# SOUTHERN PACIFIC COMPANY

PACIFIC LINES

# TIME TABLE

FOR THE

# TUCSON DIVISION







To Take Effect Sunday, March 8, 1942, at 12:01 A. M.

MOUNTAIN STANDARD TIME

For the government and information of employes only.

L. B. McDONALD,

General Manager

C. F. DONNATIN,
Assistant General Manager

W. B. KIRKLAND,
Superintendent of Transportation

H. R. HUGHES,

Superintendent

		A STATE OF THE STA	100	TOA	CONTELLAT				THE PERSON OF								WESTW	TADD	
		•		LA	STWAR	Ъ		Comment of		Art 1-75 -				44 14		Miles of State	MESIW	The state of the s	
		SE	ECOND CL	ASS			FI	IRST CLASS	5		from	Time Table No. 113	from Yard		FI	RST CLAS	S	SECONE	THIRD CLAS
Capacity of		846	902	844	842	2	4	370	44	6	stance n Frar	March 8, 1942	Distance Phoenix	1	3	43	5	841	901
sidings in car lengths		Freight	Freight	Freight	Freight	Sunset Limited	Golden State Limited	A. O. N.	Californian	Argonaut	Dista San	AIDAR	Di	Sunset . Limited	Golden State Limited	Californian	Argonaut	Freight	Freight
	- Park at	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex.Sun.& Mon.	Leave Daily	Leave Daily	** 1	STATIONS		Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily
ВКЖОТУР	v - 194-	4.50PM	1.30PM	8.20AM	1.15AM	5.55PM			4.05AM	3.45AM	732.7	(TO-R YUMA	174.2	s 9.55AM	s 1.20PM	s 12.50AM	s 1.20AM	1.404	M 11.45PM
P	Tractical Con-	5.05	1.45	8.35	1.30	6.05	4.40	4.30	4.15	3.55	737.4 737.5	EAST YARD	169.5	9.45	1.10	12.40	1.10	1.27	11.32
2 P		5.10	1.50	8.40	1.35	6.08	4.43	4.33	4.18	3.59	740.1	ARABY	166.9	9.41	1.06	12.36	1.05	1.22	11.27
P		5:16	1.56	8.46	1.41	6.12	4.47	4.37	4.22	4.03	743.7	FORTUNA	163,3	9.36	1.01	12.31	. 1.00	1.16	11.21
2 P		5.21	2.01	8.51	1.46	6.15	4.50	4.40	4.25	4.06	746.6	BLAISDELL	160.4	9.32	12.56	12.26	12.55	1.11	11.16
81 P		5.34	2.14	9.04	1.59	6.27	5.02	4.52		f 4.18	753.5	DOME )	153.5	9.20	12.44	f 12.14AM	12.43	12.58	11.03
P										1	760.2	LIGURTA	146.8						
3 WIP		6.05PM	2.55	9.35AM	2.30AM	f 6.49	5.24	5.13	4.58	s 4.40AM	770.0	TO WELLTON	137.0	9.00AM	12.23	11.53PM	f 12.20	12.304	M 10.35
P			3.07			6.57	5.32	5.20	5.05		775.7	MING	131,3	magazina 1	12.15	11.45	12.11		10.20
P			3.17			7.05	5.40	5.27	5.12		780.9	RÖLL	126,1		12.08PM	11.38	f12.04AM		10.05
Spur P		AP UT		142	44 1 1 1 1		The second	10 W			788,3	TYSON	118.7		19:53				
P	188	King Angle	3.37			7.18	5.53	5.40	5.25		793.2	GROWLER	113.8	3 10 10 11	11.55 AM	11.25	11.51 PM	The Name of Street, St	9.45
P		12.	3.55	in the		7.28	6.03	5.50	5.35	n l	802.5	KOFA 10.2	104.5	Mar Mar at	11.45	11.15	11.41		9.31
P	KALLAN.	4	4.15	Marin Andrews	Cala	7.39	6.14	6.01	5.46	* 1 3 3 3 3	812.7	HORN 9.6	94.3		11.34	11.64	11.30	CONTRACTOR OF THE	9.13
WOP	Line of the		4.40		17 12	f 7.52	6.27	6.12	5.59		822.3	TO HYDER	84.7		f11.24	10.54	f 11.20	man garage	8.55
3 P	Partners		5.00			8.04	6.39	6.22	6.10		831.1	MONTEZUMA	75.9		11.11	10.43	11.08		8.32
6 WP	CONTRACTOR OF THE SECOND	April 1	5.20			8.15	6.50	6.33	6.21		841.1	SADDLE	65,9		11.00	10.32	10.57	ATT TELT	8.15
2 P	W. William	STATE OF THE STATE	6.15	None	Confe III	8.29	7.04	6.47	6.35		851,0	GILLESPIE	56.0		10.48	10.20	10.45	Constitution of the second	7.40
9 Spur P		AND F	The second of	15 V W		\$ 18T	A CHARLES		AND LONG		856.0	ORAG	51.0	4;		Part Alle		programme to him he	A A Sirver
76 P	A Company	W KIN	6.35	ART		8.40	7.15	6.58	6.46	The party of	861.3	ARLINGTON	45.7		10.37	10.09	10.34	THE PERSON NAMED IN	7.15
72 P			6.50		1	8.45	7.20	7.03	6.51		865.7	DIXIE	41.3		10.32	10.04	f 10.29	THE PARTY OF THE P	6.50
2 P	S. Call		7.00	The state of the s	SCENE IN	8.51	7.26	7.09	6.57		871.5	CONGER	35.5		10.26	9.58	10.23		6.38
76 P			7.10	19 19		f 8.59	7.34	7.14	7.03	A John Harton	875.7	TO BUCKEYE	31.3		f 10.18	9.50	s 10.15	A contract of the second	6.30
72 P		1.0	7.22	7		9.06	7.41	7.20	7.10		881.7	LIBERTY	25,3		10.09	9.40	10.02	A TOTAL PROPERTY OF THE PARTY O	6.18
74 YP			7.34		V4.754 (4.5)	f 9.17	7,52	7.29	7.19		889.7	LITOHFIELD	17.3		10.00	9.30	f 9.52	Tall (2)	6.05
00 P	A. O.		7.40	Far Till		9.22	7.56	7.33	7.23	A THE STATE OF THE	893.0	CASHION	14.0		9.56	9.22	f 9.44		5.59
P	of the					13.1	11/2			The state of	895.7	TOLLESON .	11,3		f	The state of the s			
73 P	1 1 4		7.52	S. Parker	14	9.33	8.05	7.40	7.30	In the second	898.1	FOWLER	8,9		9.48	9.09	9.33	*	5.48
P	19 3 No. 1			William							902.0	CAMPO	5,0	To the Name of					
75 P			8.05	11000	10	9.42	8.13	7.46	7.38	TAIL THE	904.0	23rd AVE. PHOENIX	3,0		9.42	9.02	9.22	T Springe	5.35
	A					CANTA	a sow	85 1/4 1/10 B.	10 th 17	4 6	905.5	CROSSING-AT&SF WYE	1.5	TO 1999	28N			and the second second	
BKWP		Mary Della		Har His	1	s 9.50ff	8.20AM	7 7 14 15	s 7.45AM	1 1 1 1	906.0	R PHOENIX	1.0	1.37 T. C)	9.35 AM	8.55PM	9.15PM		- P
вкиотур	- Silver		8.20PM			7 7 7	4 4 4	7.55 AM	_		907.0	TO-R PHOENIX YARD	0.0		7	6			5.20PM
朝 一	and the same	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex. Sun. & Mon.	Arrive Daily	Arrive Daily		(174.2)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
	A SALUT		Service of		ALL DEST	A THE REAL PROPERTY.	The state of	Ex. Sun. & Mon.					A TOWN			-			

Fix the government and information of employes only.

	ADDITIONAL FLAG	STOPS TO RECEIVE OR D	ISCHARGE PASSENC	GERS	T. B. ETBILLÀND.
Train	gents At companies	Receive or Discharge	To (or beyond)	From (or beyond)	and to tenhenochnomic
44-4 44-4	Any Station Wellton, Hyder, Buckeye, Litchfield	Discharge Receive	Phoenix	Yuma	

ADDITIONAL S	TATIONS
Granite Spur	TATIONSMP 755.2
Yano	
Harqua	MP 849.4
Hassayampa	
Palo Verde	MP 870.2
Norton	MP 884.9

- 194	ADDITIONAL	FLAG	STOPS TO RECEIVE OF	DISCHARGE PAS	SENGERS
Train	At	1	Receive or Discharge	To (or beyond)	From (or beyond)
43 43 43 43	Any Station Buckeye Buckeye Blaisdell Any Station		Discharge Revenue Receive Discharge Receive Revenue Receive Discharge Discharge	Colton San Diego Colton	East of El Paso El Paso Tucson Phy. Line St'ns & El Paso

			10.00	8				7757	ST.JOB	He NO	TI	CACHO SUBDIVISIO	11								3
Property Commencer			dein	T. DE	ASTWAR	D·						Time Table No. 113			Tr.	1011	WEST	WARD			
	- Jario	SECONI	CLASS	,	Election of the second	to a second	FIRST	CLASS	CIT SAN	allow and	from	Time Table No. 113	rom			FIRST	CLASS	main and	M-10-1	SECOND	THIRD
Capacity of sidings in car lengths	904 Freight	856 Freight	854 Freight	852 Freight	2 Sunset Limited	30 Arizona Limited	4 Golden State Limited	370 A. O. N.	44 Californian	6 Argonaut	Distance f	March 8, 1942	Distance fron Tucson	Sunset Limited	Golden State	29 Arizona Limited	43 Californian	5 Argonaut		843 Freight	903 Freight
Later Street	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sun., Mon.	Leave Daily	Leave Daily		STATIONS	* * .	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily			THE RESERVE OF
BKWP	e inportation	The Walter	A SAME AND	1-1-6-2-10	10.05PM	6.00 PM	8.35AM		8.00AM	HTAZE.	906,0	(R PHOENIX )	120.9							Arrive Daily	Arrive Daily
BKWO TYP	9.30PM		mac sa		10.08	6.03	8.38	8.08AM	8.03	ATM M	907.0	TO-R PHOENIX YARD	119.9		9.15 AM	s 11.25 AM		s 9.00 PM			THE M
20 Spur P			Editor.		10.15	6.03	8.45	8.16	8.10		911.1	KENDALL	115.8		9.02	11.22	8.35	8.55			11.55
19 Spur P			e to total		10.15		QAB 3	- 5.16	0.10	A X III J	911.8	TOVREA	115.1	Part N. Co.	9.02		8.27	8.47			11.40
79 YP	9,52		a more a		f 10.22	6.15	f 8.52	8.23	8.17		914.4	TO TEMPE	112.5		f 8.52	11.09	e 0 01	0.041			9. 55
P		International	men ex			0.10	1000	0.20	-		915,3	TEMPE JOT.	111.6	4//	1 0.32	11.09	s 8.21	s 8.41			11.25
P	10.02		CHOICE DE LA COLON	1 1 1 1 1 1 1 1 1 1	10.28		8.58	8.29	8.23		917.1	NORMAL JOT.	109.8		8.46	14 × 3 L	8.13	8.34			11.10
Yard Limits 75 WYP	10.15				s 10.38	6.27	s 9.08	8.38	8.33		921,8	TO MESA	105.1		8.38	10 - 1					11.10
81 P	10.22					0.21	ADDITION OF			TOTAL		1.8	105.1		s 8.33	10.56	s 8.05	s 8.26			10.45 10.15
22 P	10.22				10.42	1	9.12	8.42	8.37	100	923.6	McQUEEN	103.3		8.27		7.59	8.19			9.45
40 P	10.27				10.47		0.15	0.40	0.40		925,4 926,1	TREMAINE 0.7	101.5		Televant.		CHERT		1		(Hamp)
80 P	10.36		- the trail		_	c 10	9.15	8.48	8.42		929.3	FALFA	100.8		8.23	100	7.55	8.15			9.33
43 Spur P	10.00		SHEET I		f 10.54	6.40	s 9.22	8.54	8.49		931.0	TO CHANDLER	97.6		f 8.18	10.40	7.50	s 8.10			9.25
76 P	10.45		48.74		11.01	-	9.29	0.01	8.56		934.3	POZO	95.9	Comment of Malayana (1997)		Agency of the same		Section of the P	Continue to the last	all strains and with	- January
67 P	10.56	1 197	71.67		11.06		9.34	9.01	9.01		939.0	SERAPE 4.7	92.6	- 1	8.10	10.33	7.40	8.02	- 4-1-1		9.17
67 P	11.05		T-1. 21.2	1-1-1-1	11.11	6.56	9.39	9.08	9.01	A SOUTH	943,2	SANTAN 4.2 DOCK	87.9	1	8.05		7.35	7.57			9.09
14 Spur P				-		6.36	9.39	9.13	9.06		948.1	OLBERG	83.7		8.00	10.23	7.30	7.52	4	Park Victoria	9.02
75 P	11.22				11.22	7.07	9.50	9.24	9.17	<u> </u>	953,2	BLACKWATER	78.8		06187	- 0.071	- CO.				THE YEAR
118 YP	11.33				11.27	7.12	9.55	9.29	9.22		958,2	POSTON	73.7 68.7	- di	7.49	10.12	7.19	7.40			8.46
73 WP	11.52PM		- 65,07		f 11.35	7.16	s 10.03	9.43	9.32		962.0	TO COOLIDGE	64.9		7.44		7.12	7.35			8.38
32 P			- 200 C		NA TO	7.21	7 4 7 2	9.58	AN .		966.4	RANDOLPH	60.5		s 7.39	10.03	7.05	s 7.30	. *		8.30
67 P	12.10AM	174,510	E STATE OF		11.47		10.18	10.04	9.53	en l	971.4	TOPAZ	55.5		7.28	9.58	C = 4	f 7.21			0.11
P			20.0			1,1000	A. V. H.		-s		975.2	PEAK	51.7		1.20	9.33	6.54	7.13			8.11
94 E89 WOYP	12.28	7.40PM	10.45 AM	3.25AM	11.59PM	7.36	10.32	10.16	10.03	9.10AM	979.7 936.7	TO PICACHO	47.2		7.10	9.43	the A	-			
72 P	12.38	7.50	10.55	3.35	12.05AM		10.38	10.21	10.08	9,17	940.7	OCATILLA		4.45AM	7.18	9.43	6.43	f 7.02		4.30 PM	7.57
90 P	12.47	7.59	11.04	3.44	12.09	7.43	10.42	10.25	10.12	9.23	944,2	WYMOLA	43,2 39,7	4.41	7.13	9.35	6.38	6.56		4.23	7.50
71 P	12.55	8.07	11.11	3.51	12.13	- 9mL	10.46	10.29	10.16	9.31	947.9	MONTROSE	36.0	4.37	7.05	9.31	6.30	6.52		4.17	7.43 7.36
W78 E78 WP	1.04	8.16	11.18	3.58	12.18	7.50	10.51	10.33	10.20	f 9.39	951.4	TO RED ROCK	32.5	4.29	7.01	9.27	6.26	f 6.44		4.11	7.30
67 P	1.09	8.21	11.23	4.03	12.21		10.54	10.36	10.23	9.43	954,3	AVRA	29.6		6.58	9.21		_			-
78 P	1.16	8.28	11.30	4.10	12.25	7.57	10.59	10.40	10.27	9.48	958,4	NAVISKA	25.5	4.26	6.53	9.20	6.23	6.39	TOTAL PROPERTY	3.53	7.25
69 P	1.22	8.34	11.36	4.16	12.29		11.04	10.44	10.31	f 9.54	962,2	MARANA	21.7	4.16	6.49	9.20	6.14	6.34 f 6.29		3.53	7.18
94 P	1.27	8.39	11.41	4.21	12.32	10 46 10 16	11.07	10.47	10.34	9.58	964.6	ROSKRUGE	19.3	4.13	6.46		6.11	6.24		3.43	7.08
164 WP	1.32	8.44	11.46	4.26	12.35	8.05	11.10	10.50	10.37	10.02	966.9	RILLITO	17.0	4.10	6.43	9.12	6.08	f 6.21		3.39	7.04
93 P	1.38	8.50	11.52	4.32	12.39		11.14	10.53	10.40	10.07	969,9	SABINO	14.0	4.07	6.40	7.12	6.05	6.16		3.34	6.59
78 P	1.43	8.55	11.57AM	4.37	12.42	8.10	11.17	10.56	10.43	f 10.13	972,1	CORTARO	11.8	4.04	6.37	9.07	6.02	f 6.13		3.30	6.55
93 P	1.48	9.00	12.02PM	4.42	12.45	3.1.00	11.20	10.59	10.46	10.17	974.7	KINO	9.2	4.00	6.34		5.59	6.09		3.26	6.51
W78 E78 P	1.53	9.05	12.07	4.47	12.48	All Safey	11.23	11.02	10.49	10.22	977.4	JAYNES	6,5	3.57	6.31		5.56	6.06		3.21	6.46
P	1.59	9.11	12.13	4.53	12.52	8.19	11.27	11.06	10.53	10.27	981.2	STOCKHAM	2.7	3.53	6.27	8.58	5.52	6.02		3.14	6.39
ucson Yard KWFITYP	2.10AM	9.25PM	12.25PM	5.05AM	s 1.00 AM s	8.25 PM	s 11.35AM	11.15AM	s 11.00 AM	s 10.35 AM	983.9	TO-R TUCSON	0.0	3.45AM	6.20AM	8.52AM	5.45PM	5.55PM		3.05 PM	6.30P
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily			Arrive Daily				10-10 1000011			0.20	0.02	0.10	3.33	The second second		0.00

