcher is required for hand operation, except for SP movements made as prescribed by SP Rule 663 (c), and be governed by SP Rules 771 and 772.

Spring switches on WPRR end of crossovers are normally lined for WPRR track. WPRR Rule 519 applies.

Electric lock on west crossover spring switch releases when the power switch on this crossover has been reversed by the WPRR train dispatcher.

Obtain permission from the WPRR train dispatcher for movement from WPRR track to SP track over crossovers and be governed by SP Rule 663 (b).

When interlocking signals display "stop" and there is no conflicting movement contact the WPRR train dispatcher by telephone. When the WPRR train dispatcher is unable to clear signals for route desired, movement may be made only as follows:

Westward movement to WPRR track can only be made as prescribed by WPRR Rule 509(A)1. Trains departing Weso on other routes observe SP Rule 663 (b).

If communication has failed and the WPRR train dispatcher cannot be contacted movement may be made on all routes, except westward to WPRR track, observing SP Rule 663 (c).

Instructions for operation of dual-control switches and electric switch locks are posted in telephone booths located at interlocking signal.

(Y) Alazon. Interlocking. Eastward home signal governing movements into T. C. S. territory is also absolute signal. (SA is for SP use only).

When "stop" indication is displayed a member of crew must obtain permission to proceed from WPRR train dispatcher per WPRR Rule 509 and then movement may be initiated as prescribed in the following instructions:

When interlocking signals display "stop" indication and cannot be cleared by signal operator, movement may only be made as prescribed by SP Rule 663 (b), except if unable to contact signal operator and it can be seen there is no train closely approaching the route to be used, movement may be made under the provisions of SP Rule 663 (c). When moving under the provisions of SP Rule 663 (c), a member of crew must examine switches to see that points are in proper position for movement and on dual-control switches that selector lever is placed in "HAND" position until movement has been completed over switch. After movement has been completed dual-control switch must be restored to "MOTOR" position and locked.

Dual-control switches within interlocking limits are under control of SP signal operator at Wells. When necessary to hand-throw these switches, permission must be obtained from signal operator and be governed by SP Rules 771 and 772.

West switch of crossover between SP and WPRR main tracks is a spring switch and normal position is for SP main track. Movements over this switch must be made in accordance with SP Rule 535.

Eastward inferior WPRR trains must arrive Alazon sufficiently in advance of superior WPRR trains to avoid delaying them between Alazon and Wells.

(Z) ENGINE WHISTLE SIGNALS

Weso: Westward WPRR trains on SP track must sound whistle signal o — at sign reading "WP WHISTLE" located at SP MP 425.10 approaching Tule.

Carlin: Westward: Approaching east end yard:
SP freight trains, o — o,
WPRR trains, — o.

Alazon: Eastward WPRR trains must sound whistle signal o — at sign reading "WP WHISTLE" located at MP 709, pole 2.

SPEED RESTRICTIONS—in miles per hour will apply as follows:

