

**RULE 455, VERBAL AUTHORIZATION
BY FOREMAN AND ENGINEER'S ACKNOWLEDGEMENT**

When train approaches limits specified by Track Bulletin Form B, the engineer must attempt to contact employe in charge by radio sufficiently in advance to avoid delay, advising his location and specifying track.

The following words will be used by foreman in properly identifying himself:

"Foreman _____ (of Gang No. _____) using Track Bulletin No. _____ Line no. _____ between MP _____ and MP _____ on _____ Subdivision."

In granting verbal authority for movement through limits of Track Bulletin Form B, the following alternatives will be used by foreman:

- (a) **Movement Beyond Red Flag**
To authorize train or engine to pass a red flag, or enter limits, without stopping, the following will be added:
"_____ (train) _____ may pass red flag located at MP _____ (or enter limits) without stopping".
Train or engine may pass red flag, or enter limits, without stopping, continuing to move at restricted speed and must stop short of men or equipment fouling track.
- (b) **Movement at Speed Greater Than Restricted Speed**
To authorize a train or engine to proceed at a speed greater than restricted speed, the following will be added:
"_____ (train) _____ may proceed through the limits at _____ MPH (or at "maximum authorized speed.")
Train may proceed through the limits at the prescribed speed unless otherwise restricted.
- (c) **Movement at Speed Less Than Restricted Speed**
To require train or engine to move at a speed less than restricted speed, the following will be added:
"_____ (train) _____ may proceed at restricted speed but not exceeding _____ MPH (adding if necessary "until reaching MP _____.")
Train must not exceed the prescribed speed and must be prepared to stop short of men or equipment fouling the track or a red flag to the right of the track.

The instructions issued by foreman under (a), (b), or (c) must be repeated by the engineer and "OK" received from foreman before they are acted upon.

When the word STOP is written in the Stop column, train or engine must not enter the limits until verbal authority is received from employe in charge as prescribed by example (a) above

SPEED TABLE

Time Per Mile		Miles Per Hour	Time Per Mile		Miles Per Hour	Time Per Mile		Miles Per Hour
Min.	Sec.		Min.	Sec.		Min.	Sec.	
—	36	100	—	58	62.1	1	40	36.0
—	37	97.3	—	59	61.0	1	42	35.3
—	38	94.7	1	—	60.0	1	44	34.6
—	39	92.3	1	02	58.0	1	46	34.0
—	40	90.0	1	04	56.2	1	48	33.3
—	41	87.8	1	06	54.5	1	50	32.7
—	42	85.7	1	08	52.9	1	52	32.1
—	43	83.7	1	10	51.4	1	54	31.6
—	44	81.8	1	12	50.0	1	56	31.0
—	45	80.0	1	14	48.6	1	58	30.5
—	46	78.3	1	16	47.4	2	—	30.0
—	47	76.6	1	18	46.1	2	05	28.8
—	48	75.0	1	20	45.0	2	10	27.7
—	49	73.5	1	22	43.9	2	15	26.7
—	50	72.0	1	24	42.9	2	30	24.0
—	51	70.6	1	26	41.9	2	45	21.8
—	52	69.2	1	28	40.9	3	—	20.0
—	53	67.9	1	30	40.0	3	30	17.1
—	54	66.6	1	32	39.1	4	—	15.0
—	55	65.5	1	34	38.3	5	—	12.0
—	56	64.2	1	36	37.5	6	—	10.0
—	57	63.2	1	38	36.8	12	—	5.0



SANTA SAFETY FE IRST



The
**Atchison, Topeka and Santa Fe
Railway Co.**

WESTERN REGION

ARIZONA DIVISION

TIMETABLE No.

1

IN EFFECT

Sunday, May 15, 1988

**At 12:01 A.M.
Mountain Time**

**Q.W. TORPIN
General Manager**

**D.M. MILLER A.K. POTTORFF J.J. HODGES
Assistant General Managers
LOS ANGELES, CALIF.**

**R.L. DIXON
Division Manager
WINSLOW, ARIZ.**

ASSISTANT DIVISION MANAGER — ADMINISTRATION

P.I. JENSEN Winslow, Ariz.

ASSISTANT DIVISION MANAGER — MAINTENANCE

D.L. BRUL Winslow, Ariz.

ASSISTANT DIVISION MANAGER — EQUIPMENT

H.L. MORROW Albuquerque, N. Mex.

SUPERINTENDENTS

K.W. ROSS Winslow, Ariz.

R.D. MATHES Phoenix, Ariz.

ASSISTANT SUPERINTENDENT — OPERATING

L.D. JONES Needles, Calif.

TRAINMASTER

J.S. STEVENSON Winslow, Ariz.

MANAGER OF RULES

R.N. WADE Winslow, Ariz.

GENERAL SUPERVISORS TRAIN HANDLING

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S.L. JOHNSON Winslow, Ariz.

D.D. JENSEN Needles, Calif.

W.G. COMSTOCK (Amtrak) Los Angeles, Calif.

MANAGER OF SAFETY

M.J. COOK Winslow, Ariz.

MANAGER TRAIN HANDLING

G.A. SMALLWOOD Los Angeles, Calif.

MANAGER OPERATIONS PLANNING

C.C. GRAHAM Winslow, Ariz.

SUPERVISORS TRAIN OPERATIONS

J.C. OWSLEY L.D. ANDERSON

V.L. WILLIAMS W.G. DELVEA

D.R. BORTZ

TRAIN DISPATCHERS — WINSLOW

J.K. HOLT A.O. WEEKS

J.D. RICHARDS R.J. HEDGES

T.L. FISHER T.L. JORGENSEN

L.G. ROWLAND L.G. STAEDEN

J.L. THORN P.J. COMISKEY

R.E. WILLIAMS C.F. THRELKELD

R.A. RADFORD M.S. ELSON

D.E. STANGE M.C. DANSEY

R.C. MITCHELL

AVOID DAMAGE —

SWITCH CUSTOMERS' CARS CAREFULLY

OVERSPEED Couplings are DAMAGING

Damage to freight or car can be avoided by always keeping coupling speed within the safe range — NOT OVER 4 MILES PER HOUR — A BRISK WALK.

Handle freight carefully and keep our customers.

IT'S EVERYBODY'S JOB ON THE SANTA FE

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EXPLANATION OF CHARACTERS

- A — Automatic Interlocking
- B — General Orders/Circulars
- g — Gate, normal position against conflicting route
- G — Gate, normal position against this Subdivision
- g — Gate, left in position last used
- M — Manual Interlocking
- P — Telephone
- R — Radio communication
- S — Crossing protected by stop signs
- T — Turning facility
- X — Crossover (DT)
- Y — Yard Limits
- MT — Main Track

EXPLANATION OF ROADWAY SIGNS

- Temporary Restrictions — Red, Yellow and Green flags or discs
- Permanent Speed Sign — Square or rectangular in shape, Yellow with numerals or Green
- Permanent Stop Sign — Rectangular in shape, Red
- Whistle Sign — Square in shape, White with letter "W"

**Santa Fe Police
Communications Center
Toll Free Telephone No.
1 - 800 - 333 - 2383**

GALLUP SUBDIVISION

WEST- WARD ↓			GALLUP SUBDIVISION			↑ EAST- WARD		
FIRST CLASS	STATIONS			FIRST CLASS				
3				4				
Leave Daily	Station Number	Siding Feet		Mile Post	Arrive Daily			
PM 5:07	56100		N.M. DIV. ALBUQUERQUE BRT	ABS DT 902.4	PM 5:12:55			
	40015	2486	12.6 ISLETA	CTC 915.0	12:6			
5:31	20870		14.0 DALIES P	27.4	12:13 PM			
	20862		8.7 RIO PUERCO	CTC 33.9				
	20840	s6768	No. 13.5 Su. 14.8 SUWANEE	47.2				
	20830		11.6 MARMON	58.7				
	20810		11.7 LAGUNA	CTC 71.1				
	20784		11.8 MCCARTYS	82.7				
	20770	s6620	4.0 EAST GRANTS	94.3				
		n5842	8.9 WEST GRANTS	98.3				
	20750	s5844 n6758	6.1 BLUEWATER	CTC 107.2				
	20720		1.5 EAST BACA T	ATS 113.3				
			WEST BACA No. 2.8 T	114.8				
	20705		0.8 EAST PEGS So. 10.8 T	117.7				
			WEST PEGS No. 7.1 T	118.5				
	20690	s7128	3.2 THOREAU T	125.6				
	20680		GONZALES	128.8				
	20640		No. 17.1 So. 15.8 PEREA	CTC 143.0				
	20620	s5270	9.3 MCCUNE T	ATS 149.3				
	20610	n8534	2.3 ZUNI	151.6				
s 7:30	20600		8.0 GALLUP BRT	157.6	s10:24			
	20595		7.4 EAST DEFIANCE T	CTC 165.0				
7:39			2.0 WEST DEFIANCE T	ATS 167.0	10:07			
7:49	20580	n6737	13.4 LUPTON X	ABS 180.4	9:57			
7:57	20575	n7220 s6750	10.9 HOUCK X	TWC 191.2	9:49			
8:03	20570	s5259	8.0 CHETO X	ATS 199.7	9:43			
8:13			15.0 EAST CORONADO JCT T	CTC 214.8	9:32			
			1.1 WEST CORONADO JCT T	ATS 215.9				
8:16	20540	n6437 s7107	3.2 PINTA X	219.2	9:29			
8:26	20535	n6820 s5687	13.1 ADAMANA PX	232.3	9:19			
8:40	20525	n6769 s5718	20.7 HOLBROOK X	ABS 253.0	9:04			
8:44	20515	s7505	5.8 PENZANCE X	TWC 258.6	8:59			
8:47	20510	s3599	3.7 JOSEPH CITY PX	262.4	8:56			
8:56	20505	n7155 s5621	12.2 HIBBARD X	274.8	8:47			
s9:08 PM	20500		10.8 WINSLOW BRT	CTC 285.5	8:38 AM			
Arrive Daily			NORTH TRACK (287.9)		Leave Daily			
			SOUTH TRACK (287.5)					

CTC in effect on main tracks between end of Double track Albuquerque M.P. 903.9 and Gallup, on both legs of wye from East Baca M.P. 113.3 and West Baca M.P. 114.8 to M.P. 1.0 on Baca Coal Spur, on both legs of wye Pegs, between Gallup and West Defiance, M.P. 167.0, on both legs of wye at Defiance, on main tracks and both legs of wye between East Coronado Junction, M.P. 214.8 and West Coronado Junction, M.P. 215.9 and between M.P. 284.5 and Winslow.

TWC in effect between M.P. 3.0 on Baca Coal Spur and M.P. 12.3 on Lee Ranch Mine Spur, between Winslow, M.P. 284.5 and West Coronado Junction, M.P. 215.9 and between East Coronado Junction, M.P. 214.8 and West Defiance, M.P. 167.0; on Defiance Spur between M.P. 3 and M.P. 19 (P&M Mine Storage Track M.P. 12 will be designated as a siding for TWC operation and will be referred to in Track Warrants as 'P&M Siding'); on Coronado Spur between M.P. 2 and switch to Coronado Power Plant, M.P. 42.7; and on Springerville Spur between Tepco Jct. and switch to Tucson Electric Power Plant, M.P. 26.1.

DT: At Albuquerque between M.P. 902.4 and M.P. 903.9.

Rule 94 in effect at Albuquerque between M.P. 901.1 and end of Double Track, M.P. 903.9.

Rule 410: In Double Track (DT) territory, not necessary to report limits clear unless so instructed by Train Dispatcher.