(1.40) 28.32 RULE S-72. Westward trains are superior to trains of the same class in the opposite direction, except No. 30 is superior to all westward trains and Nos. 4, 44 and 370 are superior to No. 1.

RULES 86, 87 and 93. Second and inferior class trains, extra trains and engines must clear the time of No. 29 and No. 30 not less than ten minutes.

Inferior trains must be clear of main track and insulated joints at meeting and passing points for No. 29 and No. 30

and No. 30.

RULE 206 (A). Unless otherwise instructed, crews arriving Phoenix on eastward first-class trains, will assume same schedule at Phoenix and these trains and No. 30 proceed to Phoenix Yard without clearance. RULE 221. Trains terminating at Phoenix need not obtain clearance at Phoenix Yard. Second main track between east end Phoenix Yard and east switch Kendall, may be used by freight trains when authorized by train order. Single track rules apply. RULE 5. At Picacho schedule time and train orders apply at junction switch.

No. 44 reduce speed sufficiently, stopping if necessary to permit exchange of first class and working mail at Tempe, Mesa, Chandler and Coolidge.

Train	At	Receive or Discharge	To (or beyond)	From (or beyond)
6 44 44	Rillito, Jaynes Any Station	Receive Discharge Revenue Discharge	Any Station	Any Station Yuma
44	Tempe, Mesa Chandler, Coolidge Any Station	Receive Discharge	East of El Paso	DIL Y. G. I
30	Chandler	Receive	Kansas City	Ph'x Line Stn's

Train	At	Receive or Discharge	To (or beyond)	From (or beyond
1 1 29 43 43 5	Any Station Tucson to Picachol inc., except Jaynes, Rillito J Jaynes, Rillito Chandler Any Station Coolidge, Chandler Any Station	Receive Revenue Discharge Discharge Revenue Receive Revenue Receive Discharge	Gila Line Stations Any Station San Diego Phoenix Line Stations	Kansas City East of El Paso

4		Total								us on	WE	LLTON	SUBD	IVISIO	N							AT CHICAGO AND AND
		The second state	URAN	163WE	ASTWAF	n e				14 9 X94	1						ALI E WA	327 13 (17)	WEST	WARD		
DECEMBER 1		<del></del>	SECON	D CLASS	ASIWAI			FIRST CLA	SS	alder cio	E 8	Time '	Table No	. 113	from	TOTAL	FIRST CL	ASS			SECOND	CLASS
Capacity of sidings in car lengths	843	I Zad	B. S. Santa	846 Freight	844 Freight	842 Freight	45		EROE .	6 Argonaut	Distance from San Francisco	Ma	arch <mark>8, 194</mark>	2	Distance fr Gila	Sunset Limited	30		536 May 1	841 Freight	380	
	16 17 617		-	Leave Daily	Leave Daily	Leave Daily				Leave Daily		s	TATIONS		1.45	Arrive Daily	ray was a se			Arrive Daily		
68 WIP			THEOLOGY I	6.05PM	9.35AM	2.30AM		17746		4.40AM	770.0	(TO	WELLTON	) <u>;</u>	85.7	f 9.00AM				12.30AM	** .	
69 P			T SUM.	6.13	9.43	2.38				4.46	773.1		ASHER	/H	82;6	8.54				12.22	HELDEN, MARK	
63 P	Jan Mari			6.19	9.49	2.44			1	f 4.50	776.4		TAONA		79.3	f 8.49	100			12.16		
69 P	- Carrier and a			6.25	9.55	2.50	1707	ALC:		4.55	780.1		GAEL	1.8 -	75.6	8.44	ar a "	emorn)		12.09		10.0
63 P				6.31	10.01	2.56		22.19	7.00	5.00	783.8		COLFREI	<b>D</b>	71.9	8.39				12.02AM		
67 P	1			6.39	10.09	3.04	1 (0)		FOL	5.06	788.6		PEMBROE	Œ	67.1	8.33		62-1-1		11.54PM	THE REAL PROPERTY.	EO. O.L
79 P			8.26	6.50	10.20	3.15		100	4-1	f 5.13	792.6	TO	MOHAWI	X	63,1	f 8.28	V20	ALC: 14 TH		11.47		Survey (1)
63 P				6.56	10.26	3.21		. BOZ 7	and the second	5.18	795.9		3.3 — KIM	E-15	59,8	8.20				11.37		CARREL ET
64 P				7.04	10.34	3.29	- 19	108 6	ar are	5.24	800.5		STOVAL		55,2	8.14				11.29		
94 P				7.14	10.44	3.39		SOLET I		f 5.31	806.2		MUSINA		49.5	f 8.07				11.20		
63 WP			T WILLS	7.24	10.54	3.49				f 5.40	811.9	o l	AZTEO		43,8	f 7.59	-participants	and the second		11.09		
94 P	1			7.30	11.00	3.55		na Italia	5746	5.45	815.8	i l	MUGGIN	S	39.9	7.53				10.54		24 01 19
33 P		1		7.37	11.07	4.02		43	- Town 16.	5.49	819.7		STANWI	x e	36.0	7.49		14		10.47		10 Per
18 P				7.41	11.11	4.06				5.52	822,0	dien ver	LAVA	0.6	83.7	7.46	ah e	Trible		10.43		
76 WOP				8.05	11.35	4.30	7.0	BEAT TO		f 6.04	826,1	TO.	SENTINE	L	29,6	s 7.40				10.35		
76 P			TATE OF THE PARTY	8.15	11.45	4.40				6.09	829.6		TRIGO		26,1	7.30	Part V			10.29		
61 P	Marie San Control			8.22	11.52AM	4.47				6.14	833,1		TARTRO	N	22.6	7.26	Marie William			10.23	ALTER ES	STREET, LA PAR
65 P		Maria Caracana de	o di altri di anciona	8.33	12.03PM	4.58				6 23	839,9	N. T	PIEDRA		15.8	7.17		11		10.12	The second second	
64 P				8.42	12.12	5.07				f 6.30	845.5	- Carlotte			10.2	f 7.10	Maria			10.03	G.	
63 · P	1 V 12 (10 m)			8.50	12.20	5.15			DATE.	6.36	850,3		SMURR		5.4	7.04	MAX - HILL			9.55		
rd Limits	Tanger of			9.00PM	12.30PM	5.25 AM			L.J.JOE	s 6.45AM		TO-R		ALC: Y	0.0	6.55AM			P. Bayla	9.45PM	OP.Y	
KWOTYP				Arrive Daily	Arrive Daily	Arrive Daily			IA I	Arrive Daily			(85.7)	7.01		Leave Daily	11,80		100.6	Leave Daily	NA A	
	1	1		(2.55)	(2.55) 29.38	(2.55) 29.38				(2.05) 41.14			e over Dis		ESTATE	(2.05)	uel y		to a s	(2.45) 31.16	37.6	100 I
	1.003			29.38		29.00		NAME OF THE OWNER, OWNE	7TTN/F A	Rya	EV DAI	LROAL		-01		Ter or			DI P	TOE TO	85.8	NI I I G
	Tell Carlo	WELLT	ON SUI	SDIVISIO	MC				OWIA	VALLI	LI KAI	LKOAL			4 0 4					UCTIONS		
pacity of idings in r lengths	EAST- WARD	Distance from San Francisco	Marc	ble No. 11 h 8, 1942 old Branch	Distance from	WEST- WARD	Capacity of sidings in car lengths	EAST- WARD	Distance from Yuma	ALCOHOL:	e Table I March 8, 1		Distance from Gadsden	WEST		Departme Time Tab	nt, Air Bra	ake Rules, on Yuma Va	and Special		s in Tucso	on Division
22.5	12.179.0	Z S D	The second second	TIONS	EA		PW- 1		Δ	P.L. CO.	STATION	IS	Q		E CLA	trestle at		exceed speed	10 MPH	except must no	t exceed o	WIFILOVE
YP		889.7		HFIELD	5.0		Yuma Yard P		0.0	R	YUMA		21.0	1000	3 11 11			learance at S	Spillway Si	pur, MP 10.25	E0.8	
2		894.7		-5.0 ————————————————————————————————————	0.0		20		1.0		U.S.R.S.		20.0		h An					witch will be		ard tracks.
Spurs				(5.0)			25 Spur		3.0		LUDY	pio me	18.0	KI-2-F-10	27.21					ed at Yuma.	9,35	
	15.7	11					23		8.5		WILLET'	rs	12.5					A 100 K		g must not be	used.	
	· YOU'N SEE				E-24 May 1	CHARLES DE LE SE	8 Spur	4	10.2		SPILLWA		10.8		in profit in					ed east of MP		erton).
	E 5. At Gil		time and tra	in orders for	first class to	ains apply	25		15.0	BYG BILL	SOMERTO	ON	6.0	(H) (6)	19 (i) (i) (ii)	NA TIACI	_ 0 001 110	That I				to di
L passe	mger station					nitraling with a draw	affera hos	na applies de	21.0		GADSDE	N	0.0	200000	disection.			MINE TO STATE OF			Though I may	
						The second secon		TOPPOSE AND DESCRIPTION	THE PARTY OF	-	(01.0)	9-1-1-1			T						.20 bank	

(21.0)

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS Receive or Discharge

Receive Revenue Receive Discharge Revenue

Train

Piedra Piedra

To (or beyond) From (or beyond)

Any Station

Any Station Any Station

(7.7)

			P	ICACHO SUBDIVISIO	ON		5
	E	ASTWARD		Time Table No. 113	[me ]	WES	TWARD
of	apacity sidings		Distance from San Francisco	March 8, 1942	Distance from Christmas	- Arca	la changel
	in car engths		Dist San	Christmas Branch	Dist	NODER!	without us
				STATIONS		and it	
81	P		923.6	McQUEEN 3.4	86.9	THE PERSON NAMED IN	
72	P	de da indestina	927.0	TO GILBERT	83.5	WD0.36	different L
26			932.0	HIGLEY	78.5		
9		Tog.	935.6	GERMANN 2.5	74.9	V	
18	P	4 Apr. 10	938,1	RITTENHOUSE	72.4	21.4	
54	P	0,88	941.6	QUEEN OREEK	68.9	- 44 A A A	
45	P	1 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	949.8	MAGMA 9.2	60.7	mo.st.	
27	WP	A RESTAURANT	959.0	TO FLORENCE	51.5		
6 8	Spur	Parte J. Many P.	968,8	DIVERSION 0.7	42.2		Company of
26	P	Tauge Till Till Hill	969.0	PRICE 6.2	41.5	CH- YU	
26	. P	T. St.	975,2	COOHRAN 7.9	35.3	TELL TO	
23	P	In according to	983.1	ZELLWEGER	27.4	Le transfer	
5	Spur	TO SEC. 1. CHEA	984.6	WOOLEY	25.9		
Yd.	Limits P	028.1	987.8	TO-R RAY JUNOTION	22.7	177 E 485	THE RESERVE
29	£10801.4	TAY SEED TO SEE	994.9	BRANAMAN 4.8	15.6	Caller	The same of
tive (	Y		999.2	BURNS WYE	11.3	MADE: BUT	
	28		999.7	BURNS	10.8	and the said	
imits	вжор		1000.2	TO-R HAYDEN JOT.	10.3		
Yard Limits	14 KP		1002.1	TO HAYDEN	8.4		
Y	8 Spur		1003.5	WINKELMAN	7.0		
			1004.7	ROCK QUARRY	5.8		
	Harring in	Continue trained of	1007.0	FINNEY	3.5		
2	Spur	TANK BORD IN THE PARTY	1009.4	воро	1.1		

#### ADDITIONAL STATIONS Barr M.P. 961.8

CHRISTMAS

(86.9)

0,0

RULE 5. At Gila schedule time and train orders for first class trains apply at passenger station.

At Picacho schedule time and train orders apply at junction switch.

At Hayden Jct. when train-order office is open, signal governs movement of trains and engines between Christmas Branch junction switch (1584 feet east of Hayden Jct.) and Hayden Jct. train-order office. Movements between these points are authorized by signal being placed in proceed position after being called for by one long, one short and one long sound of whistle. When train-order office is closed, movements may be made between these points "With Caution" if intervening track is seen to be clear.