BETWEEN	Passenger				Freight		BETWEEN	Passenger				Freight	
	California Zephyr and City of San Francisco		Other Passenger Trains		All Freight Trains			California Zephyr and City of San Francisco		Other Passenger Trains		All Freight Trains	
	Maximum	Restrictions	Maximum	Restrictions	Maximum	Restrictions		Maximum	Restrictions	Maximum	Restrictions	Maximum	Restrictions
First Subdivision—Pages 2-3						Third Subdivision—Pages 6-7 Cont.							
Portola and MP 324.1	55		50		40		Alazon and MP 720.5	70		60		50	
MP 323.4 and MP 323.7 on curve		40		35		30	MP 715.2 and MP 717.1 on curves		65			45	
MP 324.1 and MP 342.1	79		70		55		MP 720.5 and MP 735	79		70		55	
MP 340.3 and MP 342.1 (Tunnel 37)		50		45		35	MP 735 and MP 748	79		70		60	
MP 342.1 and MP 352.7	60		55		45		MP 748 and MP 753.2	79		70		55	
MP 343.7 and MP 343.9 on curve		50		45		40	MP 753.2 and MP 755.2	45		45		30	
MP 345.5 and MP 346.8 on curves		55		50			MP 755.2 and MP 759.8	79		70		55	
MP 347.5 and MP 348.5 on curves		50		45		35	MP 755.5 and MP 755.8 on curves					40	
MP 352.7 and MP 363.2	70		65		55		MP 758.4 and MP 758.7 on curve		60		55	45	
MP 352.7 and MP 353 on curve		65		60		45	MP 759.4 and MP 759.8 on curve		75			50	
MP 363.2 and MP 384.2	79		70		55		MP 759.8 and MP 768.2	79		70		60	
MP 384.2 and MP 390.7	65		60		50		*MP 765.9 NNR Crossing		75			40	
*MP 384.3 SPRR X'ing		40		30		30	MP 768.2 and MP 774	70		70		55	
MP 389.8 and MP 390.3 on curve						45	MP 771 and MP 771.5 on curve					45	
MP 390.7 and MP 398.5	60		50		40		MP 772.7 and MP 773.1 on curve		65		60	45	
MP 390.7 and MP 392.1 on curves		45		40		35	MP 774 and MP 775.3	79		70		60	
MP 393.5 and MP 394.2 on curves		50		45			MP 775.3 and MP 782	55		50		40	
MP 395.3 and MP 397.8 on curves		45		40		35	MP 776.6 and MP 778.1 on curves		40		35	30	
MP 398.5 and MP 404.7	65		60		50		MP 778.7 and MP 779.2 on curve		35		30	25	
MP 398.8 and MP 399.3 on curves						45	MP 782 and MP 784.5	45		40		30	
MP 404.7 and MP 488.3	79		70		55		MP 782 and MP 782.7 on curve		35		30	25	
MP 429.5 and MP 430.3 on curve		60		55		50	MP 783.5 and MP 784.5		35		30	25	
MP 433.5 and MP 434.1 on curve		60		55		50	MP 784.5 and Wendover	70		65		55	
MP 480.2 and MP 481.2 on curves		70		65		50	MP 784.6 and MP 784.9		60		55	40	
MP 483.6 and MP 483.9 on curves		65		60		50	MP 785.1 and MP 785.2 on curve					45	
MP 487.7 and MP 488 on curves		70		65		50	MP 785.8 and MP 786.5		65		60	45	
MP 488.3 and MP 496	60		55		40		MP 795.4 and MP 795.7		55		50	40	
MP 489.9 and MP 491.2 on curves		50		45			MP 796 and MP 796.4		65		55	45	
MP 492.4 and MP 492.7 on curves		55		50			MP 799.5 and MP 800		45		40	35	
MP 493.9 and MP 494.9 on curves		45		40		35	MP 805.3 and MP 806 on curve					50	
MP 495.3 and MP 495.6 on curve		55		50									
MP 496 and Winnemucca	79		70		60								
MP 510 and MP 510.4 on curve		70		65		55	Fourth Subdivision—Pages 8-9						
MP 513 and MP 513.2 on curve						55	Wendover and MP 856.6	79		70		60	
MP 519.9 and MP 520.6 on curve						55	MP 806.5 and MP 807 on curve					50	
MP 521 and MP 521.9 on curves		65		60		50	MP 849.7 and MP 849.8 on curve					55	
MP 523.1 and MP 523.4 on curve						55	MP 856.6 and MP 866.8	79		65		55	
MP 524.8 and MP 525 on curve						55	MP 856.6 and MP 856.9 on curve		65		60	50	
MP 527.5 and MP 527.7 on curve						55	MP 859.7 and MP 860 on curve		70				
MP 530.4 and MP 530.7 on curve						55	MP 860.9 and MP 861.1 on curve		70				
MP 532.1 and MP 532.5 on curve						45	MP 862.7 and MP 863.3 on curve		70				
							MP 864.3 and MP 864.7 on curve		65		60	40	
							MP 865.2 and MP 866.1 on curve		70				
							MP 866.8 and MP 879	79		70		55	
							MP 866.8 and MP 867.5 on curve		70		65		
							MP 867.5 and MP 868.4 on curve		60		55	45	
							MP 868.5 and MP 869.3 on curve		65		60	50	
							MP 869.8 and MP 872 on curve		70		65		
							MP 878.7 and MP 879 on curve		60		55	45	
							MP 879 and MP 925.7	79		70		60	
							MP 886.5 and MP 886.7 on curve		70		65	50	
							MP 901.1 and MP 902.1 on curve					55	
							MP 907.7 and MP 908.1 on curve					55	
							MP 909.9 and MP 910.4 on curve					50	
							MP 911.2 and MP 911.3 on curve					55	
							*MP 912.1 D&RGWRR X'ing		65		60	45	
							MP 912.3 and MP 912.6 on curve		65		60	45	
							MP 915.1 and MP 915.6 on curve		70		65	55	
							MP 920.6 and MP 920.9 on curve					55	
							MP 925.3 and MP 925.7					40	
							MP 925.7 and Pollard Jct.	20		20		20	
							Pollard Jct. and Salt Lake City (U.D.)	12		12		12	
							Pollard Jct. and Roper Yard					25	
							Pollard Jct. on Curve					15	
							Loyalton Branch					15	
							Reno Branch	25		25		25	
							Martin Spur		10		10	10	
							Derail MP 31.64		10		10	10	
							SP-WP Interchange						
							Connection, Reno		5		5	5	
							Ellerbeck Branch					15	
							Tooele Branch	20		20		20	