Rule 151: Between Winslow and West Coronado Junction and between East Coronado Junction and West Defiance, trains must keep to the left

Helper locomotives at or near rear of train may use dynamic brake on descending grades as follows:

Gonzales to Gallup

Gonzales to M.P. 85.9
Suwanee to Rio Puerco

SPECIAL INSTRUCTIONS

1. SPEED REGULATIONS (A) MAXIMUM AUTHORIZED SPEED

BETWEEN:	MPH	
	Psg	Frt.
Albuquerque and Isleta	79	55
Isleta and Dalies	60	40
SOUTH TRACK		
Dalies and Marmon	90	55*
Marmon and Gonzales	79	55*
Gonzales and Gallup (westward only)	90	55*
Gallup and Gonzales (eastward only)	79	55*
NORTH TRACK		
Gallup and Gonzales	79	55*
Gonzales and M.P. 85.9 (eastward only)	90	55*
Gonzales and M.P. 85.9 (westward only)	79	55*
M.P. 85.9 and Marmon	79	55*
Marmon and Dalies	90	55*
Anaconda Mill Spur		10
BACA COAL SPUR		
East Leg of Wye		40
West Leg of Wye M.P. 0.0 and 0.9		40
M.P. 0.9 and 27.3		49
ESCALANTE SPUR		
M.P. 0.0 and 3.2		15

(continued on next page)

GALLUP SUBDIVISION

SPECIAL INSTRUCTIONS (continued)

1. SPEED REGULATIONS (A) MAXIMUM AUTHORIZED SPEED

BETWEEN:	MPH	
	Psg.	Fr.
LEE RANCH MINE SPUR		
M.P. 0.0 and 13.5		49
M.P. 13.5 and 15.4		25
PEGS SPUR		
Both Legs of Wye - M.P. 0.0 and 0.8		40
M.P. 0.8 and 2.6		20
M.P. 2.6 and 4.3		15
Dumper and M.P. 3.9		4
Gallup and Winslow	90	55*
AGAINST CURRENT OF TRAFFIC		
West Defiance and East Coronado Jct.	59	49
West Coronado Jct. and Winslow	59	49
Defiance Spur M.P. 0.6 and 20.3		25
Both Legs of Wye		30
Turnout at M.P. 13.5		25
Defiance Spur M.P. 20.3 and M.P. 21.7		10
Carbon Coal Loop at M.P. 3.0		10
CORONADO SPUR		
Wye M.P. 0.0 and M.P. 0.9		30
M.P. 0.9 and M.P. 42.5		49
M.P. 42.5 and M.P. 45.5		15
Dumper M.P. 44.0		4
SPRINGERVILLE SPUR		
Tepco Jct. M.P. 0 and M.P. 26.1		49
M.P. 26.1 and end of spur		15

Passenger trains with Amtrak 500, 600 or 700 Class units in consist speed limit 50 m.p.h. on two curves between M.P. 12.5 and M.P. 13.6 between Isleta and Dalies.

Speed limit freight trains, with dynamic brakes not in use 30 MPH on descending grades:

Westward M.P. 130.4 to M.P. 135.5 (south track)
Eastward M.P. 23.0 to M.P. 13.0

* Maximum authorized speed for freight trains is:
70 MPH provided:

- (1) Train does not contain empty car(s) (10-PACK cars, double stack cars, cabooses and flat cars loaded with empty trailers, containers or container chassis are considered loads).
- (2) Train does not exceed 5500 tons.
- (3) Train does not exceed 8500 feet.
- (4) Train does not average more than 80 tons per operative brake.
- (5) Locomotive can control speed to 70 MPH without use of air brakes.

(B) SPEED RESTRICTIONS -- TONNAGE

Maximum authorized speed for freight trains is:
45 MPH when averaging 90 tons or over per operative brake,
or when train exceeds 7000 tons.

GALLUP SUBDIVISION

(C) SPEED RESTRICTIONS -- VARIOUS

	LOCATION	MPH
2 Curves	M.P. 905.2 to 905.4	70
1 Curve	M.P. 912.2 to 912.8	70
2 Curves	M.P. 12.5 to 13.6	65
4 Curves	M.P. 19.4 to 24.7	70
1 Curve	M.P. 26.8 to 27.4	40
SOUTH TRACK		
4 Curves	M.P. 27.7A to 32.5	65
2 Curves	M.P. 32.5 to 34.5X	80
7 Curves	M.P. 36.8X to 45.0X	65
1 Curve	M.P. 46.9X to 47.2X	80
1 Curve	M.P. 59.1 to 60.1	60
4 Curves	M.P. 60.1 to 61.2	50
3 Curves	M.P. 61.2 to 62.9	45*
3 Curves	M.P. 62.9 to 66.0	65
1 Curve	M.P. 66.0 to 66.7	55
1 Curve	M.P. 66.7 to 67.8	65
4 Curves	M.P. 76.9 to 79.4	75
11 Curves	M.P. 83.9 to 88.0	55
3 Curves	M.P. 88.0 to 91.0	65
7 Curves	M.P. 105.0 to 109.7	75
4 Curves	M.P. 117.5X to 119.7X	75
4 Curves	M.P. 127.6 to 130.2	75
4 Curves (westward only)	M.P. 142.4 to 149.5	80
1 Curve	M.P. 149.7 to 150.1	75
2 Curves	M.P. 154.6 to 156.8	75
1 Curve	M.P. 156.8 to 157.6	30
2 Street Crossings	M.P. 157.6 to 157.9	15
2 Curves	M.P. 157.9 to 158.3	30
1 Curve	M.P. 160.7 to 160.9	75
11 Curves	M.P. 162.8 to 175.1	80
1 Curve	M.P. 177.9 to 178.2	80
2 Curves	M.P. 183.8 to 184.7	85
1 Curve	M.P. 188.4 to 188.9	75
5 Curves	M.P. 192.5 to 199.6	80
1 Curve	M.P. 207.0 to 207.4	80
6 Curves	M.P. 213.2 to 219.2	75
8 Curves	M.P. 228.0 to 233.9	80
4 Curves	M.P. 239.4 to 243.2	80
3 Curves	M.P. 249.5 to 252.1	75
1 Street Crossing	M.P. 253.1	60
5 Curves	M.P. 254.9 to 262.2	80
1 Curve	M.P. 264.2 to 264.4	75
1 Curve	M.P. 269.6 to 269.9	80
4 Curves	M.P. 274.8 to 278.3	80
1 Curve	M.P. 283.0 to 284.6	80
4 Curves	M.P. 284.6 to 285.5	55
NORTH TRACK		
4 Curves	M.P. 285.5 to 284.6	55
1 Curve	M.P. 284.6 to 283.0	80
4 Curves	M.P. 278.3 to 274.8	80
1 Curve	M.P. 269.9 to 269.6	80
1 Curve	M.P. 264.4 to 264.2	75
5 Curves	M.P. 262.2 to 254.9	80
1 Street Crossing	M.P. 253.1	60
3 Curves	M.P. 252.1 to 249.5	75
4 Curves	M.P. 243.2 to 239.4	80
8 Curves	M.P. 233.9 to 228.0	80
6 Curves	M.P. 219.2 to 213.2	75
1 Curve	M.P. 207.4 to 207.0	80
5 Curves	M.P. 199.6 to 192.5	80

(continued on next page)

GALLUP SUBDIVISION

(C) SPEED RESTRICTIONS - VARIOUS (continued)

	LOCATION	MPH
NORTH TRACK		
1 Curve	M.P. 188.9 to 188.4	75
2 Curves	M.P. 184.7 to 183.8	85
1 Curve	M.P. 178.2 to 177.9	80
11 Curves	M.P. 175.1 to 162.8	80
1 Curve	M.P. 160.9 to 160.7	75
2 Curves	M.P. 158.3 to 157.9	30
2 Street Crossings	M.P. 157.9 to 157.6	15
1 Curve	M.P. 157.6 to 156.8	50
1 Curve	M.P. 156.8 to 155.8	75
1 Curve	M.P. 150.1 to 149.7	75
3 Curves	M.P. 136.4X to 133.4X	55
2 Curves	M.P. 130.7X to 129.9X	55
3 Curves	M.P. 129.9X to 127.5	75
1 Curve	M.P. 113.3 to 112.7	80
7 Curves	M.P. 109.7 to 105.0	75
1 Curve	M.P. 102.3 to 101.8	80
3 Curves	M.P. 98.7 to 95.8	85
2 Curves	M.P. 95.8 to 94.4	80
3 Curves	M.P. 91.0 to 88.0	65
11 Curves	M.P. 88.0 to 83.9	55
4 Curves	M.P. 79.3 to 76.9	75
1 Curve	M.P. 67.8 to 66.7	65
1 Curve	M.P. 66.7 to 66.0	55
3 Curves	M.P. 66.0 to 62.9	65
3 Curves	M.P. 62.9 to 61.2	45*
4 Curves	M.P. 61.2 to 60.1	50
1 Curve	M.P. 60.1 to 59.1	60
2 Curves	M.P. 46.2 to 43.6	80
1 Curve	M.P. 40.7 to 40.3	80
1 Curve	M.P. 39.1 to 38.6	80
2 Curves	M.P. 37.3 to 36.2	80
1 Curve	M.P. 33.6 to 32.4	80
4 Curves	M.P. 32.4 to 27.5	65
1 Curve	M.P. 27.5 to 27.4	40

*Denotes restrictions protected by Inert ATS Inductors.

GALLUP SUBDIVISION

(D) SPEED RESTRICTIONS - SWITCHES

Maximum speed permitted through turnout of other than main track switches - 10 MPH; all main track turnouts and crossovers - 15 MPH; except for spring and dual control switches and crossovers at following locations:

"D" - Dual Control Switch "EE" - East End
 "S" - Spring Switch "ESL" - Electric Switch Lock
 "WE" - West End

Station	Type	Location	MPH
Albuquerque	D	End of Double Track M.P. 903.9	40
Isleta	D	Both Ends of Siding	15
Dalies	D	Switch M.P. 27.4	40
	D	Crossover M.P. 27.5	40
	D	Crossover M.P. 27.6	50
Rio Puerco	D	2 Crossovers M.P. 33.9	50
Suwanee	D	2 Crossovers M.P. 47.2	50
Marron	D	2 Crossovers M.P. 58.7	50
Laguna	D	2 Crossovers M.P. 71.1	50
McCartys	D	2 Crossovers M.P. 82.7	50
East Grants	D	Crossover M.P. 94.3	50
West Grants	D	Crossover M.P. 98.3	50
East Baca	D	Crossover M.P. 113.3	50
	D	Switch to East Leg of Wye M.P. 113.4	40
West Baca	D	Switch to West Leg of Wye M.P. 114.7	40
	D	Crossover M.P. 114.8	50
Baca Coal Spur	D	Stem of Wye M.P. 0.9	40
Baca Wye Storage	D	EE Wye Storage M.P. 0.9	30
	S	WE Wye Storage M.P. 2.2	30
East Pegs	D	Switch to East Leg of Wye M.P. 117.7	40
West Pegs	D	Switch to West Leg of Wye M.P. 118.5	40
Pegs	D	Stem of Wye	40
Gonzales	D	2 Crossovers M.P. 128.9	50
Perea	D	2 Crossovers M.P. 142.9	50
Gallup	D	Crossover M.P. 156.4	40
	D	Crossover M.P. 156.5	50
	D	EE North Freight Lead M.P. 156.6	40
	D	2 Crossovers M.P. 161.3	50
	D	WE freight lead M.P. 161.2	30
Defiance	D	Crossover M.P. 165.1	50
	D	East leg of wye M.P. 165.3	30
	D	West leg of wye M.P. 166.9	30
	D	Crossover M.P. 167.0	50
	D	Stem of Wye M.P. 0.6	30
	ESL	EE Storage No. 1 M.P. 165.4	30
	ESL	WE Storage No. 1 M.P. 165.9	30
Lupton	S	EE North Siding	30
Houck	S	WE South Siding - EE North Siding	30
Cheto	S	WE South Siding	30
East Coronado Jct.	D	Crossover M.P. 214.8	50
	D	Switch to East Leg of Wye, M.P. 214.8	40
West Coronado Jct.	D	Switch to West Leg of Wye, M.P. 215.8	40
	D	Crossover M.P. 215.8	50
Coronado Jct.	D	Stem of Wye M.P. 0.7	30
Tepco Jct. (to Springville Spur)	D	M.P. 39.5 on Coronado Spur	40

(continued on next page)

GALLUP SUBDIVISION

(D) SPEED RESTRICTIONS - SWITCHES (continued)

Station	Type	Location	MPH
Pinta	S	WE South Siding - EE North Siding	30
Adamana	S	WE South Siding - EE North Siding	30
Holbrook	S	WE South Siding - EE North Siding	30
Penzance	S	WE South Siding	30
Hibbard	S	WE South Siding - EE North Siding	30
Winslow	D	Crossover M.P. 284.5	50
	D	Crossover M.P. 284.7	50
	D	Inbound freight lead M.P. 284.7	50
	D	Outbound freight lead M.P. 284.8	50
	D	South main track M.P. 284.9	50
	D	Yard track No. 1 M.P. 285.3	20

At M.P. 13.7 on Lee Ranch Mine Spur normal position for loop track switch is lined for counter-clockwise movement on loop track.