Normal position Christmas Branch junction switch is for Kennecott Copper Corporation Railroad. Westward trains and engines via Kennecott Copper Corporation Railroad, and via Christmas Branch, must stop to clear Christmas Branch junction switch before proceeding as authorized above.

RULE 99 must be complied with between Christmas Branch junction switch and Ray Consolidated derail on Kennecott Copper Corporation Railroad.

	ADDITIONAL FLA	G STOPS TO RECEIVE OR DIS	CHARGE PASSEN	GERS
Train	At	Receive or Discharge	To (or beyond)	From (or beyond)
6	Toltec, Bon, Bosque Bosque, Bon, Toltec	Receive Revenue Receive Discharge Revenue	Any Station Any Station	Any Station

77 44 150	SECOND	FIRST	CLASS			- URA	ART HIVE	FIRST CLASS	THIRD		SECOND	FIRST	CLASS	- 1				FIRST CL	ASS   SEC
pacity of idings in r lengths	870 Freight		378  Mexican Express	Distance from San Francisco		le No. 113 8, 1942 Branch	Distance from Nogales	379 Mexican Express	871 Freight	Capacity of sidings in car lengths	884  Local Freight	-2101	382 Motor	Distance from San Francisco		March 8, 1942  Globe Branch	Distance from Live Oak	381 Motor	8 Le Fr
	Lv. Tuesday, Friday		Leave Daily Ex. Sunday	Ωx	STAT	4	1	Arrive Daily Ex. Sunday	Arrive Tues., Friday		Leave Daily Ex. Monday		Leave Daily			STATIONS		Arrive Daily	Arrive Ex. S
	6.00 AM			000.0		<u></u>	85.0	s 4.35 PM	5.40 PM	Yard Limits BKWFYP	8.00AM	1 100	3.05 PM	1098.4 1097.9	TO-R	BOWIE	136,4	s 1.00PM	4
SKWFTYP	- G.OO AM	O RIGHT	11.40AM	983.9	TO-R TUCSON	0.8	00.8	- 4.331		50 P	8.25			1107.4	10 B   10	ESCALA	126,9	12.36	4
					SHOP YARD	T. & N. R. R. JOT.	65.1			13 P	8.50		f 3.38	1117.8	olo I c	TANQUE	116.5	f 12.17	4
Р	6.15		11.50AM	986.5 986.9	SOUTH LINE	SOUTH LINE CROSSING	62.9	4.25	5.24	42 P	9.05	Tau	3.49	1125.1		HAECKEL	109.2	12.04PM	3
P	6.35	A DOLLAR		998.8	6	.9	56.0	4.13	5.07	38 P	9.25		s 4.02	1132.6	то	вогомои	101.7	s 11.52AM	3
P	7.00	0.00	12.02PM		8	/IER	47.4		4.45	21 Spur	rise TIT			1135.3		LONE STAR	99.0	0.03 -	Burner de la
Spur P	7.00		f 12.17	1002.4	SAHU	.0	39.4			Yard Limits 52 WP	10.20	1 16	s 4.15	1137.5	TO	SAFFORD	96.8	s11.40	2
pur P	_		I District	1010.4	OONTIN	ALES	37.7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		34 P	10.35		s 4.25	1140,6	Males Trans	THATOHER	93.7	s 11.28	1
P	7.40	4 65	12.41	1016.8		NOA	33.5	3.34	4.10			1/0	Pagu	1143,1	loa L.	CENTRAL 2.5	91.2	2 2 1 0 1	0.0 1
P	7.55		s12.51	1021.1	4	A DO	28.7	s 3.25	3.57	28 P	10.55		s 4.36	1145.6	TO	PIMA	88.7	s 11.18	1
P	8.05		12.59	1025.6	4	.5 VEZ	24.2	3.16	3.42	62 P	11.14		4.40	1146.7		DUBLIN	87.6	11.14	12
	3.05		f 12.59	1028.1	2		21.7			444			75	1148.9		GLENBAR	85.4	SAPAS	
P	8.30		f 1.14	1034.2		ERO	15.6		3.20	59 P	11.45AM		f 4.51	1153.0		CORK	81.3	f11.04	12
pur P	8.50		1.24	1040.1	5	.9	9.7	2.51	3.05					1154.8	7	ASHURST	79.5	10.01	. E.S.
ales Yard KWFTP	9.30AM	ALPE HE		1049.8	TO-R NOG		0.0	2.30PM	2.40PM	59 P	12.10PM	GEP14	8 5.04	1159.8	то	FT. THOMAS	75,0	s 10.53	12
KWFTP		-		awana i	- 1				Leave Tues.,	17 WP	12.25		f 5.13	1164.2		GERONIMO	70.1	f 10.43	11
	Arrive Tues., Friday		Arrive Daily Ex. Sunday		(6:	5.9)		Leave Daily Ex. Sunday	Friday	54 P	12.40	A.	f 5.24	1170.1	To Williams	BYLAS	64.2	f 10.31	11
774	(3.30)		(2.05) 31.44	lutic Mean	Time over	er Districteed per Hour		(2,05) 31,44	(3.00) 21.97	52 P	12.57		f 5.36	1176.8		CALVA	57.5	f 10.19	11
	18.83							31.44 × 10 a /-	21.91	53 P	1.15		5.48	1183.7		NACHES	50,6	10.07	11
			Rule	S-72 Exc	eption, No. 378 is	s superior to No.	379.			52 P	1.40		6.04	1191.0	S-67 - (589) C	DILI	43,8	9.51	.10
			Pass	enger trai	ns use shop yard	route, Tucson ya	ard.			P			f	1197.8 1197.2		PERIDOT	87.0		- 10
						R. Jct. route, Tuc		wall 1		52 WP	2.10	1000 100	s 6.25	1201.0	то	SAN CARLOS	83.2	s 9.30	10
					The Marie of the					20 Spur P		TIO	u-cryscal	1207.8	mani	REPPY 5.7	26.4	10 1000	ALVITA
										43 P	2.50		f 6.52	1213.5		OUTTER 5.8	20.7	f 9.06	9
										±2 20 P	3.10	16-1	7.08	1219,3		PINAL 2.2	14.9		9
										ВКЖОТР	3.20PM		s 7.15PM	1221.5	TO-R	GLOBE	12.7	8.45AM	9
					TOTAL STATE					13 P				1226,2		RADIUM	8,0		Table 18 (6) 1
										3 Spur				1227.8		BUROH	6.9		-
	of a supplement of				a maje otalisar					9 Spur		1 - 1 - 1		1280,2		CLAYPOOL	4.0		
					welst lan smill					WYI WYI			A Table	1281.9	TO-R	MIAMI	2,8	-	
	to the second	-			m train-eater					P 27		Tall	17.00	1233.0	IN	SPIRATION JOT.	1.2		
	-xon and sky tha				in-c"the price.					14	F Valk			1284,2		LIVE OAK	0.0	Hand D. John	
		and all all a			"contribute his for		an Insurince				Arrive Daily Ex. Monday		Arrive Daily	4	0.01	(136.4)		Leave Daily	Leave Ex. S
				- A - 1		rosi yeninen Chal incah, is surviged Cololidana Branc laga sepiharisan					(7,20) 16.87		(4.10) 29.69	A draild E opport	Aver	ime over District rage Speed per Hour		(4.15) 29.11	1
	witch and Ray	acitona			wand (see bollgat rogs of theorem		Hoeno()							STATES		3/ (G. 7,718			

Ä.

A SHARE OF STREET	the second second		EASTW	AKD						- 1		*	BOWIE SUBDIVISIO	N		WE	STWA	RD
	20 10 10 10	SE	COND CLA	SS	1 1 1			FIRST	CLASS			1 89			F	IRST CLA	58	SECOND CLA
Capacity of sidings	866	964	864	962	862	960	30	4	44	6	2	from	Time Table No. 113	fron	43	1	Harris Kalin	845
in car	Freight	Freight	Freight	Freight	Freight	Freight	Arizona Limited	Golden State Limited		Argonaut	Sunset	Distance San Fran	March 8, 1942	Distance Lordsbu	Californian	Sunset		Freight
lengths	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Limited  Leave Daily	Dist	STATIONS	Dist	Arrive Daily	Arrive Daily		Arrive Daily
BKW	5.45PM	4.05 PM	8.40AM	7.45	1.454	12.01 AM	8.338	11.50			7	and annual						Milito Daily
FTYP	3.131	4.031	- 0.40 km	1.434	1.45%	12.01 AIII	- 6.33(	11.50AN	11.15A	11.05 AM	1.204		TO-R TUCSON		Alaman Victoria			A STATE OF THE PARTY OF
4 Spur	5.58	4.20	8.53	8.00	1.58	12.15	8.41	11.59AN	*1311	-		984.7	T. & N. R. R. JOT.  3.0  POLVO					
Spur P	3.30	1.20	- 0.55	8.00	1.38	- 12.15	0.11	11.59AN	11.24	11.14	1.30	987.7	3.0		C	on Die Com	do Dininion	Time Table.
P	6.13	4.40	9.08	8.20	2.13	12.35	8.48	12 10 PM	11.34	11.05		990.7	WILMOT 3.1 RANKIN	Tao		ee Kio Gran	de Division	Time Table.
P	ta d' Boccolin I o	AND A SECOND	, , , , , , , , , , , , , , , , , , ,	0.20	2.10	12,00	0.10	12.101	11.34	11.25	1.41	993,8	ESMOND	z				
P	6.35	5.05	9.30	8.45	2.35	1.00	8.59	12.26	11.50 AM	[ [ ] ] [ ] [ ] [ ] [ ]	1.55	998.6	VAIL	N				
WP	6.57	5.40	.9.52	9.20	2.57	1.35	9.15	12.43	- April 100 march 100 marc	f 11.59 AM	1.57	1003.8	PANTANO	1				
4	7.30	6.20PM		10.01 AN		2.15 AM	9.33PM	The second secon	12.07	f 12.20PM	2.14	1012.6	TO-R MESCAL	104 5				
35 CIYP			10.35	10101				1.021	12.271			1023.6	4.6	124.7	f 4.30PM	2.30 AM	(Alleman)	2.20PM
8 Yd.Lmts.	7.40	S. Est. Octob	10.57		3.40		- Alary Marchalt	1 PE 10 14 1 2	Edd Mary	12.27	2.40	1028,2	OHAMISO 4.3	120.1	4.20	2.20	q a like at	2.05
KWOP	8.00			6	4.00			The state of		s 12.41	s 2.55	1032.5	TO BENSON	115.7	s 4.08	s 2.07	Carrent and	1.42
P	8.12		11.09		4.12					12.48	3.02	1035,8	FENNER	112.5	3.57	1.57	- W	1.33
P	8.23	dellikis firm	11.20	1	4.23		- A A A A A A A A A A A A A A A A A A A	[,D,]]	Dr. Carlot	12.55	3.08	1038,5	OURVO	109.8	3.51	1.51		1.26
WP	8.34		11.32		4.34				-	1.04	3.15	1041.0	SIBYL	107.3	f 3.45	1.45	THE STATE	1.18
P	8.43	and telephonesis	11.41		4.43		The second second	ROLATIVAL .		1.10	3.21	1043.9	TULLY	104.4	3.41	1.41		1.10
P	8.52	a Alberta	11.50		4.52			11.52.53		1.17	3.27	1047.8	OCHOA	101.0	3.35	1.35	All we swin	12.57
P	9.01		11.59AM	-	5.01			10 Mild 1 1 1		1.23	3.33	1050,8	LANCHA	97.5	3.29	1.29	sensolado d	12.48
YP	9.14		12.12PM	and the second	5.14		To the Land of			s 1.31	3.38	1053.9	TO DRAGOON	94.4	s 3.24	1.25		12.40
P	9.24	Her widewall	12.22	-	5.24					1.37	3.44	1058.3	MANZORO 56	90.0	3.15	1.17	AST THE PARTY	12.22
P	9.33		12.32		5.33					s 1.46	3.50	1063.9	TO COCHISE	84,4	f 3.06	1.09	ing Buell	12.09PM
P	9.42		12.41		5.42		7 17 18.0			1.53	3.56	1069.6	HADO	78.7	2.57	1.01	raD no sur	11.57AM
WP	9.51		12.50		5.51					s 2.04	4.02	1074.7	4.7.	73.6	s 2.50	12.55	MA MINTE	11.48
P	10.01		1.00	7	6.01					2.11	4.07	1079.4	DRURY	68.9	2.39	12.48	T. Job M.	11.39
P	10.13		1.12	No. 1	6.13				The State of the S	f 2.17	4.12	1082,6	RASO 5.1	65.7	f 2.35	12.44	to en	11.33
P	10.22		1.21		6.22				15	2.25	4.18	1087.7	ALRÎOH	60,6	2.25	12.35		11.18
P	10.28	2 16377	1.27		6.28					2.30	4.22	1091.0	LUZENA 3.5	57.8	2.15	12.28	winding V	11.08
P	10.34		1.33		6.34					2.35	4.26	1094.5	OHOLLA 3.9	58.8	2.08	12.23	aliant mark	11,01
d Limits CWFYP	10.55		1.53		6.55				district the same	s 2.53	s 4.37	1098,4	TO-R BOWIE	49.9	s 1.48	12.15	Sugar WA	10.51
P	11.04	1	2.01	W RDHIO	7.04		They dollar it			3.00	4.43	1102.6	HOLT	45.7	1.41	12.01 AM		10.37
P	11.11		2.08		7.11			Targie Itar	to the late of	f 3.05	4.47	1106,6	OLGA	41.7	f 1.36	11.56PM	Hea all	10.31
P	11.18		2.14	A CONTRACTOR	7.18					3.10	4.51	1110.2	KARRO	88.1	1.31	11.51	TO THE OWNER.	10.25
BKWFYP	11.25	they had to	2.20		7.25		charded, in the			s 3.17	4.55	1114.2	TO SAN SIMON	34.1		11.46		10.19
P	11.42	Villa Lin - Con	2.34		7.39			and a trul	rundi / Elso	3.22	4.59	1117.6	BAWTRY	80.7	1.20	11.42		10.13
P	11.54PM	and the terms	2.46	Thomas va	7.51					3.29	5.05	1121.8	VANAR.	26.5	-	11.37	Holl have	10.06
P	12.04AM	SIN THE SE	2.55	-	8.00		The to a fair of the	Tracy Land		3.36	5.11	1125,0	OAVOT	23,8		11.32	4 18 12	10.00
YP	12.25		3.15	Loi, Lui	8.20				Lege /	f 3.49	5.21	1128.9	TO STEINS	19.4	f 1.02	11.24	erioto er	9.50
P	12.32		3.22	. 4	8.27		AL TO SEE MISSELL	TAILS SHOW	A STREET, STRE	3.55	5.26	1182.7	MONDEL	15.6	12.55	11.17	-	9.36
P	12.39	led made in	3.29		8.34		den in the differ	ь язбраь		4.00		1136.5	CONRAD	11.8	12.50	11.12	The could	9.36
P	12.47	eri nyaéta j	3.37		8.42		Too It was the	A COLUMN TON		f 4.06	5.37	1140.8	GARY		f 12.44	11.06	100	9.29
P	12.54	and a sea to	3.44		8.49				and have	4.11	The second secon	1143.9	PYRA	4.4	12.39	11.02	10175-316-8	9.21
Limits VFTYP	1.05AM	with Blancil	3.55PM		9.00 AM	- 1	Water Constant		o making	s 4.18PM			TO-R LORDSBURG	0.0	12.32 PM	-	H. 121 11	9.15 9.05AM
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		(164.4)		Leave Daily	Leave Daily	ploitestelb	Leave Daily
*	(7.20) 22.42	(2.15) 17.65	(7.15) 22.68	(2.16) 17.51	(7.15) 22.68	(2.14) 17.77	(1.00) 39.70	(1.12) 33.08	(1.12) 33.08	(5.13) 31.51	tree de la constitución de la co				and the		A STATE OF THE STA	

RULES 86, 87 and 93. Second and inferior class trains, extra trains and engines must clear the time of No. 30 not less than ten minutes.