*Trains approaching interlocked crossings must reduce to speeds shown above before engine passes home signal.

SPEED RESTRICTIONS FOR ENGINES. Maximum speed in miles per hour shown below is subject to further restrictions applicable to certain territories as shown in Speed Restrictions for Trains:

WESTERN PACIFIC

Class	Engine Maximum Speed
D-176 (801-805)*	79
D-225 (901-912)	65
D-239 (913-924)	65
S-50 (501-503)	45
S-50 (504-511)	65
S-57 (551-564)	35
S-57 (559-564 in multiple)	30
S-60 (581-585)	65
S-62 (601-606)	30
RS-62 (701-713 and 725-732)	65
D-62 (801D)	65

*Units 801A and 802A are equipped with freight gears. Maximum speed 65 MPH.

SOUTHERN PACIFIC

DF-1 to 12 with 60/17 gear ratio trucks	79
DF-1 to 12 with 61/16 gear ratio trucks	70
DF-1 to 12 with 62/15 gear ratio trucks and equipped with boilers and/or boiler controls	70
DF-1 to 12 with 62/15 gear ratio trucks and not equipped with boilers and/or boiler controls	65
DF-1 to 12 with 65/12 gear ratio trucks	55
DF-100, 114 (5288, 5289), 115, 119, 123, 126	65
DF-114, (5279 to 5287, 5290 to 5293), 117	55
DF-116, 118, 120, 121, 124, 125	70
DF-101 to 112	60
DF-200 to 206	55
DF-300 to 306	65
DF-307	60
DF-500, 501	70
DF-603, 606	70
DF-605, 607, 611	65
DF-608, 609	75
DF-610	65
DP	79
DS-1, 4, 5	45
DS-2, 3, 6 to 12	60
DS-100 to 108, 110, 111, 113 to 115, 117 to 122	60
DS-109	65
DS-200, 201	35

Light engines when operated from leading control cab in direction of movement must not exceed freight train speed.

Diesel engines when operated from other than leading control cab in direction of movement must not exceed freight train speed, and must not exceed 30 MPH on curves, and 20 MPH when approaching highway or street crossings at grade, and where conditions require, speed must be further reduced to a rate consistent with safety.