At Pegs, normal position for loop track switch is lined for clockwise movement.

At P&M mine on Defiance Spur normal position for loop track switch is lined for clockwise movement on loop track.

2. TRACKS BETWEEN STATIONS

Name	Mile Post Location	Capacity in Feet	Switch Connection
NORTH TRACK			
Rio Puerco	34.2	852	East & West
Garcia	42.2	1254	East
Suwanee	45.8	3335	East & West
Quirk North Set Out	63.5	931	East
Laguna	67.9	2649	East & West
Acomita	76.3	1490	East & West
Anzac	86.5	488	East
Reid	100.7	4944	East & West
Baca Coal Spur	113.4-114.7	27.3 Miles	East & West
Wye Storage	0.9	6451	East & West
Escalante Spur	5.0	3.2 Miles	West
Ambrosia Storage	17.1	147	East & West
Lee Ranch Mine Spur	27.3	15.4 Miles	
Mine Storage	13.0	6840	East & West
Coal Loop	13.7	8670	East
Loop Storage	14.8	797	West
Baca	114.1	1000	East & West
North Guam	136.7	972	East & West
Wingate	146.5	2277	East & West
Defiance Spur	165.3-166.9	21.7 miles	East & West
Mentmore Storage 1 and 2	1.5	5920 each	East & West
Carbon Coal Loop	3.0	10511	East
PM Mine Storage	12.0	6200	East & West
South Mine	13.5	4100	East
North Tipple	20.4	6200	East
Chambers	205.9	3455	East & West
Navajo	213.3	2247	East & West
Arntz	245.2	584	East
SOUTH TRACK			
Garcia	42.2X	1054	East
Quirk South Set Out	63.5	458	East
Laguna	69.7	5441	West
Anzac	86.1	2059	East & West
Reid	101.6	384	West
Baca	114.4	1000	East & West
South Guam	136.2	3440	West
Ciniza	138.9	3093	East & West
Chambers	206.1	1829	West
Navajo	212.7	941	East & West
Coronado Spur	214.8-215.9	45.5 miles	East & West
Salt River Storage	20.3	514	East & West
Coronado	42.6	5882	East & West
Springerville Spur	39.5	28.3 miles	East
Carrizo Storage	1.8	653	East & West
Arntz	245.9	737	West

GALLUP SUBDIVISION

3. TRACKSIDE WARNING DEVICES (Special Instruction 9)

Location	Type	Locator and Signals Affected
M.P. 908.7	Highwater	Eastward signal 9092 Westward-controlled signal M.P. 906.4
M.P. 28.3 (North Track)	Hot Box & Dragging Equip.	Rotating lights at scanner at M.P. 28.3 at M.P. 27.4B & at locator M.P. 27.6
M.P. 44.5 (North Track) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 45.7X (South Track) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 65.8 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
Bridges 69.8 and 70.1	Highwater	Westward signals 681 & 683 Eastward-controlled signals Laguna M.P. 71.2
Bridge 72.6	Highwater	Signals 721, 723, 752 & 754
M.P. 90.5 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
Bridge 91.5	Highwater	Signals 901, 903, 922 & 924
M.P. 111.1 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 131.3 (South Track) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 131.3X (North Track) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
Bridge 141.8X	Highwater	Signal 1411 & eastward - controlled signals Perea
Bridge 150.5	Highwater	Signals 1481, 1483, 1502 & 1504
M.P. 153.9 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 174.8	Rock Slide	Signals 1741 & 1752 and rotating red warning lights at M.P. 174.8 & 175.1
M.P. 176.9 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 202.4 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 214.7 (South Track)	Hot Box & Dragging Equip.	Rotating white lights at scanner & on locator M.P. 217.1
M.P. 236.5 (North Track)	Hot Box & Dragging Equip.	Rotating white lights at scanner & on locator M.P. 234.3
Bridge M.P. 239.4	Highwater	Signals 2391 & 2392
M.P. 242.6 (South Track)	Hot Box & Dragging Equip.	Rotating white lights at scanner M.P. 242.6, M.P. 244.1 & on locator M.P. 245.8
M.P. 259.4 (South Track)	Hot Box & Dragging Equip.	Rotating white lights at scanner M.P. 259.4, M.P. 261.1 & on locator M.P. 263.4
M.P. 260.5 (North Track)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 279.7 (South Track)	Hot Box & Dragging Equip.	Rotating white lights at scanner M.P. 279.7, M.P. 281.4 & locator M.P. 282.7

BELEN SUBDIVISION

WEST- WARD ↓		BELEN SUBDIVISION		↑ EAST- WARD	
Station Number	Siding Feet	STATIONS			Mile Post
40000		BELEN 10.3	BRT	CTC 2MT	0.0
20870	5314	DALIES	P		10.1
		(10.3)			

Four tracks: At Belen, CLIC Track 7223 and 7224 are designated track 23 and 24 respectively; between M.P. 933.7 El Paso Subdivision and New Mexico-Arizona Division Junction, tracks are designated as North and South, signaled for movements Eastward on north track and Westward on south track.

Rule 94 in effect: At Belen, on North Track and South Track and on Track 23 and Track 24 between sign indicating End CTC and switches at the east end of these tracks; however, trains or engines must not move West of sign indicating "Preliminary Section" on Track 23 or Track 24 unless authorized by control operator.

CTC in effect: At Belen, on freight lead between M.P. 893.9 and M.P. 895.4; on Track 23 and Track 24 between New Mexico-Arizona Division Junction and sign indicating End CTC and on Arizona Division Main Tracks Westward from New Mexico-Arizona Division Junction.

Normal positions of switches at East end Track 23 and Track 24 will be left lined as last used.

Helper locomotives at or near rear of train may use dynamic brake on descending grades Dalies to Belen.

SPECIAL INSTRUCTIONS

1. SPEED REGULATIONS (A) MAXIMUM AUTHORIZED SPEED

BETWEEN:	MPH	
	Psg'r	Fr't.
Belen and Dalies	79	55*

Speed limit freight trains with dynamic brakes not in use, 30 MPH on descending grades:

Eastward M.P. 10 to M.P. 2

*Maximum authorized speed for freight train is:

70 MPH provided:

- (1) Train does not contain empty car(s) (10-PACK cars, double stack cars, cabooses and flat cars loaded with empty trailers, containers or container chassis are considered loads).
- (2) Train does not exceed 5500 tons.
- (3) Train does not exceed 8500 feet.
- (4) Train does not average more than 80 tons per operative brake.
- (5) Locomotive can control speed to 70 MPH without use of air brakes.

(B) SPEED RESTRICTION -- TONNAGE

Maximum authorized speed for freight trains is:

45 MPH when averaging 90 tons or over per operative brake, or when train exceeds 7000 tons.

(C) SPEED RESTRICTIONS -- VARIOUS

	LOCATION	MPH
4 Curves	M.P. 932.3 to 932.9 (N.M. Div.)	15
2 Curves	M.P. 0.1 to 0.5 (Both Tracks)	25
1 Curve	M.P. 3.3 to 3.6 (Both Tracks)	75
4 Curves	M.P. 6.7 to 10.2 (South Track)	55
2 Curves	M.P. 6.7 to 8.4 (North Track)	65
1 Curve	M.P. 8.4 to 9.6 (North Track)	55
1 Curve	M.P. 9.6 to 10.0 (North Track)	50
1 Curve	M.P. 10.0 to 10.2 (North Track)	40

At Belen, speed limit 40 MPH on freight lead between M.P. 893.9 and M.P. 895.4 and 30 MPH on Tracks 7223 and 7224.

At Belen, maximum authorized speed 20 MPH on South track over switch to Continental Oil Spur located at Signal 9321.

(D) SPEED RESTRICTIONS -- SWITCHES

Maximum speed permitted through turnout of other than main track switches -- 10 MPH; all main track turnouts and crossovers -- 15 MPH; except for dual control switches and crossovers at following locations:

- "D" - Dual Control
- "WE" - West End
- "EE" - East End

Station	Type	Location	MPH
Belen	D	Crossover M.P. 0.5 (Arizona Div.)	50
	D	Crossover Arizona Div. Jct. (932.4)	15
	D	Switch to Albuquerque (932.4)	15
	D	Switch Arizona Div. Jct. (932.4)	30
	D	Switches WE Tracks 7223 and 7224	30
	D	Switch end of Double Track (M.P. 933.7)	30
	D	Switch to El Paso Subdiv. M.P. 934.4	30
	D	Switch to Belen Yard M.P. 934.4	15
	D	EE Storage Yard M.P. 894.0	15
	D	EE Freight Lead M.P. 893.9	40
Dalies	D	Junction Switch M.P. 10.2	40

WEST- WARD ↓			SELIGMAN SUBDIVISION		↑ EAST- WARD	
FIRST CLASS			STATIONS		FIRST CLASS	
3					4	
Leave Daily	Station Number	Siding Feet			Mile Post	Arrive Daily
PM 9:11	20500		WINSLOW BPRT	CTC 3MT ATS	285.5	AM s8:35
	20440	n7372	CANYON DIABLO	CTC 2MT ATS	311.7	
	20420		DARLING		328.6	
s10:18	20400		FLAGSTAFF BRT		344.2	s7:36
			EAST BELLEMONT	CTC 2MT	354.5	
	20390	s4984	BELLEMONT		356.3	
	20382		MAINE		362.5	
	20125		WILLIAMS JCT.		374.6	
			EAST PERRIN		383.1	
	20120		WEST PERRIN	CTC 2MT ATS	385.6	
			EAST DOUBLEA		392.0	
	20115		WEST DOUBLEA		395.1	
			EAST EAGLE NEST		405.5	
	20109		WEST EAGLE NEST		407.5	
	20105		EAST CROOKTON		418.3	
			WEST CROOKTON	CTC 2MT	420.5	
11:43	20100		SELIGMAN T		428.8	
11:59	19955	n5355	PICA X		446.9	5:46
AM 12:07	19950	n6784 s5329	YAMPAI X	ABS DT TWC	452.2	5:40
12:16	19945	n4647 s5783	NELSON X		460.2	5:29
12:24	19935	n5714 s7743	PEACH SPRINGS X		465.8	5:23
12:32	19930	n5423 s5557	TRUXTON X		477.3	5:10
12:40	19925	s8376	VALENTINE X		484.0	5:00
12:54	19915	n5550 s5939	WALAPAI X	ABS DT TWC	501.3	4:46
1:00	19910	n7130 s7132	BERRY TX	ATS	509.4	4:40
1:04	19905		GETZ X		513.9	4:37
s 1:14	19900	n5974 s5656	KINGMAN BRX		516.4	s4:33
	19840	s7117	HARRIS P		521.5	4:21
1:25	19835	n5422 s7106	GRIFFITH X	ABS DT TWC	526.8	4:14
1:31	19830	s7100	ATHOS X		535.6	4:06
1:35	19825	n7115 s5160	YUCCA X		540.2	4:02
1:44	19815	n5198 s7132	FRANCONIA X		552.7	3:50
1:53	19805	n5357 s5491	TOPOCK PX		565.1	3:37
s 2:13 AM	19800		NEEDLES BMRTY		578.0	3:25 AM
Arrive Daily			NORTH TRACK (291.4) SOUTH TRACK (292.1)			Leave Daily

SELIGMAN SUBDIVISION

CTC in effect on main tracks between Winslow and West crossover Seligman, M.P. 429.9, on siding Canyon Diablo, on Yard track No. 1 Seligman and on Freight lead Needles between M.P. 574.8 and M.P. 580.2.