Inferior trains must be clear of main track and insulated joints at passing points for No. 30.

Westward trains will use track No. 1, Rio Grande Division, Mescal to Tucson, and eastward trains will use track No. 2, Tucson Division, Tucson to Mescal, unless otherwise directed by train order.

	ADDITIONAL F	LAG STOPS TO RECEIV	E OR DISCHARGE PASS	ENGERS
Train	At	Receive or Discharge	To (or beyond)	From (or beyond)
1 2 6 4	Any Station Willcox Sibyl Mescal	Discharge Discharge Rec. Dis. (Rev.) Receive Discharge	Any Station Any Station	East of El Paso Phoenix Line Stations Any Station Any Station



#### RULE 2. Watch Inspectors:

S. A. Pope, Manager of Time Service65 Market St., San Francisco
YumaWm. Baird
YumaJ. H. Huber
PhoenixH. H. Howard
WinkelmanJ. C. Williams, Sr.
TucsonGreenwald & Adams
TucsonH. L. Tucker
Nogales E. M. Mather
Lordsburg
GlobeJ. G. Cubitto
MiamiJ. G. Cubitto, Jr.

RULES 10 (G) and 10 (H). On tracks No. 1 and No. 2 between Tucson and Polvo, signals will be placed on left of track in direction of movement.

RULE 14. Other engine whistle signals:

For diverging route, 0 —— 0. For siding, -

RULE 14 (d). As specified below, \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_ 0 sounds of whistle will be indication that flagman may return from west as prescribed by Rule 99:

Phoenix Yard—Kendall, Trains on Second Main Track.

Normal Jct., Trains on Creamery Branch.

Picacho, Trains on Phoenix Line.

RULE 14 (e). As specified below, — — — — — — — — — sounds of whistle will be indication that flagman may return from east as prescribed by Rule 99:

Wellton, Trains on Phoenix Line. Litchfield, Trains on Litchfield Branch.

Kendall-Phoenix Yard, Trains on Second Main Track.

Tempe, Trains on Creamery Branch. Tempe Jct., Trains on Tempe Branch.

McQueen, Trains on Christmas Branch.

T. & N. R. R. Jct., Trains on Nogales Branch.

Mescal, Trains on Rio Grande Division.

Bowie, Trains on Globe Branch.

RULE 14 (k). Also sound signal when passing rear of train, to be acknowledged by trainmen by signal 12 (c).

RULE 14 (1). When sounding warning signal 14 (1) approaching grade crossings, Arizona State law requires that steam whistle be used if engine is so equipped.

RULE 17. Mars Signal Light on engines shall be used when engine is moving at night, and in foggy or stormy weather. It must be dimmed or extinguished approaching passenger stations, and at other points as prescribed by rules. For identification purposes must be dimmed.

RULE 17 (C). For identification purposes, headlights may be dimmed when passing the head end and rear end of trains on adjoining tracks, except when nearing street or highway crossings.

RULE 21 (C). At Phoenix, Gila and Tucson, incoming engines may display indicators until arrival at roundhouse.

RULE 28. In double track territory signals will be placed to right of track according to direction of movement of train to be flagged. Trains in opposite direction will not be required to observe signals so placed.

RULES 72 and 73. Second class and extra trains may move irrespective of time table superiority Phoenix to Phoenix Yard when moving with

RULE S-72. Westward trains are superior to trains of the same class in the opposite direction, except as shown on Pages 3 and 6.

RULE 83. Identification of trains may be made on double track between Yuma and East Yard; Dome and Wellton; Stockham and Tucson; Phoenix and Phoenix Yard; to be applied at end of double track; and on second main track between Phoenix Yard and Kendall, to be applied at Kendall. Trains approaching each other between these stations must reduce speed sufficiently to permit identification and Rule 14 (k) will

RULE 83 (A). At the following stations, only the trains indicated will register.

Phoenix-First class trains.

Mescal-All trains.

Bowie-All trains.

RULE 83 (B). At open train order offices trains may register by ticket as follows:

Phoenix Yard......First class trains Mescal......All trains Bowie All trains except on Globe Branch
Tucson—Engineers of light engines from east will leave register ticket with engine dispatcher for delivery to operator for registration.

RULE 83 (E). A train may check the register against an extra when authorized by train order in the following form: "...may check register at.....against Extra...... on order No....". A train so authorized to check the register must also register.

An extra when instructed by train order in the following form: "Extra ..... register at..... on order No. ...." will register, and place this order number and date in column captioned "Signals."

RULE 93. Second and third paragraphs of Rule 93 apply to all tracks within vard limits.

Yard limits in which the provisions of Rule 93 will apply are established at the following points:

	West	Last
Yuma	MP 731.50	MP 737.80
Phoenix	MP 900.96	MP 908.79
Mesa	MP 920.45	MP 923.23
Ray Jct	MP 986.84	MP 988.72
Hayden Jct	MP 998.80	MP 1004.90
Gila		MP 857.70
Casa Grande		MP 920.33
Tucson	MP 981.96	MP 989.00 (Track 2)
		MP 988.09 (Track 1)
		MP 987.42 (Nog. Br.)
		MP 990.37 (So. Line)
Nogales	MP 1046.37	MP 1049.89
Benson	MP 1031.60	MP 1034.01
Bowie	MP 1097.10	MP 1100.00
Bowie-Globe Branc	h	MP 1099.50
Lordsburg	MP 1147.19	MP 1151.38
Safford	MP 1136.65	MP 1138.34
Globe	MP 1218.70	MP 1223.22
Miami		MP 1234.20

Comply with third paragraph Rule 93 within portions of main track not protected by automatic block signals which are located and described as follows:

Phoenix—Union Station and main track, between "Block System Limit" sign opposite dwarf signal 9059 and "Block System Limit" sign at MP 906.2 on westward main track and dwarf signal 9064 on eastward

Tucson—Passenger tracks Nos. 1, 2 and 3. Eastward between "End of block" sign at MP 983.6 and dwarf light Signal 9838. Westward between "End of block" sign opposite dwarf light Signal 9838 and home

RULE 97. Extra trains must not run via Creamery Branch unless train order so specifies.

RULE D-97 (A). Will apply between Phoenix and Phoenix Yard.

RULE 98. At South Line Crossing.—Gate equipped with red signal, normal position across South Line track. Before changing position of gate and making movement on South Line track, protect in each direction on Nogales Branch as per Rule 99.

RULE 99. When roadway machines (ditchers, pile drivers, power shovels, crane and derrick cars) are operated on double track or on tracks immediately adjacent to the main track, or off track adjacent to main tracks, boom or other parts of the machine must not be operated to foul main track, without proper flag protection. Such equipment must be at rest and clear of main tracks when trains are passing.

Flag protection must be provided on adjacent main tracks which closely parallel track on which ballast or other material is being loaded or unloaded. Operations must be stopped when trains on main track are

In territory where head free rail is laid, unless torpedoes with spring clamps are used, duplicate torpedoes must be placed on the opposite rail so as to afford maximum protection.

Head free rail is rail on which the square corners on under side of head are beveled up to about 60 degrees slope to within approximately one-half inch of top of rail.

RULE 103 (A). A flagman must precede all movements over:

Yuma, 1st, 2nd, 3rd and 4th Sts.

Toyrea, Washington St.

Tempe (Creamery Branch), Mill Ave. and 8th St.

Tucson, West Congress St.

Nogales, Court and Park Sts.

Globe, Hackney St. and eastward over Murphy St.

Miami, Latham Blvd. and Adonis Ave.

In general, highway crossing signals are so designed that they will not operate for trains or engines making a reverse movement after having passed over the crossing. Trains or engines making such reverse movements must protect the crossing unless it is known that signals are oper-

RULE 103 (B). Back-up hose must be used when making back-up movements with cars, between Hayden Jct. and Hayden Mills, and between North and South yards and/or P. F. E. yard, Tucson.

## RULE 104. NORMAL POSITION OF SWITCHES AT THE END OF DOUBLE TRACK AND AT JUNCTIONS:

East Yard......Spring switch end double track, for trains entering the double track.

Dome.....Spring switch at end of double track, for trains entering double track.

Phoenix......Spring switch at west end freight lead and main track, for main track.

West end of double track, for westward main track. Phoenix Yard.... Spring switch at east end double track, for trains

entering the double track. Picacho......Operators will handle switches near train-order office for movements to and from Phoenix Line and both sidings.

Stockham.....Spring switch end double track, for trains entering the double track.

#### DERAILS IN MAIN TRACK:

Litchfield Park, 320 feet west of east end of track. Christmas, 250 feet east of west switch.

Nogales, 221 feet west of west switch, may be trailed through by eastward trains.

South Line Crossing, 165 feet east on South Line.

#### RULE 105. FOLLOWING TRACKS ARE DESIGNATED FOR USE AS SIDINGS:

Fowler..... Track north of main track. Mesa.....Track south of main track.
Ray Junction...Track south of main track.

First track north of main track, for eastward trains. Second track north of main track, for westward trains.

Track north of main track, for westward trains. Sentinel..... Track south of main track, for eastward trains. Picacho...... Track south of main track, for eastward trains from

Gila Line only. Track north of main track, for eastward and westward trains.

Red Rock ..... .Track north of main track, for eastward trains. Track south of main track, for westward trains.

Track north of main track, for westward trains. Track south of main track, for eastward trains. Track north of main track, for eastward trains.

Track south of main track, for westward trains. . Track north of main track, for westward trains. Dragoon..... Track south of main track, for eastward trains.

Track north of main track, from west switch to switch just east of station building, for eastward

Track north of main track, from east switch to switch just east of station building, for westward trains.

. First track north of main track, for westward trains. Second track north of main track, for eastward trains.

San Carlos . . . . . Track north of main track.

Abbreviations used for sidings: "E" for Eastward, "W" for Westward, "M" for Middle, "N" for North, "S" for South.

RULE 221. Trains must obtain clearance before leaving Tempe to or from Creamery Branch, and at Bowie and Miami.

Trains must obtain clearance at Phoenix Yard, except westward trains terminating at Phoenix.

Trains originating at Phoenix must obtain clearance before leaving Phoenix Yard.

#### RULE 824. INSTRUCTIONS FOR SETTING HAND BRAKES:

	DELLING LINE DIGITAL
YUMA Freight Trains	Four brakes on east end.
PHOENIX Freight Trains	. Two brakes on west end.
TUCSON Passenger Trains	
Freight Trains	(Two brakes on east end.). (Fifteen brakes on west end.). Ten brakes on east end.
TUCSON—P.F.E. YARD Each cut of cars	

S. P. tracks Nos. 1, 2, and 3..... Fifteen brakes on west end.
Hand brakes on passenger trains are to be set after engine is spotted

Hand brakes on passenger trains are to be set after engine is spotted for taking oil. If necessary to detach engine after these hand brakes have been released, employe before detaching engine must see that sufficient hand brakes have again been set.

Hand brakes on freight trains must be securely set after train or cut has stopped, unless yardmen immediately take charge and yard engine is coupled to cars. Any employe releasing any of these brakes must set as many others to replace them.

RULE 825. Outfit cars must not be left next to oil or gasoline loading or unloading locations; warehouses; lumber yards or other buildings.

RULE 834. Tank cars, or open-top cars loaded with rail, pipe, structural steel, lumber, poles or mounted wheels, when such lading projects above sides and end walls of car, must not be placed in train next to cab of cab-in-front type AC class engines.

RULE 836. Cars moved from one station to another ahead of engine on descending grade must be chained to the engine. Switching movement on descending grades must be protected by a derail. When practicable engine must be kept on descending grade end of cars.

When necessary to move cars ahead of engine 20 MPH must not be xceeded.

RULE 883. Engines under steam must not be stored or left unattended on tracks that are not protected by derails against entry to main track. When chains or blocking available wheels must be blocked.

#### AUTOMATIC BLOCK SYSTEM

RULE 509. When making a reverse movement on main track after moving out of siding or other track, in block system limits, train or engine will, unless movement be completed beyond the governing signal, proceed as if signal be in stop position.

The following block signals equipped with triangular number plate displaying the letter "P" have included in their control limits some special protective device. When these signals indicate "stop," in addition to complying with Rule 509, careful inspection must be made of the track or structure, as indicated below, and it must be known that they are safe for passage of trains before proceeding:

Signal	Prot	ects	Location
P-7372 S	Spring S	wite	hEnd of double track, East Yard
P-7375	- "	ш	
P-7532	"	"	End of double track, Dome
P-7535	"	"	a a a a a
P-9052	"	u	West end of freight lead, Phoenix
P-9075	"	"	East end of double track, Phoenix Yard
P-9810	"	"	End of double track, Stockham
P-9813	"	u	

At Yuma, operation through gantlet track over Colorado River Bridge will be governed by positive block Signals 7320 and 7322 west of bridge, and Signals 7321 and 7323 east of bridge. Speed of eight MPH must not be exceeded until engine has cleared gantlet track. Trains and engines will operate within the above limits, in accordance with positive block signal indications, which supersede the superiority of trains. Second-class and inferior trains and engines must not occupy positive block or overlaps in connection therewith when it is known a first-class train will thereby be delayed.

When signals indicate "stop" and no train or engine in block, send flagman ahead immediately and after flagman has traversed block to opposing signal, proceed with caution.

Signal 7320 governing eastward movement against the current of traffic on westward main track will indicate "proceed" only when train or engine is on approach circuit and push-button opposite signal is pressed.