OTHER MAXIMUM SPEEDS Maximum MPH

Passenger trains with 400 series caboose may make authorized passenger train speed.	
Passenger trains with other series cabooses and freight trains all series cabooses	60
Scale test cars must be handled next ahead caboose and not exceeding	
Main tracks other than branches	30
Main tracks on branches	15
Trains handling WPRR steam derrick No. 37 straight track	35
On curves 5 MPH less than speed prescribed for freight trains but not exceeding	30
Trains handling steam derricks (other than WPRR steam derrick No. 37), steam shovels, cranes, rotary plows or pile drivers on own wheels, logs on flat cars, loaded air dump cars	25
Trains or engines through a turnout or siding equipped with power operated switches in T.C.S. territory	20
Trains or engines trailing through spring switch old main track to main track East Elko	20
Trains or engines through turnouts, crossovers, sidings and other inside tracks, except as otherwise provided for	10

MISCELLANEOUS

Trains handling diesel engines dead in train must not exceed the maximum speed for such class engine.

Diesel freight engines dead in train must have automatic brake valves cut out in cabs and brake valve handles locked in running position; independent brake valve handles locked in running position (locking pins are provided for this); dead engine features cut in; all isolation switches placed in "start" position; all switches at engineer's control stand locked in "off" position and main battery switches pulled; reversers locked in neutral position in all units. Distributing valve pops must be set to 25 pounds pressure. Same procedure should be followed on passenger engines.

Diesel yard engines dead in train must have automatic brake valve cut out and handle placed in running position; distributing valve pop set to 15 pounds pressure; dead engine feature cut in; main battery switch pulled and reversers locked in neutral position.

During freezing weather engine water cooling system must be drained on any type diesel engine being towed.

Coupling snow plow ends of diesel engines to passenger equipment or to other engines is prohibited.

When the plow end of Jordan Spreaders 6, 7 or 13 are to be coupled to other cars or locomotives, an empty flat car must be placed next to plow end, to prevent damage to locomotive or equipment.

YARD LIMITS

West MP		East MP	
BD 11.28	Loyalton	.....	End of Branch
BI 0.0	Reno Junction (Reno Branch)	.....	BI 0.81
BI 32.43	Reno	.....	End of Branch
642.96	Carlin	.....	647.13
663.6	Elko	.....	666.76
926.06	Salt Lake City and Roper . . As indicated by yard limit signs		

SWITCHING LIMITS

West MP		East MP	
319.94	Portola	.....	323.09
437.03	Gerlach	.....	439.45
530.02	Winnemucca	.....	533.6
764.96	Shafter	.....	767.73
805.28	Wendover	.....	808.31
926.06	Salt Lake City		

TONNAGE RATING

Engine Class	1st Sub-div.	2nd Sub-div.	3rd Sub-div.	4th Sub-div.	Reno Branch	Loyalton Branch	Tooele Branch
Eastward							
D-176*	2755	4600	2305	2620	1400		1200
D-225**	5950	11350	5950	5950	3700		2800
D-239**	7300	13600	7300	7300	4600		3475
S-50	880	2645	880	880	800	2645	435
S-57***	1150	3340	1150	1150	900	3340	535
S-60	1150	3340	1150	1150	1050	3340	535
S-62***	1825	4150	1825	1825	1500	4150	870
RS-62***	1825	4150	1825	1825	1500	4150	870
D-62***	1825	4150	1825	1825	1500	4150	870
Westward							
D-176*	2395	4600	1855	2260	2440	1050	4600
D-225**	5950	11350	4600	5950	5950	2350	9100
D-239**	7300	13600	6175	7300	7300	3250	11350
S-50	880	2645	880	1000	880	435	1900
S-57***	1150	3340	1150	1250	1150	550	2350
S-60	1150	3340	1150	1250	1150	700	2350
S-62***	1825	4150	1715	1825	1825	1000	2835
RS-62***	1825	4150	1715	1825	1825	1000	2835
D-62***	1825	4150	1715	1825	1825	1000	2835

Ratings shown above are actual tonnage.