TWC in effect between Seligman and Needles.

Rule 410: In double track (DT) Territory, not necessary to report limits clear unless so instructed by train dispatcher.

Signal displaying flashing green aspect is named ADVANCE APPROACH and the indication is: Proceed prepared to pass next signal not exceeding 50 MPH and to advance on diverging route.

Westward freight trains must stop not less than ten minutes at Yucca to cool wheels and inspect train when train weight exceeds 2000 tons per operative dynamic brake.

Helper locomotives at or near rear of train may use dynamic brake on descending grades as follows:

Williams Jct to East Eagle Nest	Yampai to Pica
West Crookton to Seligman	M.P. 350.8 to Flagstaff
	M.P. 337 to West Crossover Darling
	East Crossover Darling to Dennison

Yampai to Hackberry
Getz to Topock

YARD LIMITS
M.P. 575.1 to 580.5

SPECIAL INSTRUCTIONS

- SPEED REGULATIONS
- (A) MAXIMUM AUTHORIZED SPEED

BETWEEN:	MPH	
	Psgr.	Frt.
EASTWARD MOVEMENTS BOTH TRACKS		
Seligman and Williams Junction	79	55*
Williams Junction and Maine	90	55*
Maine and Darling	79	55*
Darling and Winslow	90	55*
WESTWARD MOVEMENTS BOTH TRACKS		
Winslow and Maine	79	55*
Maine and Williams Junction	90	55*
Williams Junction and Seligman	79	55*
NORTH TRACK		
Seligman and Peach Springs	79	55*
Peach Springs and Needles	90	55*
SOUTH TRACK		
Needles and Getz	79	55*
Getz and Valentine	90	55*
Valentine and Seligman	79	55*
AGAINST CURRENT OF TRAFFIC		
Seligman and Needles	59	49

* Maximum authorized speed for freight trains is:

70 MPH provided:

- Train does not contain empty car(s) (10-PACK cars, double stack cars, cabooses, and flat cars loaded with empty trailers, containers or container chassis are considered loads).
- Train does not exceed 5500 tons.
- Train does not exceed 8500 feet.
- Train does not average more than 80 tons per operative brake.
- Locomotive can control speed to 70 MPH without use of air brakes.

SELIGMAN SUBDIVISION

Speed limit freight trains, with dynamic brakes not in use on descending grades:

Westward	MPH	Eastward	MPH
M.P. 350.7 to 428.8	30	M.P. 451.9 to 446.0	30
M.P. 451.9 to 489.0	30	M.P. 410.0 to 407.0	30
M.P. 514.4 to 522.0	25	M.P. 350.7 to 291.0	30
M.P. 522.0 to 565.0	30		

At Seligman on yard track No. 1 trains must not exceed 30 MPH while head end of train is passing over hand operated switches at east and west end of track.

(B) SPEED RESTRICTIONS - TONNAGE

- (a) Maximum authorized speed for freight trains is:
45 MPH when averaging 90 tons or over per operative brake, or when train exceeds 7000 tons.
- (b) Freight trains averaging more than 80 tons per operative brake or having more than 5500 tons must not exceed:
25 MPH, M.P. 514.4 to 518.8
45 MPH, M.P. 518.8 to 562.8

(C) SPEED RESTRICTIONS - VARIOUS

	LOCATION	MPH
2 Curves	M.P. 285.5 to 286.4	55
3 Curves	M.P. 286.4 to 287.4	40*
1 Curve	M.P. 287.4 to 288.9 (eastward only)	85
1 Curve	M.P. 298.8 to 299.1 (eastward only)	80
1 Curve	M.P. 301.3 to 302.0 (eastward only)	85
2 Curves	M.P. 302.0 to 303.3	75
1 Curve	M.P. 304.8 to 305.0 (eastward only)	80
1 Curve	M.P. 315.7 to 316.0 (eastward only)	85
2 Curves	M.P. 325.9 to 327.0 (eastward only)	80
3 Curves	M.P. 327.0 to 328.6	65
3 Curves	M.P. 328.6 to 330.8	45*
2 Curves	M.P. 330.8 to 331.8	35*
9 Curves	M.P. 331.8 to 336.2	40*
3 Curves	M.P. 336.2 to 338.0	55
1 Curve	M.P. 338.0 to 341.6	75
3 Curves	M.P. 341.6 to 343.5	50
6 Curves	M.P. 343.5 to 345.3	40*
10 Curves	M.P. 345.3 to 348.2	35
5 Curves	M.P. 348.2 to 350.2	40
7 Curves	M.P. 350.2 to 352.6	45*
2 Curves	M.P. 352.6 to 353.9	65
7 Curves	M.P. 359.8 to 364.1	75
1 Curve	M.P. 364.1 to 364.3	45*
3 Curves	M.P. 364.3 to 366.8	50
3 Curves	M.P. 366.8 to 367.9	45*
10 Curves	M.P. 367.9 to 371.8	50*
2 Curves	M.P. 371.8 to 373.7	80
3 Curves	M.P. 421.6 to 422.8	45*
6 Curves	M.P. 422.8 to 425.4	50*

NORTH TRACK

2 Curves	M.P. 432.8 to 434.3	75
2 Curves	M.P. 447.4 to 448.2	70
7 Curves	M.P. 448.2 to 451.6	55
3 Curves & Grade	M.P. 451.6 to 453.2	45*
2 Curves & Grade	M.P. 453.2 to 455.5	55
5 Curves & Grade	M.P. 455.5 to 457.7	45
5 Curves & Grade	M.P. 457.7 to 460.1	50
7 Curves & Grade	M.P. 460.1 to 463.7	55
3 Curves	M.P. 463.7 to 464.9	45
5 Curves & Grade	M.P. 464.9 to 469.0	55
4 Curves	M.P. 469.0 to 470.5	45*
2 Curves & Grade	M.P. 470.5 to 472.7	70
4 Curves & Grade	M.P. 472.7 to 477.0	75
3 Curves & Grade	M.P. 477.0 to 479.0	70
5 Curves & Grade	M.P. 479.0 to 480.6	25*
2 Curves & Grade	M.P. 480.6 to 481.6	40

(continued on next page)

SELIGMAN SUBDIVISION

(C) SPEED RESTRICTIONS - VARIOUS (continued)

	LOCATION	MPH
2 Curves & Grade	M.P. 481.6 to 482.5	65
9 Curves & Grade	M.P. 482.5 to 490.2	75
1 Curve	M.P. 492.8 to 493.0	80
1 Curve & Grade	M.P. 514.4 to 515.2	55*
2 Curves & Grade	M.P. 515.2 to 516.5	40
6 Curves & Grade	M.P. 516.5 to 518.8	35
5 Curves & Grade	M.P. 518.8 to 524.3	70
2 Curves & Grade	M.P. 524.3 to 525.7	75
10 Curves & Grade	M.P. 542.2 to 552.6	80
1 Curve	M.P. 554.7 to 554.9	85
1 Curve	M.P. 560.3 to 560.6	80
1 Curve	M.P. 562.3 to 562.8	60
3 Curves	M.P. 562.8 to 564.5	50*
3 Curves	M.P. 564.5 to 565.5	45
1 Curve	M.P. 565.5 to 565.9	40
2 Curves	M.P. 565.9 to 568.3	80
3 Curves	M.P. 572.4 to 575.6	80
1 Curve	M.P. 575.6 to 576.8	70
1 Curve	M.P. 576.8 to 577.5	50
2 Curves	M.P. 577.5 to 578.0	30

SOUTH TRACK

3 Curves	M.P. 578.0 to 577.5	30
1 Curve	M.P. 577.5 to 576.8	50
1 Curve	M.P. 576.8 to 575.6	70
1 Curve	M.P. 565.9 to 565.5	40*
3 Curves	M.P. 565.5 to 564.5	45
4 Curves	M.P. 564.5 to 562.3	50
2 Curves	M.P. 552.6 to 551.2	60
8 Curves	M.P. 551.2 to 542.1	70
1 Curve	M.P. 526.9X to 525.9X	65
3 Curves	M.P. 525.9X to 524.3X	50*
1 Curve	M.P. 524.3X to 524.0X	45
3 Curves	M.P. 524.0X to 520.3X	55
1 Curve	M.P. 520.3X to 519.9X	30*
6 Curves	M.P. 519.9X to 517.8X	35
5 Curves	M.P. 517.8X to 515.3X	40
1 Curve	M.P. 515.3X to 514.1	60
2 Curves	M.P. 495.8 to 492.8	80
1 Curve	M.P. 490.2 to 488.9	75
4 Curves	M.P. 488.9 to 486.8	65
4 Curves	M.P. 486.8 to 482.5	60
2 Curves	M.P. 482.5 to 481.6	45*
2 Curves	M.P. 481.6 to 480.6	40*
4 Curves	M.P. 480.6 to 479.3	25*
1 Curve	M.P. 479.3 to 479.0	40
3 Curves	M.P. 479.0 to 477.0	60
4 Curves	M.P. 477.0 to 472.6	70
2 Curves	M.P. 472.6 to 470.5	60
4 Curves	M.P. 470.5 to 469.0	45*
5 Curves	M.P. 469.0 to 464.9	55
3 Curves	M.P. 464.9 to 463.8	45
6 Curves	M.P. 463.8 to 460.1X	55
6 Curves	M.P. 460.1X to 457.7	50
5 Curves	M.P. 457.7 to 455.4	45
2 Curves	M.P. 455.4 to 453.2	55
3 Curves	M.P. 453.2 to 451.6	45
7 Curves	M.P. 451.6 to 448.2	55
2 Curves	M.P. 448.2 to 447.4	70

NEEDLES YARD

Freight Lead	M.P. 574.8 to 580.2	30
"H" Street Crossing	M.P. 578.1	15

*Denotes restrictions protected by Inert ATS Inductors

SELIGMAN SUBDIVISION

(D) SPEED RESTRICTIONS - SWITCHES

Maximum speed permitted through turnout of other than main track switches - 10 MPH; all main track turnouts and crossovers - 15 MPH; except for spring and Dual Control switches and crossovers at following locations:

"D" - Dual Control Switch "EE" - East End
 "S" - Spring Switch "WE" - West End

Station	Type	Location	MPH
Winslow	D	Yard Track No. 1 M.P. 286.7	20
	D	Switch North Track M.P. 287.9	50
	D	Freight Leads to South Track	50
	D	Crossover M.P. 288.1	50
	D	Crossover M.P. 288.3	50
Canyon Diablo	D	Crossover M.P. 288.5	50
	D	EE & WE Siding	40
	D	Crossover M.P. 310.5	50
Darling	D	Crossover M.P. 312.1	50
	D	Crossover M.P. 326.7	50
Flagstaff	D	2 Crossovers M.P. 329.5	50
East Belmont	D	2 Crossovers M.P. 342.0	50
Maine	D	2 Crossovers M.P. 354.5	50
Williams Jct.	D	2 Crossovers M.P. 362.1	50
	D	Crossover M.P. 374.3	50
	D	EE & WE Yard Track No. 1	30
	D	Crossover M.P. 375	50
	D	Switch from Seligman Subdivision to Phoenix Subdivision	40
East Perrin	D	Crossover M.P. 383.1	50
West Perrin	D	Crossover M.P. 385.6	50
East Doublea	D	Crossover M.P. 392.0	50
West Doublea	D	Crossover M.P. 395.1	50
East Eagle Nest	D	Crossover M.P. 405.5	50
West Eagle Nest	D	Crossover M.P. 407.5	50
East Crookton	D	Crossover M.P. 418.3	50
West Crookton	D	Crossover M.P. 420.5	50
Seligman	D	Crossover M.P. 427.7	50
	D	Crossover M.P. 429.6	50
	D	Crossover M.P. 429.9	50
	D	EE and WE No. 1 Track	50
Pica	S	WE North Siding	30
Yampai	S	EE South Siding; WE North Siding	30
Nelson	S	EE South Siding; WE North Siding	30
Peach Springs	S	EE South Siding; WE North Siding	30
Truxton	S	EE South Siding; WE North Siding	30
Valentine	S	EE South Siding	30
Walapai	S	EE South Siding	30
	S	WE North Siding	15
Berry	S	EE South Siding; WE North Siding	30
Kingman	S	EE South Siding; WE North Siding	30
	S	WE South Siding (normal position lined for quarry track)	10
Harris	S	EE South Siding	30
Griffith	S	EE South Siding; WE North Siding	30
Athos	S	EE South Siding	30
Yucca	S	EE South Siding; WE North Siding	30
Franconia	S	EE South Siding; WE North Siding	30
	S	EE South Siding; WE North Siding	30
Topock	S	EE South Siding; WE North Siding	30
Needles	D	Crossover M.P. 574.7	50
	D	Frt. Lead to North Track M.P. 574.8	50