Signal 7321 governing westward movement against the current of traffic on eastward main track will indicate "proceed" only when train or engine is within 275 feet of signal.

When a train or engine has received a proceed indication from either Signal 7323 or 7321 and is holding the indication by reason of standing within less than 275 feet of signal, the signal may be released and "proceed" indication secured on adjoining track by operating proper push-button located on signal case adjoining Signal 7323 after train it is desired to move has entered approach circuit. Operating push-button 7321-PB will place Signal 7321 at "stop" and clear Signal 7323. Operating push-button 7323-PB will place Signal 7323 at "stop" and clear Signal 7321.

Signal 7322 will not indicate "proceed" until after engine has passed overlap post located 1100 feet west of this signal.

Eastward trains waiting at Colorado for a westward train will remain west of overlap post.

Directions for use and operation of push-buttons located inside pushbutton box.

Westward trains moving against the current of traffic from crossover at east end of Yuma yard, Signal 7341 will display stop indication, and train will be required to stop before passing signal. If switches are properly lined and route clear, yardman will then signal engineman with green flag by day and green light by night, as authority to proceed against the current of traffic with caution, not exceeding 15 MPH.

If necessary to move a westward passenger train through the freight yard from the east end of yard to passenger station, yardman will verbally inform engineman of this fact and notify him as to track which is to be used. Trains under such conditions must move with caution not exceeding 10 MPH.

At Phoenix, Crossing - A.T. & S.F. Wye.
Signal 9052 governs eastward movements.
Signal 9053, on main track, and
Signal 9055, on freight lead, govern westward movements.

If either of these signals indicates "stop," train or engine, after stopping, and observing wye track to be clear of opposing movements, may proceed in accordance with Rule 509, and in addition must provide flag protection on the intersecting track unless derail thereon is in derailing position.

At Kendall, eastward trains on main track, stop west of Signal 9112 to wait for or meet opposing trains.

Eastward trains on second main track will be governed by position of Signals 9112 and 9113 before entering main track.

Account no overlap on light Signal 9838 located at end of block just east of Tucson yard office, and no overlap on light Signal 9841 located just west of car shop on Nogales Branch, trains and engines moving between these signals, and on passenger track No. 1 between west end of car shed and light Signal 9838, must do so with caution.

On track No. 2 between Tucson and Mescal:

Eastward trains will be governed by Rule 509 applicable to double track.

Westward trains Mescal to Esmond will be governed by Rule 509 applicable to single track.

Westward trains Esmond to Tucson will have no block signal protection after passing Signal 9978.

Between Tucson and Polvo, automatic signals are on the left of the track in the direction of movement.

### SPRING SWITCHES

Spring Switches are identified by target on switch stand bearing the letters "SS."

When a block signal in advance of a facing point spring switch indicates "stop," careful examination of switch must be made before passing over it. When making trailing point movement and train is stopped on switch, a reverse movement must not be made, nor the slack taken until the switch has been thrown by hand. When movement has been completed through switch, reverse movement must not be made until point closes.

Running switches are prohibited and sand, blow-off cocks and injectors must not be used or boosters started while engine is standing on or passing over such switches.

These switches located as follows and speed indicated must not be exceeded passing through turnout:

		Signal	MPH
East Yard	Trailing eastward Facing westward	7372 7375	25 60
Dome	Facing eastward Trailing westward	7532	25 30
Phoenix	Main track and west end Facing eastward Trailing westward		15 15
Phoenix Yard	East end double track: Trailing eastward Facing westward	9075	15 15
Stockham	Facing eastward Trailing westward	9810 9813	50 35

RULE 511. Within block signal limits after switches of a crossover are thrown wait three minutes before crossing over unless block signals protecting the movement can be seen to be in stop position not less than one-half mile distant.

RULE 516. Overlap posts located as follows:

	23rd Ave. Phoenix	viidale	or	Siding	Westward trains
	McQueen	u	4	u	Eastward trains
	Roskruge	u	"	u	Eastward trains
	A District Section Configuration St. As	u	"	4	Westward trains
	Cortaro	4	"	"	Eastward trains

#### INTERLOCKING

#### WELLTON

Limits extend from two-arm signals on Gila Line and on Phoenix Line 4,000 feet east of station building to light signal on westward track 400 feet west of station building and to two-arm signal on eastward track 1,000 feet west of station building.

The derail at east end of siding is electrically locked, and can be operated by trainmen only when released by signal operator.

Switches and derails to spurs leading from westward main track, just west and east of station building are hand-thrown, but must not be used until permission is secured from signal operator.

#### TUCSON, SIXTH AVENUE

Limits on westward track extend from dwarf signal at tower to Signal 9835, and on eastward track from dwarf signal opposite Signal 9835 to dwarf signal at tower.

Signals prescribed by Rule 628 may be given from tower.

One long sound of the engine whistle will be signal to Towerman for movement on westward main track with the current of traffic. Whistle signal to be used only when necessary.

#### MESCAL

Interlocking signals of the Rio Grande Division will display indication in the upper quadrant. Signal arm extended upward parallel to signal mast indicates "proceed."

Limits are between home signals governing east switch of east crossover and west switch of west crossover on Rio Grande Division, and home signals governing east and west switches of sidings on Tucson Division. Switches are controlled by signal operator, except switches leading from north siding to water and outfit spurs; from south siding to both legs of wye and to west end of coal track. Switch and derail east end coal track are hand-thrown but must not be used until permission is secured from signal operator.

Where hand signals, as prescribed by Rule 628, cannot be seen, trains stopped will call the signal operator and secure permission to proceed; also to throw switches by hand in event the remote control appliance is inoperative.

RULE 663 (b). When authority is received by telephone to proceed through the limits of an inoperative interlocking signal, member of the crew must make careful examination of facing point switches before passing over them.

#### TRAIN INSPECTION

Trains containing carload shipments of T. N. T. bombs, loaded projectiles and other such articles of a highly sensitive nature should be stopped for inspection at intervals of not to exceed 50 miles, provided any car in the train containing articles of this nature is loaded in excess of 65 per cent of its marked capacity.

Engines running light on descending grades must stop for inspection at freight train inspection points.

Freight trains must be inspected at each water stop. When conditions are favorable, and in the judgment of conductor and engineer it is safe to do so, and when additional stops can thereby be avoided, freight trains may run between water stops without stopping for inspection, provided the distance is not over 60 miles, except freight trains and light engines may run between Tucson and Maricopa, and between Aztec and Yuma, for inspection. This does not relieve trainmen, however, from making inspection when stops permit, or whenever it is necessary in the judgment of conductor or engineer. On branch lines distance of 40 miles must not be exceeded, and on descending grade must stop at Cutter on Globe Branch.

Mixed trains, including military trains, made up in part of freight cars equipped with cast iron wheels, shall be required to comply with rules and time-table instructions applying to freight trains as they relate to stopping for train inspection, likewise speed restrictions.

## METHOD OF DISPATCHING TRAINS BETWEEN TUCSON AND MESCAL

Dispatching of Mescal Subdivision of Rio Grande Division will be handled by Rio Grande Division, except that portion between Mescal and Tucson on Track No. 1 which will be handled by dispatching force of Tucson Division and which will be operated under double-track rules as westward track in conjunction with Track No. 2 of Bowie Subdivision of Tucson Division as Eastward Track.

Rule D-97 (A) will apply on Tracks No. 1 and No. 2 between Tucson and Mescal, except that extra trains must obtain clearance, or proper train-order signal, or permission from train dispatcher before using either track.

Trains from Bowie Subdivision moving to Mescal Subdivision, and trains on Mescal Subdivision moving through Mescal, with the same conductor and engineer operating through Mescal, may be issued train orders on one subdivision that affect their movements on either, or both subdivisions. Any such train orders issued by one division to a train on the other division must be transmitted to the other division addressed to Dispatcher before complete is given to the order addressed to the train; and such orders must be shown on clearance issued by the division on which train originates.

RULE 83 (B). When a regular train is checked on Bowie or Mescal Subdivision, it will not be necessary to check the register at Mescal against the same train.

RULE 83 (D). Westward trains may leave Mescal without clearance provided train is properly cleared by train-order signal.

RULE 206 (A). Regular trains and sections of schedules authorized on Bowie or Mescal Subdivisions are authorized to assume corresponding schedules or sections of schedules on Bowie or Mescal Subdivisions at Mescal without clearance.

#### AIR BRAKE RULES

RULE 24. Freight trains may pass

Mescal. Eastward

Estrella, Dragoon and Steins, Westward

· Pinal, Eastward and Westward

without stopping for purpose of rear end air test if proceed signal is given from rear by trainmen, after complying with Air Brake Rule 4, and air gage indicates required air brake pressure. Speed approaching summit must not exceed 15 MPH.

If proceed signal is not given or received, train must stop and rear end air test be made.

RULE 33. Retainers will be used on grades of 1.4% to 1.5% on freight trains of less than 110 M's per operative brake when necessary in the judgment of conductor and engineer.

On freight trains averaging 110 M's and over on grades of 1.4% to 1.5% and on all freight trains on grades of 1.5% and over, retainers will be used as follows:

Mescal to Benson	.1.4%	grade,	One	Retainer	for	each	150 M's	3
Steins to Mondel	.1.4%	"	"	"	"	"	150 M's	3
Steins to Bawtry	.1.4%	u	"	"	"	"	150 M's	3
Sibyl to Benson	.1.4%	"	"	"	"	u	150 M's	3
Pinal to Globe		"	"	- u	"	u	120 M's	3
Globe to Burch	.2%	"	"	u	"	u	120 M's	3
Live Oak to Miami	.3%	"	"	"	"	"	100 M's	3
Miami to Burch	.1.4%	"	u	u	u	u	150 M's	3
Pinal to Cutter	.2.2%	"	"	u'	"	u	120 M's	3

When retainers are used, stops will be made for inspection and to permit heat of wheels to equalize, as follows:

Eastward: Chamiso Westward: Fenner

Vanar

Communicating signal will not be used on train No. 370.

RULE 38. Gila—When engine crew and/or train crew is changed on passenger trains, but engine is not changed and no angle cock has been closed except for detaching cars on the rear, rear-end air brake test will be made as follows:

On a passenger train after the brake pipe has been charged to standard pressure, the engineer will apply the brakes with a 10-pound reduction, then signal the trainmen by one sound of the whistle. The angle cock on the rear of the train will then be opened gently, allowing only enough air to escape to cause brake pipe gage hand in cab to fall without making an emergency application, and then closed. When the engineer notes the hand falling he will answer with two sounds of the whistle. The trainman will immediately signal by four sounds of the communicating signal to release the brakes. Engineer will then release the brakes by placing the automatic brake valve handle in release until brake pipe is charged to not less than 5 pounds below standard pressure, slowly return it to running position, then wait until brake pipe pressure has settled and make one short release by moving the handle momentarily to release and back to running position.

This test to be followed by running test in accordance with Rule 39 as soon as speed permits after starting train.

RULE 39. Running air test not required of eastward passenger trains approaching Crossing A. T. & S. F. wye.

Incoming passenger enginemen will leave automatic air brakes set on trains at Tucson, Phoenix and Yuma after final stop has been made. Outgoing enginemen will release brakes on signal from carmen, this signal to be given only after all switching has been done.

#### MISCELLANEOUS

1. At Wellton, Aztec, Sentinel, Gila, Casa Grande, Florence, Hayden Jet., Benson, Bowie, and San Simon, water for engine purposes is treated and must not be taken for domestic use except as follows:

Aztec, water rack.

Sentinel, water rack and two columns at east end.

Hayden Jct., by closing valve between treater and water column.

Benson, either of the two columns at station, by first opening switch in box on outside of freight house.

Bowie, notify pumper.

When filling water cars for domestic purposes at Hayden Jct., Benson, or Bowie, after closing valve between treater and water column, fill engine tank to drain line of treated water before filling water cars.

At Aztec, westward freight trains take water when possible and take water at Sentinel only when it will avoid delay west of there.

At Sentinel, eastward freight trains take water and fill water car, and take water at Aztec only when necessary or when it will avoid delay at Sentinel.

At Saddle, emergency water station and should take only enough to reach next water station.

At Maricopa, eastward and westward freight trains take water, and if necessary, fill water car.

At Benson, when business is heavy, westward freight trains, including light engines, take water at columns at station, to avoid shortage in east tank.

At Sibyl, westward identified and other important freight trains may take water if it will avoid stopping at Benson. Other freight trains will not take water except in case of emergency, and then only sufficient to reach next water station.

In all cases where it is necessary to make a short move with heavy freight train to reach water or oil column, including that required to spot second engine of double-headed train, engine must be cut off before spotting at column.

4. One helper as restricted Par. 4(b) and 4(g) may be placed behind caboose if of steel underframe construction and cars ahead of caboose are not rear end cars; helper placed ahead of caboose must be ahead of rear end cars.

#### In helper service:

- (a) No helper engine will be placed behind wooden underframe cars or cabooses.
- (b) Engines weighing more than 235,000 pounds on the drivers will not be placed behind steel underframe cabooses.
- (c) In no case will more than one helper engine be placed behind steel underframe cabooses.
- (d) When helper engines are used in rear of freight trains, consolidation and lighter class must be placed behind heavier class.
- (e) Engines must not be cut off or coupled to a train while same is in motion.

For the purpose of pushing trains out of yards:

- (f) No engine will be placed behind wooden underframe caboose or other wooden frame equipment.
- (g) Engines weighing more than 235,000 pounds on the drivers will not be placed behind steel underframe cabooses.
- (h) Air will not be coupled through pusher engine.
- (i) Yard engines regularly so used will be equipped with Russell-Jordan device to hold the coupler pin from dropping, thus making it unnecessary for employees to uncouple the pusher engine when cutting off.
- (j) In no case shall the knuckle be removed, or closed, or uncoupling lever temporarily fastened in release position on a pusher engine, as means of preventing coupling being made.
- (k) Unless local conditions require, it will not be necessary to stop trains to detach pusher engines.
- 5. At Litchfield, gate at entrance Airplane Spur is locked with Government lock, and to gain entrance it will be necessary for engineer to sound a long and short blast of steam whistle and the watchman on duty will take care of the opening and closing of the gate.

At Litchfield Park, Boswell Spur is protected by gate, which must be kept closed and locked when not in use.

At Tovrea, entrance to Tovrea Packing Co. plant is protected by gates, which must be kept closed and locked when not in use. Look out for rubbish and material alongside tracks around plant.

At Tovrea chute across the ice track at packing plant, located one-half car length south of bumper.

This chute when in normal position, will extend across and about two feet above a car, but will not clear a man on top of car.

When in use will be in slanting position from the second floor of Tovrea plant to auto truck backed across ice track, and when so in use, cars cannot be shoved to bumper.

At Hayden, entrance to Kennecott Copper Corp'n plant is protected by gate, which must be closed and locked at night.