*Three unit engine. Reduce 33 1/3 % of tonnage rating for each inoperative, or detached unit.

**Four unit engine. Reduce 25% of tonnage rating for each inoperative, or detached unit.

***One unit engine. When operated in multiple control, add together the rating for each operative unit.

Tonnage rating based on maximum grade each subdivision. Between points where grades are less than maximum, greater tonnage can be handled.

TRACKS ON WHICH ENGINE MOVEMENTS RESTRICTED

Location and Description of Track	Class of Engine	Prohibited
*Portola, Scale Track	All	On Track Scale live rail
*Portola, Scale Track	All except Single Unit	On Track Scale dead rail
Loyalton	All except Single Unit	On Standard Oil Co. Track
*Reno, Track Scales	All	On Track Scale live rail
Sano, Spur off siding	All	Beyond 300 feet from frog
Reynard, Spur off siding	All	Beyond 300 feet from frog
Phil, Spur off siding	All	Beyond 300 feet from frog
Golconda, Spur off siding	All	Beyond 300 feet from frog
Ellison, Spur off siding	All	Beyond 300 feet from frog
Kamos, Spur off siding	All	Beyond 150 feet from frog
Pardo, Spur off siding	All	Beyond Frog
Elburz, Spur off siding	All	Beyond 300 feet from frog
Deeth, Stock Track	All	Beyond 50 feet from frog
Sage, Spur off siding	All	Beyond 150 feet from frog
Silver Zone, Spur off siding	All	Beyond 150 feet from frog
Clifside, Spur off siding	All	Beyond 150 feet from frog
Pilot, Spur off siding	All	Beyond 150 feet from frog
Wendover, Army Base Track	All	Beyond WP ownership
Blair, Spur off main track	All	On Track Scale live rail
Salduro, Spur off siding	All	Beyond 150 feet from frog
Arinosa, Spur off siding	All	Beyond 150 feet from frog
Knolls, Spur off siding	All	Beyond 150 feet from frog
Clive, Spur off siding	All	Beyond 500 feet from frog
Low, Spur off siding	All	Beyond 500 feet from frog
Spray, Spur off main track	All except Single Unit	Beyond frog
Saltus, Royal Salt Co. RR	All	Beyond frog
Salt Lake City, Fisher Brewery Spur	All except Single Unit	Beyond frog
Redman Spur	All except Single Unit	Beyond frog
Roper Yard, Track 21	All	Over Scales

*Live rail is weighing rail

SPURS AND COMMERCIAL TRACKS

STATIONS	Distance from San Francisco	How Connected	Car Capacity
SULPHUR.....	P 474.5	1 W	30
KNIGHT.....	570.1	1 E	6
RUSSELL.....	P 582.5	1 E	6
JENKINS.....	592.1	1 E	12
DUGGAN.....	P 631.9	1 E	20
TONKA.....	P 650.1	1 E	28
TULASCO.....	P 708.8	1 E	20
TOBAR.....	P 733.5	Both Ends	50
BLAIR.....	P 808.7	1 W	90
SILSBEE.....	P 811.6	1 W	50
ARAGONITE.....	P 861.5	1 E	5
MARBLEHEAD.....	P 870.8	Both Ends	36
TIMPIE.....	P 885.7	Both Ends	75
SPRAY.....	P 906.3	1 E	110
LAGO.....	P 907.8	Both Ends	80
GARFIELD PIT.....	P 911.7	Both Ends	122
PHOSPHATES.....	913.2	1 E	...
SALTUS.....	P 915.0	Both Ends	5
TERMINAL.....	P 922.1	1 W	20