SELIGMAN SUBDIVISION

2. TRACKS BETWEEN STATIONS

Name	Mile Post Location	Capacity in Feet	Switch Connection
Dennison North Track	298.3	520	East & West
South Track	298.2	505	East & West
Sunshine South Track	305.9	3617	East & West
Angell North Track	322.7	Wye	East & West
South Track	322.7	330	East & West
Cosnino North Track	333.1	430	East & West
South Track	333.3	1044	East & West
Railhead North Track	339.9	4735	East & West
Ralston Purina			
South Track	340.2	Yard	East & West
Belmont South Track	355.9	490	East
North Track	356.3	412	East & West
Maine North Track	362.5	2272	East & West
Spur South Track	368.1	293	East
North Track	368.1	360	West
West Perrin			
North Track	385.4	560	East & West
West Doublea			
South Track	395.0	650	East & West
West Eagle Nest			
North Track	407.2	562	East & West
North Track	419.0	1877	East & West
SOUTH TRACK			
Powell	558.8	663	East
Audley	438.8	1000	East
Hackberry	489.8	1788	East & West
NORTH TRACK			
Audley	440.9	200	West
Shipley	461.4	Yard	East & West
Hackberry	489.0	4934	West
McConnico	521.2	1921	West
Haviland	545.8	475	West

3. TRACKSIDE WARNING DEVICES (Special Instruction 9)

Location	Type	Locator and Signals Affected
M.P. 290.5	Highwater	Westward controlled signal M.P. 287.5 Automatic signals 2912-2914
M.P. 294.2 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 305.9 (Both Tracks) (Westward only)	Dragging Equip.	Rotating white lights on posts opposite signals 3071-3073
M.P. 315.4 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 322.8 (Both Tracks) (Eastward only)	Dragging Equip.	Rotating lights on posts at signals 3202-3204
M.P. 336.8 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 358.3 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 377.6 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 379.4-379.8	Rock Slide	Warning lights M.P. 379.4, M.P. 379.9 & 380.9 and signals 3781-3783, 3792-3794 & 3812-3814

(continued on next page)

SELIGMAN SUBDIVISION

3. TRACKSIDE WARNING DEVICES (continued)

Location	Type	Locator and Signals Affected
M.P. 395.5	Rock Slide	Warning lights M.P. 393.6, 394.0, 394.5, 394.6, 396.0, 396.4, 397.0, controlled signals M.P. 395.1 and signals 3972 & 3974
M.P. 401.2 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 402	Rock Slide	Warning lights at M.P. 401.1 & 402.7 and signals 4001-4003 & 4032-4034
M.P. 409-411	Rock Slide	Warning lights and signals 4091-4093 & 4112-4114; red rotating lights at M.P. 409, 410 & 411
M.P. 426.9 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 439.0	Highwater	Signals 4381 & 4412
M.P. 452.1 (Both Tracks)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 467.7	Highwater	Signals 4671 & 4682
M.P. 473.9 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 504.6 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 505.9	Highwater	Signals 5051 & 5072
M.P. 536.0 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 552.2 & 554.8	Highwater	Signals 5511-5531 & 5532-5562 (for both bridges)
M.P. 561.5 (Both Tracks) (Bi-Directional)	Hot Box & Dragging Equip.	Rotating white light & radio communications at scanner
M.P. 562.8	Highwater	Signals 5611 & 5642
M.P. 569.2 (South Track)	Dragging Equip.	Rotating lights at M.P. 568
M.P. 575.8	Highwater	Westward controlled signal west of M.P. 574 & eastward signal 5772; and eastward controlled signal on freight lead at M.P. 576.9

WEST-WARD ↓		PHOENIX SUBDIVISION		↑ EAST-WARD	
Station Number	Siding Feet	STATIONS			Mile Post
20125		WILLIAMS JCT		CTC	375.2
		2.9			378.1
20150		WILLIAMS		PY	384.2
		6.1			401.2
20180	5433	SERENO		PTY	0.0
		20.5			21.2
20200		ASH FORK		PTY	21.2
		21.2			28.4
20210		DRAKE		TY	34.4
		7.2			46.2
20240	5711	ABRA		TWC	80.6
		6.0			86.8
20270	1480	KAYFOUR		TY	95.4
		11.8			101.5
20275	6262	TUCKER		TY	109.7
		20.0			116.4
20280	6623	SKULL VALLEY		TY	123.2
		8.2			135.0
20285	3087	KIRKLAND		TY	139.6
		8.6			150.3
20290	3460	GRAND VIEW		TY	157.6
		6.1			169.2
20297	4939	HILLSIDE		TY	173.6
		8.2			179.9
20305	6452	DATE		TY	183.7
		6.7			188.3
20315	1878	PIEDMONT		TY	191.6
		6.4			193.7
20322	3598	CONGRESS		TY	
		11.8			
19550		MATTHIE		TY	
		4.6			
19554	2322	WICKENBURG		TY	
		10.7			
19558	7453	CASTLE HOT SPRINGS		TY	
		7.3			
19562	3602	WITTMANN		TY	
		11.5			
19566	4222	BEARDSLEY		TY	
		4.5			
19578	3622	ENNIS		TY	
		6.3			
19654	3390	PEORIA		TY	
		3.8			
19690		GLENDALE		TY	
		4.6			
19694		ALHAMBRA		TY	
		2.7			
19700		MOBEST		TY	
		2.1			
19700		PHOENIX		TY	
		(208.8)			

CTC in effect on main track between Williams Jct. and Williams M.P. 378.1.

TWC in effect between Williams M.P. 378.1 and Glendale.

Santa Fe and Southern Pacific trains may jointly use tracks at east and west end of Union Depot at Phoenix.

At Phoenix, before crossing Southern Pacific tracks on tail of wye, be governed by instructions in box on north side of Southern Pacific tracks.

YARD LIMITS

Ashfork, M.P. 399.6 to 1.3

Drake, M.P. 19.9 to 22.2

Matthie, M.P. 133.9 to 136.1

M.P. 181.5 to Phoenix M.P. 193.7

PHOENIX SUBDIVISION

SPECIAL INSTRUCTIONS

1 SPEED REGULATIONS

(A) MAXIMUM AUTHORIZED SPEED

	MPH
Phoenix Subdivision	49
Ennis Spur	20

Speed limit freight trains, with dynamic brakes not in use on descending grades:

Westward	MPH	Eastward	MPH
M.P. 375.0 to 400.5	25	M.P. 95.4 to 89.0	30
M.P. 12.0 to 31.5	30		
M.P. 54.9 to 145.0	30		

(B) SPEED RESTRICTIONS - TONNAGE

Maximum authorized speed for freight trains is:

45 MPH when averaging 90 tons or over per operative brake, or when train exceeds 7000 tons.

(C) SPEED RESTRICTIONS - VARIOUS

	LOCATION	MPH
6 Curves	M.P. 375.1 to 378.0	40
5 Curves &		
2 Street Crossings	M.P. 378.0 to 378.9	30
5 Curves	M.P. 378.9 to 381.1	40
18 Curves	M.P. 381.1 to 391.2X	35
1 Curve	M.P. 391.2X to 391.9X	30
32 Curves	M.P. 391.9X to 402	35
2 Curves	M.P. 0.2 to 0.8	20
12 Curves	M.P. 0.8 to 14.2	40
8 Curves	M.P. 14.2 to 21.1	35
1 Curve	M.P. 21.1 to 21.4	20
5 Curves	M.P. 21.4 to 23.2	30
2 Curves	M.P. 23.2 to 24.4	40
95 Curves	M.P. 83.5 to 123.2	35
1 Curve	M.P. 134.8 to 135.1	20
56 Curves	M.P. 135.1 to 150.3	35
1 Curve	M.P. 174.9 to 175.1	40
1 Curve &		
11 Crossings	M.P. 175.8 to 181.5	25
4 Curves &		
22 Crossings	M.P. 182.5 to 190.8	30
1 Street Crossing	M.P. 188.2 (eastward only)	20
1 Curve	M.P. 190.8 to 191.1	20
1 Crossing	M.P. 191.0	10
3 Curves &		
11 Crossings	M.P. 191.0 to 192.9	20
2 Switches &		
2 Crossings	M.P. 192.9 to 193.7	15

(D) SPEED RESTRICTIONS - SWITCHES

Maximum speed permitted through turnout of other than main track switches - 10 MPH; all main track turnouts and crossovers - 15 MPH.

PHOENIX SUBDIVISION

2. TRACKS BETWEEN STATIONS

Name	Mile Post Location	Capacity in Feet	Switch Connection
Daze	393.3	601	East
Meath	9.2	350	East
Matthie	135.2	1100	East & West
Lizard Acres	171.6	948	East & West
Surprise	172.5	937	East & West
Ennis Spur	174.1	19 miles	West
Goldbadge	(1.0)	806	East
Burnstead	(3.3)	1043	East & West
Webb Spur	(1.0)	8925	East
Olive Avenue	(.6)	1328	East & West
Wayne	(1.8)	706	East & West
Fennemore	(1.2)	1827	East & West
Waddell	(3.0)		
McMicken Spur			
Citrus Park	(2.2)	1820	East & West
McMicken	(2.6)	1035	East & West
Sun City	177.2	1873	West

3. TRACKSIDE WARNING DEVICES (Special Instruction 9)

Location	Type	Locator and Signals Affected
Bridge 88.9	Highwater	Rotating lights M.P. 88.1 & 89.6
M.P. 144.3	Highwater	Rotating lights M.P. 144.9 & 143.4
Bridge 146.6	Highwater	Rotating lights M.P. 145.7 & 147.3

WEST- WARD ↓		PARKER SUBDIVISION		↑ EAST- WARD	
Station Number	Siding Feet	STATIONS			Mile Post
19550		MATTHIE	TY		0.0
		22.3			
19534	5158	AGUILA			22.3
		17.7			
19532	2250	LOVE			40.0
		4.8			
19528	603	WENDEN		TWC	44.8
		5.2			
19524	1216	SALOME			50.0
		20.5			
19512	1530	UTTING			70.5
		9.4			
19508	750	BOUSE			79.9
		10.7			
19504	2404	WALL			90.6
		15.2			
19500		PARKER	PTY		105.8
		(105.8)			

TWC in effect between Matthie and Parker.

YARD LIMITS

Matthie M.P. 0.0 to 1.1

Parker M.P. 103.1 to 108.0

SPECIAL INSTRUCTIONS

1. SPEED REGULATIONS

(A) MAXIMUM AUTHORIZED SPEED

	MPH
Parker Subdivision	49

(B) SPEED RESTRICTIONS – TONNAGE

Maximum authorized speed for freight trains is:
45 MPH when averaging 90 tons or over per operative brake,
or when train exceeds 7000 tons.