At Coolidge, cars must not be detached in motion to Indian Service spur. Gate at entrance must be kept closed and locked when not in use.

At Tucson, P. F. E. yard, look out for ice and rubbish alongside racks.

At Willcox, look out for bedding sand between tracks 2 and 3.

7. Capacity of sidings between clearance points is based on an average car length of 49 feet not including engines and caboose.

# 10. ENGINES HEAVIER THAN THOSE SHOWN MUST NOT OPERATE ON FOLLOWING LINES OR TRACKS.

Mk 7, 8 & 9 CLASS

Creamery Branch.

Tempe Branch sidings and spurs.

Christmas Branch.

Mk 2, 4, 5 & 6 CLASS

Tempe ...... Tempe Milling Co., Phoenix Mill and gravel pit spurs.

Tracks 2 and 3.

Mesa......McKellips, Standard Oil, and Texas Oil spurs.

Shell Oil and Independent Cotton & Oil Co. spurs. Mutual Cotton Oil spur.

Union Oil Co. spur. Mesa Milling Co. spur.

Nogales Branch.

Globe Branch.

C 8, 9, 10 & P CLASS

Ocapos......Spur. Estrella....Spur. Heaton....Spur.

Kendall......River track east of spur.

Creamery Branch....Siding.

Creamery......Track east of Creamery plant.

Mesa.....Drew's spur (Must back in).

Magma.....Spur.

Christmas Branch.... (Between Winkelman and Christmas.)

#### Engines must not use:

Spurs: Buckeye, Seaside Oil Co.; Florence; Burns; Wymola.

Between Price and Christmas look out for rock and land slides. Between Naches and Peridot look out for rock and land slides.

11. At Phoenix, No. 370 and freight trains will use freight lead between Signal P-9052 and west end of double track.

At Phoenix, Santa Fe and Southern Pacific trains may jointly use tracks at east and west end of Union Station. Yard and light engines must take every precaution possible to avoid delaying first-class trains on all tracks within Union Station zone. Trains will approach switch at entrance to Union Station tracks prepared to stop and will proceed only when track is known to be clear.

At Bowie, No. 5 track in west yard must be kept clear for through movement.

15. At Yuma, eastward freight trains must not pass Signal 7328 and westward trains, except first-class must not pass Signal 7341 without receiving proceed signal from yardman, using green flag by day and green light by night.

At Tucson, westward freight trains must not pass first crossover switch west of Signal 9851 without proceed signal from yardman.

Eastward freight trains, before entering train yard, after passing 6th Avenue interlocking plant, must receive proceed signal from yardman.

Yardman must use white flag by day and green light by night.

Westward trains must not pass east crossover switch at "End of Block" opposite light Signal 9838 on Passenger track No. 1, 405 feet west of west end of car shed, without proceed signal from yardman, unless this switch is lined for movement on Passenger track No. 1.

20. All cars handled in passenger trains must be equipped with steel-tired or all-steel wheels.

Wooden baggage, express and other head-end cars, unless equipped with steel center sills must not be used in passenger trains.

Head-end passenger cars so constructed or loaded as to prevent trainmen passing through must not be handled on rear of any passenger train. Freight cars must not be handled behind any car carrying passengers. The term "freight" does not include a baggage, express, or mail car, or a caboose.

When necessary to handle passenger equipment, except official cars in freight trains, it must be placed next to caboose, provided rear-end freight cars in train will permit.

25. Electric lanterns may be used for displaying white light only, except may be used by herders for displaying green lights.

#### SPEED RESTRICTIONS

Maximum speed of passenger trains must not exceed 50 MPH and freight and mixed trains 35 MPH except as otherwise provided for herein, or by bulletin, train order or "fixed signal."

	THE RESERVE OF THE PARTY OF THE	A Section	PASSEN	IGER		FREIGHT			LT. ENGINES RUNNING F'WD.			
Pages	TERRITORY	Maximum	Mk 5, 6, 7 8 ,9 M 4, 6, 9, 11	Mk 2, 4	SP 1, 2, 3 F 1, 3, 4, 5 C 8, 9, 10	Freight Maximum	Engines Backing	Switch Engines S-SE	T 37 Mt 1, 2, 3, 4, 5 P 1, 3, 5, 12	Mk 5, 6, 7 8, 9 M 4, 6, 9, 11 SP 1, 2, 3 F 1, 3, 4, 5 C 8, 9, 10	Mk.2,	
222222222222222222222222222222222222222	Through interlocking limits with caution. Through crossovers, turnouts except where otherwise specified Yuma Yard, west and east switches Yuma, east switch - End of double track, East Yard. East Yard, end of double track - M.P. 745. M.P. 745 - 748.58. M.P. 748.58 - 755.12 M.P. 755.12 - 762.88 M.P. 762.88 - Wellton, west interlocking limit. Wellton, west interlocking limit - M.P. 766 (Westward track). Wellton, east crossovers. Wellton, east interlocking limit - M.P. 776.36. M.P. 776.36 - 777.78 M.P. 777.78 - 845.94 M.P. 845.94 - 847.28 M.P. 847.28 - 887.42 M.P. 887.42 - 887.61 M.P. 887.61 - 890.53	15 15 60 65 60 30 50 60 50 25 35 60 50 60 50 60	15 15 50 50 50 50 50 50 50 50 50 50 50 50 50	15 15 40 40 40 30 40 40 25 35 40 40 40 40 40 40	15 15 45 45 45 45 45 45 45 45 45 45 45 45 45	15 15 40 40 40 30 35 40 35 40 35 40 35 40 35 40	15 15 30 30 30 30 30 30 30 30 30 30 30 30 30	15 20	. 15 15 45 45 45 30 45 45 20 35 45 45 45 45 45 45	15 15 35 35 35 30 35 35 20 35 35 35 35 35 35 35	15 15 30 30 30 30 30 30 30 30 30 30 30 30 30	
4	Litchfield Branch	20	20	20	20	20	15		20	20	20	
2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	M.P. 890.53 - 890.78. M.P. 890.78 - 893.54. M.P. 893.54 - 894.48. M.P. 894.48 - Phoenix, Signal 9048. Phoenix, Signal 9048 - M.P. 907.90. Phoenix Yard Limit - Kendall (second main track). Phoenix, M. P. 907.90 - 912.74. M.P. 912.74 - 913.12. M.P. 913.12 - 913.77. M.P. 913.77 - Tempe, west City Limit.	50 60 50 60 20 25 60 40 50 20	50 50 50 50 20 25 50 40 50 20	40 40 40 40 20 25 40 40 40 20	45 45 45 45 20 25 45 40 45 20	35 40 35 40 20 25 40 30 35 20	30 30 30 30 20 25 30 30 30 20	20	45 45 45 45 20 25 45 40 45 20	35 35 35 35 20 25 35 35 35 35 20	30 30 30 30 30 20 25 30 30 30 20	
5	Creamery Branch	20	20	20	20	20	20		20	20	20	
3	Tempe, east City Limit - M.P. 915.79	40	40	40	40	25	25		40	25	25	
L	Tempe Branch	20	20	20	20	20	20		20	20	20	
7	M.P. 915.79 - 920.86. M.P. 920.86 - Mesa, west switch. Mesa Yard, west switch - east City Limit (except curve M.P. 922) Mesa Curve M.P. 922. Mesa, east City Limit - M.P. 924.12. M.P. 924.12 - 927.69. M.P. 927.69 - Chandler, west City Limit. Chandler, east City Limit - M.P. 945.49. M.P. 945.49 - 946.78. M.P. 946.78 - Picacho, west wye switch. Picacho, west wye switch - Crossover. Picacho crossover - M.P. 938. M.P. 938 - 979.7 M.P. 979.7 - Signal 9828. Tucson Yard, Signal 9828 - M.P. 985	60 40 20 10 60 50 60 60 50 60 60 50 60 50 60 50 60 25 60 25 60 25 60 25 60 25 60 60 25 60 60 60 60 60 60 60 60 60 60 60 60 60	50 40 20 10 50 50 50 50 50 50 50 50 50 50 50 50 50	40 40 20 10 40 40 40 40 40 40 40 40 40 40 40 40 40	45 40 20 10 45 45 45 45 45 45 45 45 45 45 45 45 25 45 45	40 25 20 10 40 35 40 40 35 40 40 30 20 40 40 35	30 30 30 30 30 30 30 30 30 30 30	20	45 40 20 10 45 45 45 45 45 45 45 45 45 45 20 45 45	35 25 20 10 35 35 35 35 35 35 35 35 35 35 30 20 35 35	30 25 20 10 30 30 30 30 30 30 30 30 30 30 30 20	

#### SPEED RESTRICTIONS—(Continued)

Maximum speed of passenger trains must not exceed 50 MPH and freight and mixed trains 35 MPH except as otherwise provided for herein, or by bulletin, train order or "fixed signal".

		L. L. Land	PASSE	NGER	ant me we	FREIGHT	10005		LT. ENGIN	IES RUNNIN	G-F'WD.			PASS	ENGER	FREIGHT		RUNNING FORWA
Pages	TERRITORY	Maximum	Mk 5, 6, 7 8,9 M 4, 6, 9, 11	Mk 2, 4	SP 1, 2, 3 F 1, 3, 4, 5 C 8, 9, 10	Freight and Mixed Maximum	Engines Backing	Switch Engines S-SE	T 37 Mt 1, 2, 3, 4, 5 P 1, 3, 5, 12	Mk 5, 6, 7 8, 9 M 4, 6, 9, 11 SP 1, 2, 3 F 1, 3, 4, 5 C 8, 9, 10	Mk 2, 4	Page	TERRITORY	Maximum	Gas- Electric T-37 Mk 2, 4, 5, 6, 7, 8, 9 M 4, 6, 9, 11 C 8, 9, 10	Freight and Mixed Maximum	Engines Backing	T-37 Mk 5, 6, 7, 3, 9 M 4, 6, 9, 11 C 8, 9, 10
44444444444445555555555555555555555555	Wellton, east crossovers Wellton, east frogs Wellton, east interlocking limit - M.P. 772.06 M.P. 772.06 - 772.78 M.P. 772.78 - 792.50 M.P. 792.50 - 794.03 M.P. 795-800 M.P. 795-800 M.P. 800 - 813 M.P. 813 - 817 M.P. 817 - 823.61 M.P. 823.61 - 825.18 M.P. 825.18 - Gila, west switch Gila yard, west and east switches Gila, east switch - M.P. 866.98 M.P. 866.98 - 867.85 M.P. 867.85 - 870.12 M.P. 870.12 - 874.48 M.P. 874.48 - 886.36 M.P. 886.36 - 898 M.P. 898 - 902 M.P. 898 - 902 M.P. 902 - Casa Grande, west City Limit Casa Grande, east City Limit - Picacho	35 50 60 65 30 50 65 50 65 30 65 30 65 50 65 50	25 35 50 50 50 50 50 50 50 50 50 50 50 50 50	25 35 40 40 30 40 40 40 40 40 40 40 40 40 40 40 40 40	25 35 45 45 30 45 45 45 30 45 45 45 45 45 45 45 45 45 45 45 45 45	20 35 35 40 30 35 40 35 40 35 40 35 40 35 40 35 40 40 40 40 40 40 40 40 40 40 40 40 40	20 30 30 30 30 30 30 30 30 30 30 30 30 30		20 35 45 45 30 45 45 30 45 45 45 45 45 45 45 45 45 45 45 45 45	20 35 35 35 35 35 35 35 35 35 30 35 35 35 35 35 35 35 35 35 35 35 35 35	20 30 30 30 30 30 30 30 30 30 30 30 30 30	សសសសសសសសសសសសសសសសសសសសសសសសសសសសសសសសសសសសស	Christmas Branch, except M.P. 923.89 - 924.08. M.P. 924.08 - 955.93. M.P. 955.93 - 956.07. M.P. 955.93 - 956.07. M.P. 956.07 - 964.28. M.P. 964.28 - 964.54. M.P. 964.54 - 968.79. M.P. 968.79 - 972.07. M.P. 972.07 - 972.15. M.P. 972.15 - 974.12. M.P. 972.15 - 974.12. M.P. 974.12 - 974.20. M.P. 974.12 - 975.34. M.P. 975.34 - 975.48. M.P. 975.34 - 975.48. M.P. 976.21 - 976.36. M.P. 976.36 - 980.35. M.P. 980.37 - 981.03. M.P. 980.97 - 981.03. M.P. 981.03 - 981.70. M.P. 981.70 - 981.78. M.P. 981.70 - 981.78. M.P. 981.79 - 983.27 M.P. 983.27 - 987.43. Ray Jct. yard,	40 35 40 30 40 30 15 30 15 30 20 30 25 30 25	35 40 35 40 30 40 30 15 30 15 30 20 30 15 30 20 30 25 30 25	30 25 30 20 30 15 25 15 30 25 15 20 25 25 25 25 25 25 25 25 25 25 25 25 25	20 20 20 20 20 20 20 15 20 15 20 20 20 20 20 20 20 20 20 20 20 20 20	35 30 35 30 35 30 30 30 30 30 315 15 30 30 15 15 30 30 20 20 30 30 20 20 30 30 25 25 30 30 25 25
777777777777777777777777777777777777777	Tucson yard, Track No. 1, signals 9883 - 9851  Tucson, M.P. 985 - 991  M.P. 991 - 997  M.P. 997 - 1004.27  M.P. 1004.27 - 1010.36  M.P. 1010.36 - 1012.62  M.P. 1012.62 - 1014  M.P. 1014 - 1016.77  M.P. 1016.77 - 1018.08  M.P. 1018.08 - Mescal, west interlocking limit	50 65 50 30 50 30 50 30	50 50 50 30 50 30 50 30 40	40 40 40 30 40 30 40 30 40 30 40	45 45 45 30 45 30 45 30 45 40	20 35 40 35 25 35 25 35 25 35	20 30 30 30 30 25 30 25 30 25 30	20	20 45 45 45 25 45 25 45 25 45 25 46	20 35 35 35 25 35 25 35 25 35	20 30 30 30 25 30 25 30 25 30	55 55 56 66 66	M.P. 987.43 - 988.24 M.P. 988.24 - 999.53 Hayden Jct. yard, M.P. 999.53 - 1000.64 M.P. 1000.64 - Winkelman Winkelman - Christmas  Nogales Branch, except Tucson yd. M.P. 984 - 986.88 M.P. 986.88 - Nogales Nogales yard limits	15 30 15 30 15 35 20 35 20	15 30 15 30 15 20 35 20	15 25 15 25 15 25 20 20 25 20	15 20 15 20 15 	15 30 30 15 15 30 30 15 15 15 20 20 20 25 25 20
777777777777777777777777777777777777777	Mescal interlocking plant, through crossovers to R.G.Div.  Mescal, east interlocking limit - M.P. 1026  M.P. 1029 - 1030.86  M.P. 1030.86 - Benson, west switch  Benson yard, west and east switches  Benson, east switch - M.P. 1036.96  M.P. 1036.96 - 1040.78 *(See foot note)  M.P. 1040.78 - 1044.50  M.P. 1044.50 - 1045.14 *(See foot note)  M.P. 1045.14 - 1052.36  M.P. 1052.36 - 1058  M.P. 1058 - Willcox, west City Limit  Willcox, east City Limit - M.P. 1076  M.P. 1076 - 1080  M.P. 1080 - 1084.42  M.P. 1094.62 - Bowie, west switch  Bowie yard, west and east switches  Bowie, east switch - M.P. 1121  M.P. 1121 - 1122.51  M.P. 1122.60  M.P. 1124.44 - 1128.68  M.P. 1128.68 - Lordsburg	25 50 65 50 40 30 50 28 45 28 40 50 65 60 60 65 60 60 65 60 60 65 60 65 60 65 60 60 60 60 60 60 60 60 60 60 60 60 60	50 50 50 40 30 50 28 45 28 40 50 50 50 50 50 50 50 50 50 50	25 40 40 40 40 30 40 28 40 40 40 40 40 40 40 40 40 40 40 40 40	45 45 45 40 30 45 28 45 45 45 45 45 45 45 45 45 45 45 45 45	35 30 30 35 25 30 35 25 30 35 40 40 40 35 40 30 30 35 40 40 35 30 30 35 40 40 40 35 40 40 35 40 40 40 40 40 40 40 40 40 40 40 40 40	30 30 30 30 30 30 25 30 30 30 30 30 30 30 30 30 30 30 30 30		25 45 45 40 30 45 25 40 45 45 45 45 45 45 45 45 45 45 45 45 45	25 35 35 35 30 35 25 30 25 30 35 35 35 35 35 35 35 35 35 35 35 35 35	25 30 30 30 30 30 30 25 30 30 30 30 30 30 30 30 30 30 30 30 30	666666666666666666666666666666666666666	Globe Branch, except	40 3 3 3 3 40 3 3 40 3 3 3 40 3 3 40 3 3 40 3 5 6 6 20 15	7-6 C 8, 9, 9, 30 30 30 30 30 30 30 30 30 30 30 30 30	30 30 30 30 30 30 15 30 25 30 25 30 25 30 25 30 25 30 25 30 25 30 25 30 25 30 25 30 25 30 25 30 25 30 25 30 25 30 25 30 25 30 30 25 30 25 30 25 30 25 30 25 30 25 30 25 30 25 30 25 30 25 30 30 25 30 30 30 30 30 30 30 30 30 30 30 30 30	20 20 15 20 20 20 20 20 20 20 20 20 20 15 6 15	30 30 30 25 30 25 30 25 15 15 30 25 30 25