RAILROAD SURGEONS

LOCATION	NAME	TITLE
San Francisco, Calif.....	Dr. G. F. Cushman.....	Chief Surgeon
Portola, Calif.....	Dr. C. W. Brown.....	Division Surgeon
Portola, Calif.....	Dr. W. S. Bross, Jr.....	Asst. Division Surgeon
Reno, Nevada.....	Dr. G. O. Bradley.....	Local Surgeon
Reno, Nevada.....	Dr. G. G. Lenz.....	Local Surgeon
Reno, Nevada.....	Dr. G. R. Magee.....	Oculist
Winnemucca, Nevada.....	Dr. K. L. Hartoch.....	Local Surgeon
Winnemucca, Nevada.....	Dr. Frank V. Rueckl.....	Local Surgeon
Battle Mountain, Nevada.....	Dr. C. C. Hyde.....	Local Surgeon
Elko, Nevada.....	Dr. A. J. Hood.....	Division Surgeon
Elko, Nevada.....	Dr. H. S. Collett.....	Local Surgeon
Elko, Nevada.....	Dr. T. K. Hood.....	Local Surgeon
Elko, Nevada.....	Dr. L. A. Moren.....	Local Surgeon
Elko, Nevada.....	Dr. J. M. Read.....	Local Surgeon
Elko, Nevada.....	Dr. E. H. Bastien.....	Oculist
Elko, Nevada.....	Dr. F. M. Poulson.....	Oculist
Tooele, Utah.....	Dr. T. M. Aldous.....	Local Surgeon
Salt Lake City, Utah.....	Dr. E. V. Long.....	Local Surgeon
Salt Lake City, Utah.....	Dr. H. B. Harmon.....	Local Surgeon
Salt Lake City, Utah.....	Dr. J. H. Quinn.....	Oculist

WATCH INSPECTORS

LOCATION	NAME	TITLE
San Francisco, Calif.....	C. D. Fabrin.....	Manager of Time Service
Reno, Nevada.....	R. Herz & Bros.....	Watch Inspector
Winnemucca, Nevada.....	Bosch & Son.....	Watch Inspector
Elko, Nevada.....	W. N. Blohm.....	Watch Inspector
Elko, Nevada.....	C. E. Cox.....	Watch Inspector
Salt Lake City, Utah 460 West 2nd South St..	H. B. Miller Co.....	Watch Inspector
Salt Lake City, Utah 12 W. Broadway.....	Wilfred Burrell.....	Watch Inspector

SPEED TABLE

TIME PER MILE	MILES PER HOUR
36".....	100
37".....	97.3
38".....	94.7
39".....	92.3
40".....	90
41".....	87.8
42".....	85.7
43".....	83.7
44".....	81.8
45".....	80
46".....	78.3
47".....	76.6
48".....	75
49".....	73.5
50".....	72
51".....	70.6
52".....	69.2
53".....	67.9
54".....	66.7
55".....	65.5
56".....	64.3
57".....	63.2
58".....	62.1
59".....	61
1'00".....	60
1'01".....	59
1'02".....	58.1
1'03".....	57.1
1'04".....	56.2
1'05".....	55.4
1'06".....	54.5
1'07".....	53.7
1'08".....	52.9
1'09".....	52.2
1'10".....	51.4
1'11".....	50.7
1'12".....	50
1'13".....	49.3
1'14".....	48.6
1'15".....	48
1'16".....	47.4
1'17".....	46.8
1'18".....	46.2
1'19".....	45.6
1'20".....	45
1'25".....	42.4
1'30".....	40
1'35".....	37.9
1'40".....	36
1'45".....	34.3
1'50".....	32.7
1'55".....	31.3
2'00".....	30
2'15".....	26.7
2'30".....	24
2'45".....	21.8
3'00".....	20
3'30".....	17.1
4'00".....	15
5'00".....	12
6'00".....	10
7'00".....	8.6
7'30".....	8
8'00".....	7.5
10'00".....	6