(C) SPEED RESTRICTIONS – VARIOUS

	LOCATION	MPH
1 Curve & Switches	M.P. 0.0 to 0.6	15
3 Curves	M.P. 0.6 to 2.4	30
15 Curves	M.P. 53.2 to 58.2	25
3 Curves	M.P. 95.2 to 97.2	30
3 Curves	M.P. 100.0 to 101.9	30

(D) SPEED RESTRICTIONS – SWITCHES

Maximum speed permitted through turnout of other than main track
switches – 10 MPH; all main track turnouts and crossovers – 15 MPH.

3. TRACKSIDE WARNING DEVICES (Special Instruction 9)

Location	Type	Locator and Signals Affected
Bridge 0.2	Highwater	Rotating light west end of Bridge 0.2
Bridge 4.6 Bridge 5.1	Highwater Highwater	Rotating lights M.P. 3.6 & 6.3, activated signals may indicate highwater at both bridges

WEST- WARD ↓		CLARKDALE SUBDIVISION		↑ EAST- WARD	
Station Number	Siding Feet	STATIONS			Mile Post
20210	1571	DRAKE	PTY		0.0
		18.3			
20225	1158	PERKINSVILLE	Y		18.3
		19.7			
20235		CLARKDALE	Y		38.0
		(38.0)			

At Clarkdale, spring point derail switch, normally lined for derail, located at east end of yard on main track; also, spring point derrails, normally lined for derail, located at cement plant on main track as well as on Lower Track One, approximately 200 feet west of cement plant crossing.

YARD LIMITS

Drake to Clarkdale, M.P. 0.0 to 38.0

SPECIAL INSTRUCTIONS

1. SPEED REGULATIONS

(A) MAXIMUM AUTHORIZED SPEED

	MPH
Clarkdale Subdivision	20

(C) SPEED RESTRICTIONS – VARIOUS

	LOCATION	MPH
7 Curves	M.P. 11.9 to 13.2	15
7 Curves	M.P. 13.2 to 14.2	10
3 Curves	M.P. 14.2 to 15.0	15
5 Curves	M.P. 22.2 to 23.7	15
3 Curves	M.P. 28.0 to 28.5	15
17 Curves	M.P. 29.9 to 34.8	15

(D) SPEED RESTRICTIONS – SWITCHES

Maximum speed permitted through turnout of other than main track
switches – 10 MPH; all main track turnouts and crossovers – 15 MPH.

2. TRACKS BETWEEN STATIONS

Name	Mile Post Location	Capacity in Feet	Switch Connection
Bear	10.6	1098	East & West

ALL SUBDIVISIONS

4. The General Code of Operating Rules, effective October 27, 1985, is supplemented, modified or amended as follows:

Rule 1 supplemented by adding: When electric standard clocks are incorrect, they must be set to correct time. Any variation from correct time, up to nine seconds fast or slow, will be indicated by placard on mercury pendulum standard clocks.

Rule 2 supplemented by adding: While on duty, employees governed by the General Code of Operating Rules, except those employed in an office where a standard clock is located, must have and use a reliable watch capable of indicating time in hours, minutes and seconds.

Rule 3 supplemented by adding: Time may be compared by dialing extension 600, Topeka.

Rule 10 sixth paragraph amended to read: On tracks where there is a current of traffic, when yellow flag is to be placed in advance of a temporary speed restriction or track condition, yellow flags and green flags will be placed only for trains moving with the current of traffic.

Rule 19 sixth paragraph amended to read: The marker must be inspected at the initial terminal and each crew change point to see that it is properly displayed and functioning. Inspection will be made at crew change point, either by observation of marker at rear of train or readout information displayed in the cab of the controlling locomotive indicating that marker light is functioning if rear car equipped with an operative end of train device. If observed from rear of train, condition of marker must be communicated to outbound locomotive engineer.

Rule 26 last paragraph page 30 amended to read: Testing does not include visual observations made by an employee positioned inside or alongside a caboose, engine or passenger car; or inspection task to ascertain that a rear end marker is in proper operating condition on a train standing on a main track.

Rule 26 last paragraph page 32 amended to read: ON A MAIN TRACK - A blue signal must be displayed at each end of the rolling stock except such is not required for marker inspection task involving repositioning the activation switch or covering the photo electric cell. In lieu of blue signals the employee performing the marker inspection task may afford protection by personally contacting the employee at the controls of the engine and being advised by that person that the train is and will remain secure against movement until the inspection is completed.

Rule 97(4) amended to read: Verbal authority from the train dispatcher within APB limits; or to run with the current of traffic within TWC limits or where Rule 251 is in effect.

Rule 99 supplemented by adding: When necessary to provide protection against following trains, a crew member must go back at least the distance prescribed below:

Where Maximum Authorized Timetable Speed is	Distance
35 MPH or less	1 mile
36 MPH to 49 MPH	1 1/2 miles
50 MPH or over	2 miles

Rule 102(2) amended to read: Trains not exceeding 5,000 tons must not proceed until it has been determined that it is safe to do so either by visual inspection of train or knowledge that the train brake pipe pressure has been restored by observing caboose gauge, end of train device (ETD) or by making a brake pipe leakage test.

If train exceeds 5,000 tons, visual inspection must be made on each side of all cars and units, and it must be known that equipment and track are in safe condition and that all wheels are properly positioned on the rail before proceeding.

Train must not proceed, nor flagman be recalled, until engineer knows that visual inspection is completed where required or brake pipe pressure has been restored where applicable. When applying this rule, trains on the Phoenix, Parker and Clarkdale Subdivisions will be treated as if they are 5000 tons or more.

ALL SUBDIVISIONS

Rule 103(A) supplemented by adding: When movement is made on an auxiliary track included in the circuit of crossing warning devices, the circuit should be fouled and movement delayed, or stopped if "STOP" sign is displayed for train, until warning devices known to have been operating for 20 seconds.

Rule 104(M) first paragraph amended to read: Spring switches are identified by letters "S" or "SS", special targets, signs and/or lights. Facing point movements over spring switches will be protected by signals or indicators where required. Spring switch must not be trailed through unless switch is in normal position, or has been lined for the movement.

Rule 153 supplemented by adding: Where two or more main tracks are in service, they will be designated as follows:

1. If two tracks, the track to the right as viewed from a westward or southward train is the North Track, and the track to the left is the South track.
2. If three tracks, the farthest track to the right as viewed from a westward or southward train is the North track, the farthest track to the left is the South track and the track between the North and South tracks is the Middle track.
3. If four or more tracks, the farthest track to the left as viewed from a westward or southward train is No. 1 track and the tracks to the right thereof are No. 2, No. 3, No. 4, etc., respectively.

Rule 230 through 242 modified as follows. Aspects and indications as shown in General Operating Rules will not apply. Aspects and indications as shown in Arizona Division Timetable, Pages 26 and 27, will apply.

Rule 317(2) does not apply.

Rule 404 first paragraph amended to read: In track warrants and track bulletins, regular trains will be designated by number, as No. 10, adding engine number when necessary; extras by engine number and direction.

Rule 405 supplemented by adding: Track warrants and track bulletins may be transmitted mechanically to any location. Prescribed form for track warrant is shown on Page 168 and pre-printed pads of this form will be in the format shown. The form for mechanical transmission is changed, with Items (5) and (14) omitted, (16) revised, (18) and (19) added.

Mechanically transmitted track warrants must indicate total number of track bulletins (Item 16), track condition messages (Item 18) and items checked (Item 19). In Items (16) and (18), if none show 'no'. Employees receiving copies must assure that the correct number of track bulletins and track condition messages are received, and that 'items marked' correspond with those indicated in Item 19.

Rule 408(2) is amended to read: When authorized to WORK BETWEEN two specific points, movement may be made in either direction between those points without flag protection.

Rule 450 is supplemented by adding: Forms for track bulletins Form A and Form B have been revised. Form C will be used for mechanical transmission only, to permit issuance of additional "other conditions" when space in Line 11 of Form A is insufficient.

Mechanically transmitted track bulletins must indicate in space provided, the total number of lines used. Employees receiving copies must assure that the lines used correspond with the number indicated.

Rule 607 supplemented by adding: Any act of hostility, misconduct or willful disregard or negligence affecting the interests of the Company is sufficient cause for dismissal and must be reported.

Indifference to duty, or to the performance of duty, will not be condoned.

Courteous deportment is required of all employees in their dealings with the public, their subordinates and each other.

Boisterous, profane or vulgar language is forbidden.

Rule 623 amended to read: Employees whose duties are in any way affected by them, must have and comply with Air Brake Rules 901 through 928. Engineers, firemen and hostlers must have and comply with Air Brake and Train Handling Rules, Form 2501 Standard.

ASPECTS OF COLOR LIGHT AND SEMAPHORE SIGNALS	

RULE	NAME	INDICATION
230	CLEAR	Proceed.
231	APPROACH LIMITED	Proceed prepared to pass next signal not exceeding 60 MPH and to advance on diverging route.
232	ADVANCE APPROACH	Proceed prepared to pass next signal not exceeding 50 MPH and to advance on diverging route.
233		
234	APPROACH MEDIUM	Proceed; approach next signal not exceeding 40 MPH and be prepared to enter diverging route at prescribed speed.
235	APPROACH RESTRICTING	Proceed prepared to pass next signal at restricted speed.
236	APPROACH	Proceed prepared to stop at next signal, trains exceeding 40 MPH immediately reduce to that speed.
237	DIVERGING CLEAR	Proceed on diverging route not exceeding prescribed speed through turnout.
238	DIVERGING APPROACH	Proceed through diverging route; prescribed speed through turnout; approach next signal preparing to stop, if exceeding 40 MPH immediately reduce to that speed.
239		
240	RESTRICTING	Proceed at restricted speed.
241	STOP AND PROCEED	Stop, then proceed at restricted speed.
242	STOP	Stop.

ALL SUBDIVISIONS

5. (a) Trains or engines using auxiliary tracks must not exceed turnout speed for that track, unless indicated otherwise in Special Instruction 1(A).
- (b) Where street or highway crossings are shown, speed limit applies only while head end of train is passing over crossing.

6. MAXIMUM SPEED OF ENGINES.

Engines	Forward or Dead In Train (MPH)	When not Controlled From Leading Unit (MPH)
Amtrak 100-799; 5990-5998	90*	45
1215-1245#, 1453#, 1460#, Slug Units 120-121	45	45
All Other Classes	70	45

Forward speed applies when lead unit of train is controlling and is in backing position. EXCEPTION: When such unit is car body type, maximum authorized speed is 45 MPH.

* Engine without cars must not exceed 70 MPH.

When used as controlling unit, maximum authorized speed is 20 MPH.

7. Rule 101(B): Equipment listed below must not be moved through water above top of rail greater than the depths and not in excess of the speeds shown:

MAXIMUM DEPTH OF WATER THROUGH WHICH ENGINE MAY BE OPERATED AND MAXIMUM SPEEDS IN SUCH OPERATION

	Maximum depth above top of rail (Inches)	Maximum speed (MPH)
All Classes Except Amtrak	3	5
Amtrak	2	2

8. Derricks, cranes, pile drivers, spreaders and similar machinery moving on their own running gear must not be moved in trains except on authority of Superintendent, and trains handling such equipment must not exceed speeds indicated below:

Subdivision	Wrecking Derricks MPH	Pile Drivers AT-199454 AT-199455 AT-199457 AT-199459 AT-199460 AT-199461 AT-199462 AT-199463 AT-199464 AT-199465 AT-199466 AT-199467 and Jordan Spreaders MPH	Locomotive Crane AT-199720 Other Machines MPH
Gallup, Seligman, Phoenix, Belen, and Parker Subdivisions	40	45	30
All Other Subdivisions	15	15	15

Locomotive crane AT-199720 and pile drivers must be handled in trains next to engine.

Trains or engines handling wrecking derricks, cranes, pile drivers, Jordan spreaders, and similar machinery moving on their own running gear, through a turnout must not exceed one-half the maximum authorized speed for that turnout.

All foreign line scale test cars must be handled in trains immediately ahead of caboose or as rear car at speed not exceeding 50 MPH.

9. RULE 109(C) TRACKSIDE WARNING DETECTORS:

When rock slide indicated, trains must proceed at restricted speed until track at this location is known to be clear.