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25. Destric haderes engrels used for Coolegies by its Hightenity. except may be used by her ten in climbs may green the fitter of the con-

<sup>\*</sup>Passenger trains handled by MT 1-2-3-4-5 class engines maximum speed 30 M.P.H.

#### SPEED RESTRICTIONS (Continued)

Following engines are cross counter-balanced and are permitted a maximum speed of 75 MPH:

All GS-1, 2, 3. Mt-1, 2, 3, 4, 5. P-12.

P-7, 8, 10; 2461, 2462, 2463, 2464, 2465, 2467, 2469, 2471, 2472, 2473, 2474, 2475, 2476, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491.

Following engines are cross counter-balanced and are permitted a maximum speed of 55 MPH when handling passenger trains:

F-1, 3, 4, 5; 3619, 3625, 3634, 3636, 3652, 3656, 3658, 3665, 3666, 3676, 3677, 3681, 3682, 3685, 3687, 3692, 3706, 3709, 3711, 3716, 3717, 3727, 3728, 3732, 3737, 3742, 3752, 3765.

All AC-4, 5.

All AC-7, 8.

Maximum speed at which engines backing may be operated is 30 MPH, except must not exceed 15 MPH on curves and approaching grade crossings.

GS engines 1, 2, 3 and 4 Class must not exceed 45 MPH running forward light and 30 MPH running backward light.

## SPEED OF TRAINS REGULATED BY ORDINANCES THROUGH CITY LIMITS

PAGE	STATION	MPH
2 3 3	Yuma over street crossings	5
3	Tempe. Chandler.	20 20 25
5	Casa Granda	20
6	Casa Grande Nogales.	25
6	Safford.	15
6	Pima	15
7	Willcox	30

Speed restrictions for engines are shown in speed restriction table; however, attention is called to the following maximum speeds at which tenders may be operated.

Tenders having water capacity 7,000 gallons or less, except Classes 70-R-1 and 70-SC-1, maximum speed 50 MPH.

Tenders having water capacity in excess of 7,000 gallons, and including Classes 70-R-1 and 70-SC-1, maximum speed of engines.

Maximum speed of disabled engines hauled in train, or running under own steam, must not exceed.

" = Steam, mast not exceed.	
When pilot removed	.20 MPH
When main rod only removed	.30 MPH
When side rods only removed	.30 MPH
When both main and side rods removed	.20 MPH
When hauled in train and all rods are on	.30 MPH
SP1, 2 and 3 when inside main rod removed or inoperative	.30 MPH
S and SE engines, and all other classes of engines when not	
equipped with engine twicks	OO MIDII

When all weight has been removed from any one pair of drivers on an engine, speed must not exceed 20 MPH.

When all weight has been removed from one wheel of any pair drivers on an engine, speed must not exceed 30 MPH.

Engines operated coupled tender to tender must not exceed speed permitted same engines running backwards.

When an engine has broken main axle and is in condition to be moved, engine should be detached from train and run light to next siding, not exceeding eight miles per hour.

If unable to place engine on siding, then it should be left between switches of siding on main track and proper protection be provided.

Trains with passenger equipment handling steel-wheel box cars, commonly known as PMT cars or foreign line steel-wheel box cars equipped for movement in passenger trains or trains consisting wholly of steel-wheel box cars, except those equipped with high speed trucks, must not exceed 60 MPH.

Kennecott Copper Corp'n R. R. between Hayden Jct. and Hayden Mills is operated by the Tucson Division.

Speed of trains must not exceed 15 MPH.

Grade Hayden Mills to Hayden Jct. 2.2%.

\* Impaired overhead and side clearance at Hayden Mills Smelter.

(Unless otherwise further restricted by time table, slow board, or train order)

PAGE	TYPE OF ENGINE—TERRITORY—STRUCTURE—LADING, ETC.	M.P.H.
2-3-4 5-7 4-5-6 All	Trains handling wooden pile-drivers; locomotive cranes with boom disconnected and heavy end forward; steam shovels and ditchers, transported on their own wheels; On tangent main tracks.  except SPMW 4044. On tangent branch tracks. On all curves. 5 MPH less than speed authorized.  Where slew boards in place 5 MPH less than shown on slow boards, except	35 25 25
	when speed indicated is 15 MPH or less be governed by slow boards. Trains handling locomotive cranes with boom disconnected and light end forward (must not be handled in this man- ner except in emergency):	
2-3-4-5-7 All	On tangent main tracks. On curves and on branch tracks. Trains handling locomotive cranes with boom in place, either end forward (to be handled in work trains when practicable):	20 15
2-3-4-5-7 All All	On tangent main tracks. On curves and on branch tracks. Trains handling steel pile-drivers may make maximum freight train speed. Trains handling relief outfit with steam derrick:	25 15
2-3-4-5-7 4-5-6 All	On tangent main tracks. On tangent branch tracks. On all curves 5 MBH less then speed authorized. Where low boards in place 5 MPH less than shown on slow boards, except where speed indicated is 15 MPH or less be governed by slow boards.	35 25

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE Employes are warned that it is dangerous to ride on top or sides of cars while passing these points and that they must protect themselves from injury. Bulletins may be issued from time to time referring to impaired clearances not listed below.

778.0 891.0 907.0 911.8 913.4 914.0 914.4 921.8	Yuma, ice platform
778.0 891.0 907.0 911.8 913.4 914.0 914.4 921.8	Gila River bridge. Side Agua Fria River bridge. Side Phoenix, ice platform. Side Tovrea, meat chute. Overhead Tempe, Water User's spur. Overhead and Side Salt River bridge Tempe, Tempe Milling Co. spur Mesa, Texas Oil Co., Drew's spur and ice platform. Side
911.8 913.4 914.0 914.4 921.8	Phoenix, ice piatform
911.8 913.4 914.0 914.4 921.8	Phoenix, ice piatform
911.8 913.4 914.0 914.4 921.8	Tovrea, meat chute. Overhead and Side Tempe, Water User's spur Overhead and Side Salt River bridge Side Tempe, Tempe Milling Co. spur Side Mesa, Texas Oil Co. Drew's spur and ice platform. Side
914.0 914.4 921.8	Salt River bridge. Side Tempe, Tempe Milling Co. spur. Side Mesa. Texas Oil Co. Drew's spur and ice platform. Side
914.0 914.4 921.8	Salt River bridge. Side Tempe, Tempe Milling Co. spur. Side Mesa. Texas Oil Co. Drew's spur and ice platform. Side
914.4 921.8	Tempe, Tempe Milling Co. spur
921.8 959.3	Mesa, Texas Oil Co., Drew's spur and ice platform Side Gila River bridge
959.3	Gila River bridge
079 4	Tunnel No. 1 (Christmas Branch) Overhead and Side
014. 4	Tumor 1.0. 1 (Om isomas Dianon)
972.5	Gila River bridge (Christmas Branch)
975.4	Rock cut (Christmas Branch)Side
985.3	Glia River bridge (Christmas Branch)Side
987.8	Ray Junction, water tank spoutOverhead and Side
988.5	Tunnel No. 2 (Christmas Branch)Overhead and Side
990.0	Tunnel No. 3 (Christmas Branch)Overhead and Side
1003.5	Winkelman, ore binsSide
1007.0	Finney, ore chuteSide
1009.2	Tunnel No. 4 (Christmas Branch)Overhead and Side
984.2	Tucson, ice platformSide Tubac, water tank spoutOverhead and Side
1029.6	Tubac, water tank spoutOverhead and Side
1049.8	Nogales, ice platformSide
1008.1	Cienega Creek bridgeSide
1033.6	San Pedro River bridgeSide
1114.2	San Simon, water tank spoutOverhead and Side San Carlos, water tank and spoutOverhead and Side

#### SPEED TABLE

SPEED	1 MILE	SPEED	1 MILE	SPEED	1 MILE	SPEED	1 MILE
PER	IN	PER	IN	PER	IN	PER	IN
HOUR	MIN, SEC,	HOUR	MIN. SEC.	HOUR	MIN. SEC.	HOUR	MIN. SEC.
6 8 10 12 15 16 17 18 19 20 21 22 23 24	10.00 7.30 6.00 5.00 4.00 3.45 3.31 3.20 3.09 3.09 2.51 2.43 2.36	25 26 27 28 29 30 31 32 33 34 35 36 37	2.24 2.18. 2.13 2.08 2.04 2.00 1.56 1.52 1.49 1.45 1.42 1.40 1.37	39 40 41 42 43 44 45 46 47 48 49 50 51 52	1.33 1.30 1.27 1.25 1.23 1.21 1.20 1.18 1.16 1.15 1.12 1.10	53 54 55 56 57 58 59 60 61 62 63 64 65	1.08 1.06 1.05 1.04 1.03 1.02 1.01 1.00 .59 .58 .57 .56

#### SURGEONS

LOCATION	NAME	TITLE
San Francisco	Dr. C. A. Walker	Chief Surgeon and Manager
Yuma	Dr. C. S. Powell	District Examiner and Surgeon
Yuma	Dr. C. W. Cain	Asst. District Surgeon
Litchfield	Dr. R. L. Penn	District Surgeon
Buckeye	Dr. G. C. Rubel	District Surgeon
Buckeye	Dr. V. Jeffery	Asst. District Surgeon
Phoenix	Dr. H. D. Ketcherside	District Examiner and Surgeon
Phoenix	Dr. J. E. Drane	Asst. District Surgeon
Phoenix	Dr. A. M. Tuthill	
Phoenix		Asst. District Surgeon
Phoenix	Dr. N. A. Ross	Asst. District Surgeon
Phoenix	Dr. D. F. Harbridge	Oculist
Phoenix	Dr. W. A. Schwartz	Aurist
Phoenix	Dr. R. F. Palmer	Consulting Physician and Surgeon
Tempe	Dr. R. J. Stroud	District Surgeon
Mesa	Dr. W. S. Sharp	District Surgeon
Chandler	Dr. J. M. Meason	District Surgeon
Coolidge	Dr. H. E. Pinkerton	Emergency Surgeon
Coolidge	Dr. G. S. Walker	Emergency Surgeon
Gilbert	Dr. L. M. Thompkins	Emergency Surgeon
Florence	Dr. G. E. Huffman	District Surgeon
Ray	Dr. O. E. Utzinger	District Surgeon
Hayden	Dr. C. B. Huestis	District Surgeon
Gila	Dr. J. A. Love	District Examiner and Surgeon
Casa Grande	Dr K E Redden	District Surgeon
Tucson	Dr. A. Thomas Dr. Sanger Dr. G. Presson	Assistant to Chief Surgeon and Exam
Tucson	Dr. Sanger	District Surgeon
Tucson	Dr C Proggan	Acting Division Surgeon
Tucson	Dr. R. A. Wilson.	Acting Division Surgeon
Tucson	Dr. E. H. Brown	Aurist and Oculist
Tueson	Dr. T. H. Cates.	Consulting Aurist and Oculist
Tucson	Dr. I. H. Cates	
Nogales	Dr. J. S. Gonzales Dr. C. S. Smith	District Examiner and Surgeon
Nogales	Dr. C. S. Smith	Oculist and Aurist
Nogales	Dr. Z. B. Noon	District Surgeon
Benson	Dr. A. N. Shoun	District Examiner and Surgeon
Willcox	Dr. J. C. Wilson	District Surgeon
Willcox	Dr. B. E. Briscoe	District Surgeon
Bowie	Dr. F. W. Parrish	District Examiner and Surgeon
Lordsburg	Dr. C. B. Austin	District Surgeon
Safford	Dr. J. N. Stratton	District Surgeon
Safford	Dr. F. W. Butler	Asst. District Surgeon
San Carlos	Dr. R. D. Cunningham	District Surgeon
Globe	Dr. C. Gunter	District Examiner and Surgeon
Globe	Dr. M. Gunter	Asst. District Surgeon
Globe	Dr. W. A. Holt	Consulting Surgeon
Miami	Dr. C. M. Cron	District Surgeon
Miami	Dr. W. B. Watts, Jr	Asst. District Surgeon
	D. 11 alvos, 01	Trough Day Dar Boom

#### HOSPITALS

General Hospital	San Francisco, Calif.
St. Joseph's Hospital	Phoenix, Ariz.
St. Mary's Hospital	Tucson, Ariz.