When train is stopped at signals in connection with highwater indicator, bridge and track must be inspected before proceeding over bridge.

ALL SUBDIVISIONS

Abnormal heat from hot wheels (sticking brakes), overheated journals, traction motors or suspension bearings will actuate trackside indicators. Dragging equipment and wide or shifted loads will also actuate trackside indicators at locations so equipped.

INSTRUCTIONS APPLICABLE TO ALL TYPES:

- To locate defects indicated by a detector, crew must count axles. If defect(s) indicated is for a hotbox or hot wheel, train may be rolled by a crew member on ground. If defect(s) indicated is for other than a hotbox or hot wheel, train must stop and crew member walk to location of such equipment.
- If an overheated journal is found, the car or unit must be setout. If heat caused by sticking brakes and condition is corrected, train may proceed at prescribed speed. If an overheated condition on indicated journal is not found, make close inspection of 12 journals ahead of and behind the indicated journal. If nothing found wrong (or entire train has been inspected) train may proceed at prescribed speed for the next 30 miles where it must stop for an identical inspection unless train was checked by an intervening detector or is delivered to a terminal where mechanical inspection is made.

Mechanical forces at the terminal, or relieving crew at crew change point where mechanical inspection is not made, must be informed of these conditions.

If abnormal heat is detected on same car by an intervening detector, or during a stop for inspection, the car or unit must then be setout. EXCEPTION: Train crew must request and be governed by instructions from Chief Dispatcher concerning further handling of 10-Pack equipment after second detector stop.

- When making inspection for hotbox, give particular attention to heat of journals and hub of wheels; observing for smoke, sluffing or melting of bearing surface, or metallic cuttings in journal box of friction type bearings.
- When inspecting indicated journals, or journals ahead of and behind indicated journals or equipment, if the bare hand cannot be held on a roller bearing housing for a few seconds the bearing should be considered overheated. WARNING: CAUTION AND GOOD JUDGMENT SHOULD BE EXERCISED AS DEFECTIVE COMPONENTS CAN BECOME EXTREMELY HOT AND COULD CAUSE PERSONAL INJURY.

Use yellow crayon marker to write date and letter "X" above each journal indicated or found to be overheated and the date and letter "W" above each wheel indicated, found to be defective or overheated.

- Any detector failure or malfunction observed must be reported to the train dispatcher as promptly as practicable. Train dispatchers must not instruct trains to disregard detector indications and proceed without stopping for required inspection, unless they have been informed by a signalman that the detector is actually inoperative.

When a train is stopped by detector, information required by Revised Form 1571 Standard must be transmitted verbally to train dispatcher's office.

- Trains must not exceed 30 MPH while moving over hotbox detectors (scanners) when:
 - it is snowing or sleeting; or
 - there is snow on ground which can be agitated by a moving train.

INSTRUCTIONS APPLICABLE TO RADIO (REPORTER) TYPE:

- After train passes the detector:
 - If no defects were noted, a message stating "NO DEFECTS" will be transmitted via radio and train may proceed at prescribed speed.
 - If no radio message is transmitted, or if no message or audible tone (see Item 4) is received, train may proceed at prescribed speed and must be observed closely enroute.
- If rotating white light is illuminated before head-end of train reaches the detector, or a message stating "SYSTEM FAILURE" is transmitted via radio, crew must be alert for possible radio transmission of a message or audible tone (see Item 4) should an alarm occur during passage of the train.
 - If such message or tone is not received, train may proceed at prescribed speed.
 - If such message or tone is received, train must be governed by Item 4.

ALL SUBDIVISIONS

3. If rotating white light becomes illuminated as train passes the detector but a message or audible tone is not transmitted via radio, entire train must be inspected for defects.
4. If defects are noted as train passes the detector, a rotating white light will become illuminated, and:
 - A. A message stating "YOU HAVE A DEFECT" will be transmitted via radio; or
 - B. An audible tone will be transmitted via radio. The tone will be (a) a fast beep if on North track, (b) a slow beep if on Middle or South track or (c) a continuous tone if two trains are passing detector at the same time and defects are noted in each train.

When these warnings are received, train must immediately reduce to 20 MPH. When rear end is 300 feet beyond the detector, identification of defects noted, by type and location in train, will be transmitted via radio and proper inspection must be made. The radio transmission will be repeated one time. References to defect locations will be from HEAD-END of train, and references to "LEFT" or "RIGHT" side are to the engineer's left or right side in the direction of travel.

5. If a train received 4 defective car* alarms, 3 or more hotbox alarms, 2 or more dragging equipment alarms, or one wide load alarm, remainder of train must be inspected for additional defects.

*DEFECTIVE CAR alarm indicates more than three defects on a particular car. Inspection must be made of all journals and wheels on that car, also on 3 cars or units ahead of and behind that car.

INSTRUCTIONS APPLICABLE TO LOCATOR (READOUT) TYPE:

1. When actuated by a condition on a train, a rotating white light will illuminate at detector and locator locations. Trains must immediately reduce speed to not exceed 20 MPH and stop must be made with head-end at locator, if possible; readout observed and instructions in the locator cabinet complied with. Counters will indicate accumulated axle count between defective axle and rear of train. If counters fail to show location of defective equipment, or if rear car of train is indicated as location of defective equipment and no defect(s) found on that car, the entire train must be thoroughly inspected for hot journals, wheels, bearings or dragging equipment.
2. When rotating white light is illuminated before train reaches the detector, stop must be made and locator observed unless otherwise instructed by train dispatcher. If any lamps in locator cabinet are lighted, or an axle count is indicated on register, be governed by above instructions. If no lamps are lighted, or counters have not registered, train may proceed at prescribed speed and must be observed closely enroute.

10. Left blank intentionally.

11. Rule 104(L): All sidings having hand-thrown derails will have derail locked off rail, except when engines or cars are left unattended on siding.

12. Rule 82A: Clearances not required on Arizona Division.

13. Rule 450: Track bulletins will be used on Arizona Division.

14. Rule 403: An incorrect engine number shown on an address on a track warrant must be reported by a crew member and, if authorized by the train dispatcher, may be changed to show the correct engine number.

15. Rule 104(B): Trains operating without cabooses must not leave siding switch used to enter siding lined and locked for siding unless authorized to do so by the train dispatcher.

ALL SUBDIVISIONS

16. Maximum authorized speed of following equipment:

	MPH																																										
(a) Trains handling continuous welded or jointed rail, except 25 MPH on all curves of 6° or more. Locations of such curves to be furnished by train dispatcher (refer to Operating Circular)	40																																										
(b) Trains handling ACFX tank cars 17451 thru 17495 Trains handling NATX tank cars 10841 thru 10865	45																																										
(c) Trains handling gondolas: PC 598500 thru 598599, CR 598500 thru 598999 or SP 345000 thru 345699	45																																										
(d) Trains handling ATSF tank and work equipment cars: 100301 thru 101099 189000 thru 189999 192770 thru 192875 199880 thru 199899 202750 thru 202999 209000 thru 209999	45																																										
(e) Trains handling following tank cars: DVLX 4001 thru 4190 and the following UTLX cars: <table style="margin-left: 20px;"> <tr><td>76517</td><td></td><td></td></tr> <tr><td>76539</td><td>76556</td><td>76558</td></tr> <tr><td>76568</td><td>76595</td><td>76649</td></tr> <tr><td>76656</td><td>76696</td><td>76733</td></tr> <tr><td>76736 thru</td><td>76738</td><td></td></tr> <tr><td>76742 thru</td><td>76745</td><td>76747</td></tr> <tr><td>76748</td><td>76750</td><td>76751</td></tr> <tr><td>78256 thru</td><td>78269</td><td>78272</td></tr> <tr><td>78274</td><td>78278</td><td>78281</td></tr> <tr><td>78285</td><td>78287 thru</td><td>78293</td></tr> <tr><td>78326</td><td>78328 thru</td><td>78333</td></tr> <tr><td>78336 thru</td><td>78340</td><td>78343</td></tr> <tr><td>78344</td><td>78347</td><td>78348</td></tr> <tr><td>78350</td><td>78353</td><td></td></tr> </table>	76517			76539	76556	76558	76568	76595	76649	76656	76696	76733	76736 thru	76738		76742 thru	76745	76747	76748	76750	76751	78256 thru	78269	78272	78274	78278	78281	78285	78287 thru	78293	78326	78328 thru	78333	78336 thru	78340	78343	78344	78347	78348	78350	78353		40
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78336 thru	78340	78343																																									
78344	78347	78348																																									
78350	78353																																										
(f) Trains handling EMPTY "Schnabel" type cars: <table style="margin-left: 20px;"> <tr><td>APWX 1004</td><td>GEX 40010, 80002, 80003</td></tr> <tr><td>BBCX 1000</td><td>GPUX 100</td></tr> <tr><td>CAPX 1001</td><td>HEPX 200</td></tr> <tr><td>CEBX 100, 101</td><td>KWUX 10</td></tr> <tr><td>CPOX 820</td><td>WECX 101, 102, 200-203,</td></tr> <tr><td>CWEX 1016</td><td>301</td></tr> </table>	APWX 1004	GEX 40010, 80002, 80003	BBCX 1000	GPUX 100	CAPX 1001	HEPX 200	CEBX 100, 101	KWUX 10	CPOX 820	WECX 101, 102, 200-203,	CWEX 1016	301	40																														
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All cars listed in (f) must be handled on or near the rear end of trains not exceeding 100 cars in length, must not be handled in trains requiring pusher service and must not be humped or switched with motive power detached.																																											
(g) Trains handling LOADED "Schnabel" type cars listed in (f), also CEBX 800 LOADED & EMPTY, must be governed by instructions issued for each individual movement.																																											
(h) Trains handling solid consists of military equipment	55																																										
(i) Trains handling empty gondola cars KCS 801011 thru 802930	45																																										
(j) Trains handling hopper cars WFAX 84654 thru 84700	45																																										
(k) Solid trains of empty trailers and/or empty containers	55																																										

17. Within Track Warrant Control limits, any track warrant received with only Box 13, 14 and 17 marked requiring speed or other restriction must be retained and complied with on all trips during the tour of duty on which they were received.

ALL SUBDIVISIONS

HAZARDOUS MATERIAL

IN CASE OF ACCIDENT, your safety is the first consideration. If you suspect hazardous material may be involved in a derailment, do the following IF IT IS SAFE TO DO SO:

- A. DETERMINE STATUS OF ALL CREW MEMBERS.
- B. RESCUE INJURED, remove them to a safe area, and call for assistance.
- C. IF FIRE OR VAPOR CLOUDS are visible, evacuate to 1/2 mile upwind of vapor cloud or fire. Before evacuating take all paperwork such as waybills, consist and emergency response information with you.
- D. NOTIFY the Manager Operations Planning by the quickest means possible. If Railroad communications fail or is not available, call long distance collect - (602) 289-7236. Tell him:
 - (1) Your name and title.
 - (2) Train identification symbol.
 - (3) Specific location of the incident (station, mile post location, nearest street or highway crossing).
 - (4) If you need fire or medical response.
- E. IF NO FIRE OR VAPOR CLOUDS are apparent:
 - (1) EXTINGUISH smoking materials and caboose stove. Do not smoke in the vicinity of a hazardous material incident. Do not ignite fusees.
 - (2) CHECK the train consist and shipping papers to determine what cars and commodities may be involved and where they are located on the train.
 - (3) INSPECT the train to determine the condition of cars involved. Use a buddy system if possible. Tell crew members what products may be involved and what risk they may pose. Approach from upwind (wind at your back) or uphill side. Go no nearer than absolutely necessary to assess the condition of the cars. Use your eyes, ears and nose to detect any fire, vapor or gas clouds, smoke, leak or unusual smells or noises. If you detect these conditions, DO NOT GO NEAR THE CARS, evacuate all crew members to a safe distance.
- F. PROVIDE the Manager Operations Planning with as much of the following information as possible after you have inspected the train.
 - (1) Initial and number of cars involved.
 - (2) Location of hazardous material in derailment.
 - (3) Description of hazardous materials from shipping papers.
 - (4) Condition of each car. Upright or turned over, intact; punctured or leaking; on fire or near fire; producing a vapor or gas cloud; unusual odor or unusual noise.
 - (5) Location of people, property, or public systems (roads, power lines, hospitals, etc.) which could be subject to damage.
 - (6) Location of nearby stream, river, pond, lake or other body of water.
 - (7) Location of access roads.
 - (8) Any other information that will help the Manager understand the situation.
- G. WARN people to stay away from the emergency area.
- H. IDENTIFY yourselves to responding police or fire personnel. GIVE them your train consist and hazardous materials emergency response printout. HELP them determine which cars and products are derailed or damaged. The conductor may provide waybill data, but should retain the waybills for delivery to a responding operating officer.
- I. REMAIN at the scene at a safe distance until relieved by a railroad Operating Officer.