### AVERAGE TARE WEIGHTS OF PASSENGER TRAIN CARS

description of the second	CONDI	AIR- TIONED	CONDITIO NED				
CLASS	All-Steel	Steel Under- frame	All-Steel Cooling Season	All-Steel Heating Season			
Baggage—60 ft	93,070						
-68 ft. -70 ft. -70 ft. (With Auto. End Door) -(Dynamo).	127,610 122,620 125,800 98,730						
" -70 ft (With Auto End Door)	122,020		dee				
" —(Dynamo)	98,730						
		87,120					
Baggage & Mail—60 ft. " " " —69 ft. " " " —70 ft.	103,620 124,760 129,140						
" " —70 ft.	129,140						
		103,590.	D. A.				
" " Passenger  Express Refr.—N. P. Ry " — A. R. E. No. 40-154 " — " 155-224 " — " 500-506 " — " 1101-1175 " — " 500-799  Express, Horse.	108,675	103,590 112,640 74,000 78,000 89,000 110,000 85,000 83,000	·				
Express Refr.—N. P. Ry		74,000					
" " - " 155- 224		89,000					
" " — " 500- 506		110,000	N				
" - " 1101-1175		85,000					
-P. F. E. 500- 799	133,050	83,000	1				
Postal	112,120						
Postal Storage—40 ft	112,120 74,530 105,120						
" —60 ft	105,120						
Assembly(ACW)	148 910	122 200	168,950 173,200	168,950 164,700			
Official (NAC)	146,210 170,700	122,300 155,370	THE STATE OF THE S				
"(ACW) Cars 107-128			182,800	182,800			
(ACW) " 140-141			195,040	195,040			
Chair—60 ft(ACI)	100,620		138,000	132,000			
" —72 ft(ACW)			158 700	158 700			
" -Streamline-Single (ACS)			120,900	104,500			
" — " — Art(ACS)			205,400	172,600			
-74 ft(ACI)	***********		180,915	182,800 195,040 132,000 157,800 158,700 104,500 172,600 173,102			
Coaches—60 ft. (ACI)	98,130		136 100	130 100			
4 —70 ft(ACI)	137,640 137,640		182,800 195,040 138,000 165,000 158,700 120,900 205,400 180,915 197,944 136,100 157,800	181,600 130,100 151,000			
" —70 ft(ACW)	137,640		151,000	151 000			
- 72 it(ACI)				157,400 153,500 163,000 161,200			
-73 ft. 6 in. (ACW)			153,500 163,000 168,500	163,000			
" —73 ft. 6 in(ACI)			168,500	161,200			
# -72 ft. (Interurban)	120,000						
All-Day Lunch—Chair	120,000 105,970 103,875						
Cafe-Coach(ACI)	103,070	138,600	155,700	149,000			
Cafe-Lounge(ACI)	148,950	138,600 161,200	173,500	166,000			
n. (ACW)			156 000	166,000 156,000			
Diner —70 it	155 990	135,930 146,930					
" -77 ft. (Arch Roof). (ACI)	155,330 156,000	110,000	170,100	162,70			
" -77 ft. ( " " )(ACW)			162,950	162,95			
-77 ft. (Clere Story Roof)(ACW)		165,530	170,100 162,950 169,450 189,581	162,95 169,45 173,83			
* -79 ft. (NAC)	169,100		189,581				
Express, Horse.  Postal.  Postal Storage—40 ft.  ———————————————————————————————————	100,100		201,323	184,700 181,630 160,300 157,780 161,900 186,160			
Lounge( " " " )(ACI)			189,800 167,500 164,980	181,630			
"(Arch Roof)(ACI)			167,500	160,300			
hearystion—75 ft (ACT)	154,400		164,980	161,78			
77 ft (ACI)	101,100		169,185 194,543	186.16			
4		141,870					
rullman-Observation (ACI)	160,800	141,870 153,000 153,000	177,314	169,200			
" Tourge (ACM)	160,800	103,000	177,314 192,300 194,900 187,682 183,920	176,300 178,900 179,600 176,000			
" (ACI)	171,200		187.682	179,600			
-Bedroom(ACI)	167,600		183,920	176,00			
- (ACM)	171,200 171,200 167,600 167,600			179,80			
-Sieeper(ACM)	163,100 163,100 153,000 153,000		191,100 180,075 185,200 168,663	175,10			
" —Tourist(ACM)	153,000		185,200	171,50 169,20 161,40			
- "(ACI)	153,000		168,663	161,40			
Arizona Limited—(7 cars)(ACM)			1,020,800	980,80			
-77 it (ACI)  Pullman-Observation (ACI)  Lounge (ACM)  ACI)  Bedroom (ACI)  - Bedroom (ACI)  - Sleeper (ACM)  ACM  - Tourist (ACM)  Arizona Limited—(7 cars) (ACM)  Rail, Gas-Electric—400 H.P.	158,400 167,200						
UUU ALA	1 101.400	1	11	1			

#Steel underframe.

CODE

NAC-Non-Air Conditioned.

ACI -Air-Conditioned-Ice.

ACM-Air-Conditioned-Mechanical.

ACW-Air-Conditioned-Waukesha.

ACS -Air-Conditioned-Steam Ejector

# RATING OF ENGINES—TUCSON DIVISION

IN M'S OF 1,000 LBS. BACK OF TENDER

Nominal Class	OFFICIAL CLASS	ENGINE NUMBERS	Boller Pressure	Yuma to East Yard Pembroke to Mohawk Lava to Sentinel	East Yard to Pembroke Mohawk to Lava Sentinel to Gila Maricopa to Tueson Wellton to Saddle 2 M. W. of Gillespie to Picacho	Glia to Estrella Saddle to 2 M. W. of Gillespie	Estrella to Maricopa Tucson to Maricopa Estrella to Kim Mohawk to Blaisdell Fortuna to Yuma Picacho to 2 M. E. of Crag 2 M. W. of Gilleprie to Wellton	Maricopa to Estrella Blaisdell to Fortuna 2 M. E. of Crag to 2 M. W. of Gillesple	Kim to Mohawk	McQueen to Christmas	Christmas to McQueen	Tucson to Nogales	Nogales to Tucson
M-4 M-6, 8 M-9 M-11	M-63 20/28 126, 135-S M-63 21/28 150-S, 159-SF M-63 21/28 150-S, 162-SF M-63 22/28 153-S, 162-SF	1617 to 1713 1721 to 1803, 1823 to 1825 1804 to 1822, 1826 to 1830, 1836 1832 to 1835	190 200 210 200	2550 3050 3250 3350	2900 3600 3800 3950	1900 2250 2400 2500	4300 5000 5300 5500	2900 3600 3800 3950	2100 2500 2650 2750	3150 4100 4250	3750 4900 5100	i di denin	
T-37 P-1, 3, 5	T-70-24/26 146-S P-77 22/28 141-S	2105, 106	175 210	3100 2800	3700 3300	2300 2000	5200 4650	3700 3300	2550 2250	3700	4400	2350	3250
C-8, 9, 10		2513 to 2599, 2698 to 2860	210	3900	4600	2900	6,00	4600	3250	4700	5600	3000	4100
Mk-5, 6	P-73 26/28 189-SF	3120 to 3129	$ \begin{array}{c c} 205 \\ \hline 210 \\ 210 \\ 476 \\ 205 \end{array} $	4500 5000 5500	5200 5750 6350	3300 3600 4000	7300 8100 8900	5200 5750 6350	3600 4000 4500	5650 6100	6750 7300		
F-1 F-3 F-4, 5 F-4, 5	F-63 27½/32 273-S, 282-SF F-63 29½/32 297-S, 300-SF F-63 29½/32 306/B-61-SF\ F-63 29½/32 306/B-62-SF\	3600 to 3652 3653 to 3667 3668 to 3769	200 200 200	5700 6500 6700	6700 7600 8000	4200 4800 5000	9300 10800 11500	6700 7600 8000	4700 5400 5600	Tablesia w di cilio potamo	niekowi k niekowi k Nigolika nieko Zas	Taranta paliparan paliparan paliparan	
AC-7, 8 Mt-1,3,4,5 Mt-2	AC-63 <sup>24-24</sup> / <sub>82</sub> 515-SF, 532-SF Mt-73 28/30 246/B-60-SF Mt-73 29/30 262-SF	4151 to 4204 4300 to 4376	250 210 210	10500 5400 5600	12000 6400 6600	8000 3850 4000	9000 9300	12000 6400 6600	8800 4350 4500	Address of the state of the sta	Translation		
GS-4	GS-80 25½/32 267/B-118-SF	4430 to 4449	300	6000	7000	4300	9760	7000	4800	Buchard Box		The same	
SP-1 SP-2, 3	SP-63 28-53 316/B-60-SF SP-63 28-53 317/B-61-SF	5000 to 5048	225	7600	8800	5600	12500	8800	6800		Libra A	in dat N	
Allowance cars	e for empty and underloaded	Less than 45 Ms	7 0 1	6 3 0	6 3 0	6 3 0	6 3 0	6 3 0	6 3 0	6 3 0	6 3 0	6 3 0	6 3 0

Main Lines		
	7 700	grantucki zemy
Tucson to South Yard Junction E. P. & S. W. R. R	12.60 7.69	WINTER TO S
Wellton to Picacho, via Phoenix	09.01	-bay -bay
Total Main Lines		629.30
Branches		ACTOR STATES AND ALL
Benson-Fairbank. S. P. R. R. At Benson	. 64	Manual Control
S. P. Co.   McQueen to Winkelman.   74.40	86.98	THE RESIDENCE IN
Creamery          {A. E. R. R. At Tempe	2.19	
Litchfield A. E. R. R. Litchfield to Litchfield Park.  Nogales. S. P. R. R. Tucson to Nogales.  Tempe. A. E. R. L. Tempe Jet. to West Chandler.	4.92 65.79 8.73 15.00	Bespennen and H. Gottvern H.
Total Branches	1 1	320.39
Total	1	949.69

# RATING OF ENGINES—TUCSON DIVISION—Continued IN Ms OF 1,000 LBS. BACK OF TENDER

THE REPORT OF A STATE OF THE PARTY OF THE PA				EASTWARD				WESTWARD					EASTWARD					WESTWARD					
Nominal Class	OFFICIAL CLASS	engine numbers	Boiler Pressure	Tucson- Mescal	Benson- Dragoon San Simon Steins	Mescal- Benson Dragoon- Willcox Raso- San Simon Steins- Conrad Pyra- Lords- burg	Willcox- Raso Conrad- Pyra	Lords- burg- Pyra	Pyra- Mondel Steins- San Simor Raso- 2 M. E. Cochise Dragoon- Benson Mescal- Tucson	San Simon Bowie	Bowie- Raso 2 M. E. Cochise- Dragoon	Mondel- Steins Benson- Mescal	Bowle- San Carlos	San Carlos Cutter	Cutter- Pinal	Pinal- Globe	Globe- Miami	Miami- Globe	Globe- Pinal	Pinal- San Carlos	San Carlos Tanque	Tanque- Bowie	
M-6 M-6 T-37 C-8 C-9, 10 C-9, 10	M-63 21/28 150-S	\[ \begin{pmatrix} 1725 \to 1769 \\ 1780 \to 1503 \\ 1823 \to 1825 \\ 2105, 2106 \\ 2513 \to 2599 \\ 2698 \to 2860 \end{pmatrix} \]	200 175 210	1950 2000 2500	1500 1550 1950	6000 6000 8000	2900 3000 3750	3250 3350 4150	6000 6000 8000	3650 3750 4650	2250 2300 2900	1500 1550 1950	3700 4900	2250 3000	950 1310	6000 8000	500	1050 1400	950 1310	6000 8000	3150 4170	2400 3220	
TW- 3 P-12	TW-50 20/26 120 P-73 26/28 189-SF	2932 to 2945	170 205	1600 2600	1250 2000	6000 8000	2400 3900	265 4350	6000 8000	2950 4900	1850 3000	1250 2000	3200 4850	1950 2980	850 1300	7000 8000	1980	900 1390	850 1300	7000 8000	2700 4100	2100 3200	
Mk-2, 4 Mk-2, 4 Mk-5, 6 Mk-5, 6 Mk-7, 8, 9 Mk-7, 8, 9		3200 to 32 \\ 3241 to 32 \\\ 3300 to 3324.	210 210 { 176 205	2800 3150 3500	2200 2450 2750	8000 8000 8000	4250 4700 5200	4750 5250 5800	8000 8000 8000	5300 5850 6500	3250 3650 4000	2200 2450 2750	** Di			7	<b>1</b>				ACCUPATION OF THE PARTY OF THE		
F-1 F-3 F-4, 5 F-5	F-63 271/32 273-S F-63 29½/32 297-S, 300-SF F-63 29½/32 306/B-61SF F-63 29½/32 306/B-62-SF	3600 to 3652	200 200 200	3700 4200 4750	2900 3300 · 3750	10000 10000 10000	5500 6300 7100	6100 7000 7850	10000 10000 10000	6850 7800 8800	4250 4850 5450	2900 3300 3750					4						
AC-7, 8	AC-63 24-24 515-SF, 532-SF Mt-73 28/30 246/B-60-SF Mt-73 29/30 262-SF	4151 to 4204	250 210 210	7400 3800 3550	5500 2950 2800	14000 10000 10000	10400 5650 5350	630 5950	14000 10000 7 10000	7050 6700	8000 4350 4100	2950 2800											
Mt-2 GS-4	GS-80 25½/32 267/B-118-SF	4430 to 4449.	300	3900	3000	10000	6000	6700	10000	7500	4550	3000					4	3.44			100		
SP-1 SP-2, 3	$\begin{array}{c} \text{SP-63} \ \ \frac{28-32}{28-32} \ \ 316/\text{B-60-SF} \dots \\ \text{SP-63} \ \ \frac{28-32}{28-32} \ \ 317/\text{B-61-SF} \dots \end{array} \right\}$	5000 to 5048	225	5350	4350	10000	8000	8850	10000	10000	6150	4350		List.								-	
	Allowance for empty and underloaded cars	Less than 45 M's		6 3 0	6 3 0	6 3 0	6 3 0	6 3 0	6 3 0	8 3 0	8 3 0	8 3 0	6 3 0	6 3 0	6 3 0	6 3 0	8 3 0	8 3 0	8 3 0	6 3 0	3 0	3 0	

These ratings include the total weight of train, exclusive of engine and tender, which the different class of engines will haul in each direction between the stations shown.

ASSISTANT SUPERINTENDENT G. A. BAYS TRAINMASTERS { J. A. McKINNON. Yuma W. C. PRYOR. Phoenix J. J. COWIN. Tucson

ASSISTANT TRAINMASTER
A. G. McMANUS.....Tucson

CHIEF TRAIN DISPATCHER

H. W. CASSADY .......Tucson