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Position in train of placarded cars containing hazardous materials

NOTE: Cars with same placards may be placed next to each other.

Shippers may use either words or numbers on placards. Numbers shown are samples. Other numbers may appear on placards.

HOW TO USE THIS CHART:

To determine where a placarded car can be placed in a train follow these steps:

- Determine the type of placard applied to the car.
- Determine the type of car.
- Follow vertically down the chart and note which lines apply.
- The symbol X indicates the wording at the side that applies.

See footnotes for explanation.

RESTRICTIONS

Must not be nearer than the sixth car from the engine, occupied caboose or passenger car. If total number of cars in train does not permit, must be placed as near the middle of train as possible but not nearer than the second car from the engine, occupied caboose or passenger car.

MUST NOT BE NEXT TO:

Engine, occupied caboose or passenger car	X	X	X	X	X
Car occupied by guard or escort	X (1)	X (1)		X (1)	
Loaded plain flat car	X	X		X	
Loaded bulkhead flat car	X (2)	X (2)		X (2)	
Loaded TOFC/COFC flat car	X	X (3)		X (4)	
Flat Car loaded with vehicles	X	X		X (5)	
Open top car with shiftable load	X (2)	X (2)		X (2)	
Car with internal combustion engine in operation. Car with any heating apparatus or any lighted stove, heater or lantern	X	X		X	
Car placarded EXPLOSIVES A	X		X	X	X
Car placarded POISON GAS		X	X	X	X
Car placarded RADIOACTIVE	X	X		X	X
Any loaded placarded car (other than COMBUSTIBLE or same placard)	X	X	X		

(1) A placarded rail car must be next to and ahead of any car occupied by the guards or technical escorts accompanying this car. However, if a car occupied by guards or technical escorts is equipped with a lighted heater or stove, it must be the fourth car behind any car placarded EXPLOSIVES A.

(2) Restriction applies only when any of the lading protrudes beyond the car ends or when any of the lading extending above the car ends is liable to shift so as to protrude beyond the car ends.

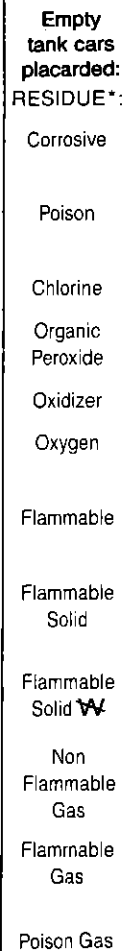
NO RESTRICTIONS

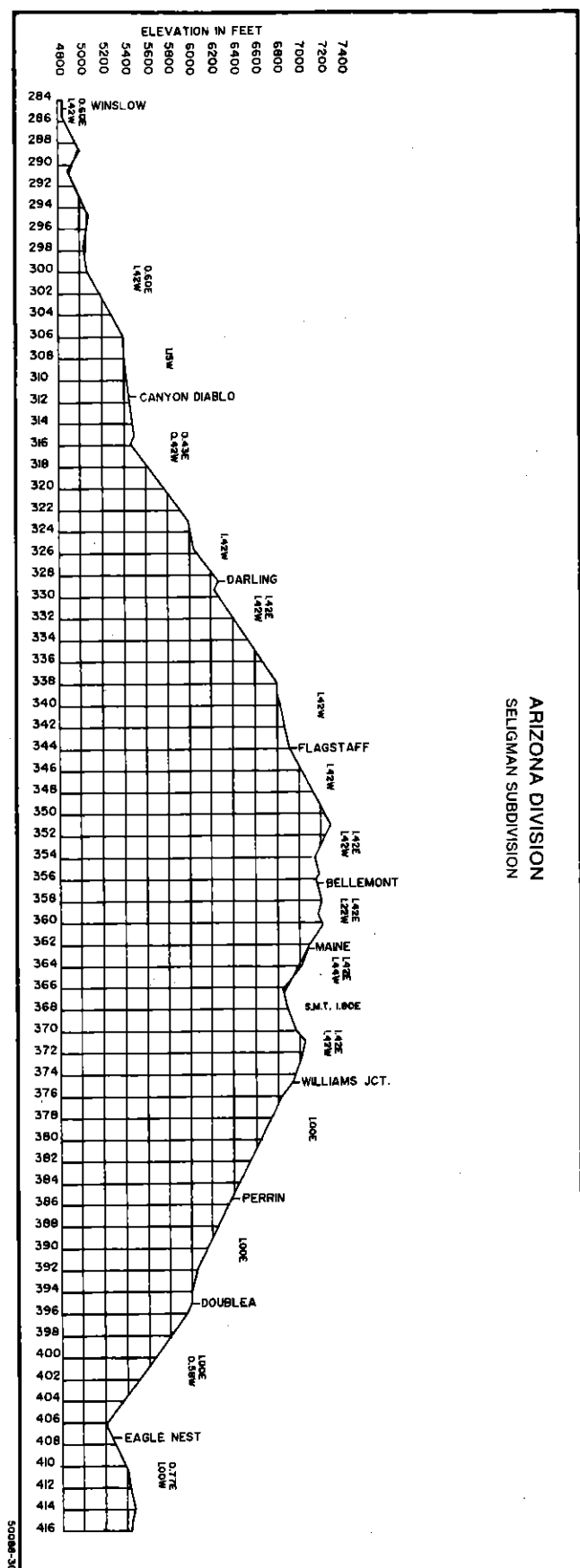
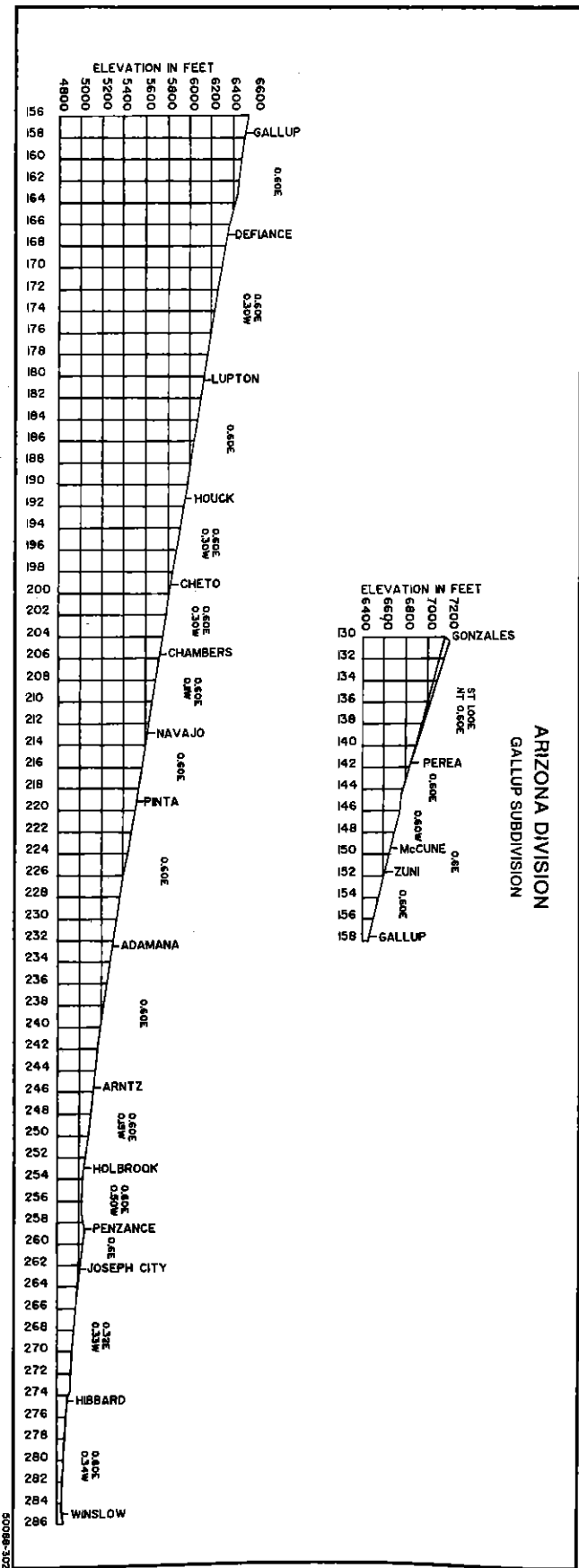
(3) Cars placarded EXPLOSIVES A may be placed next to each other.

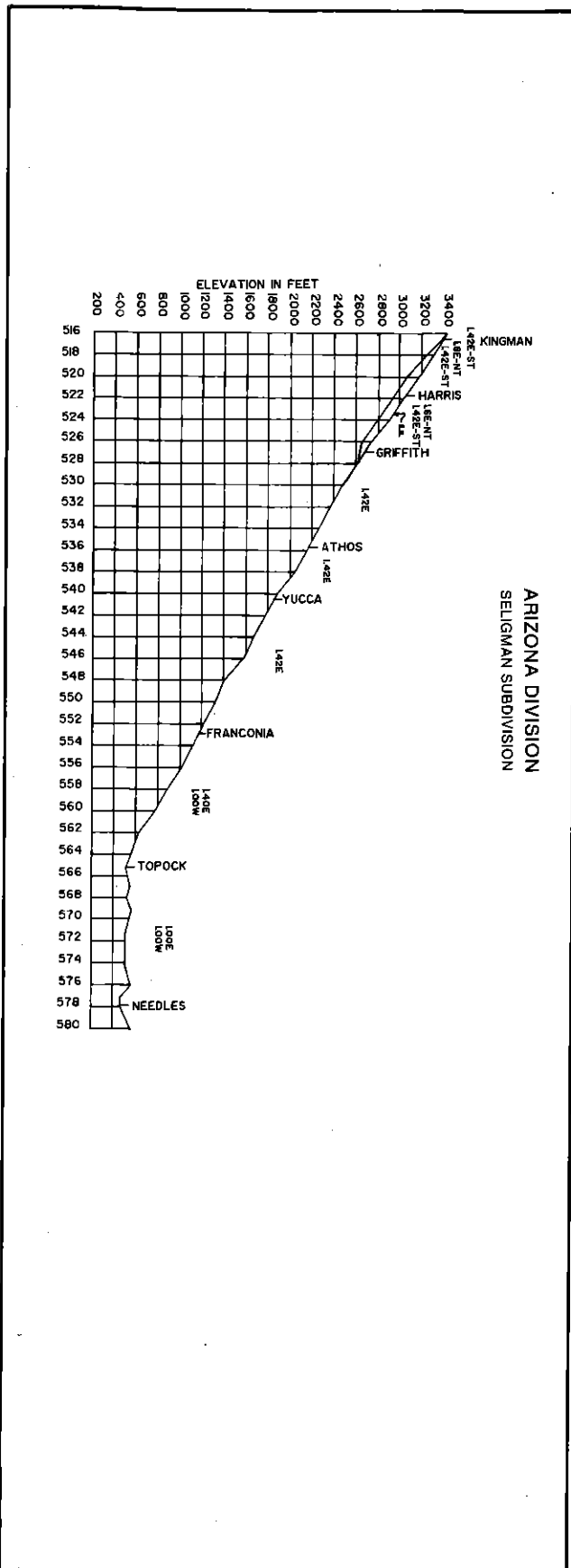
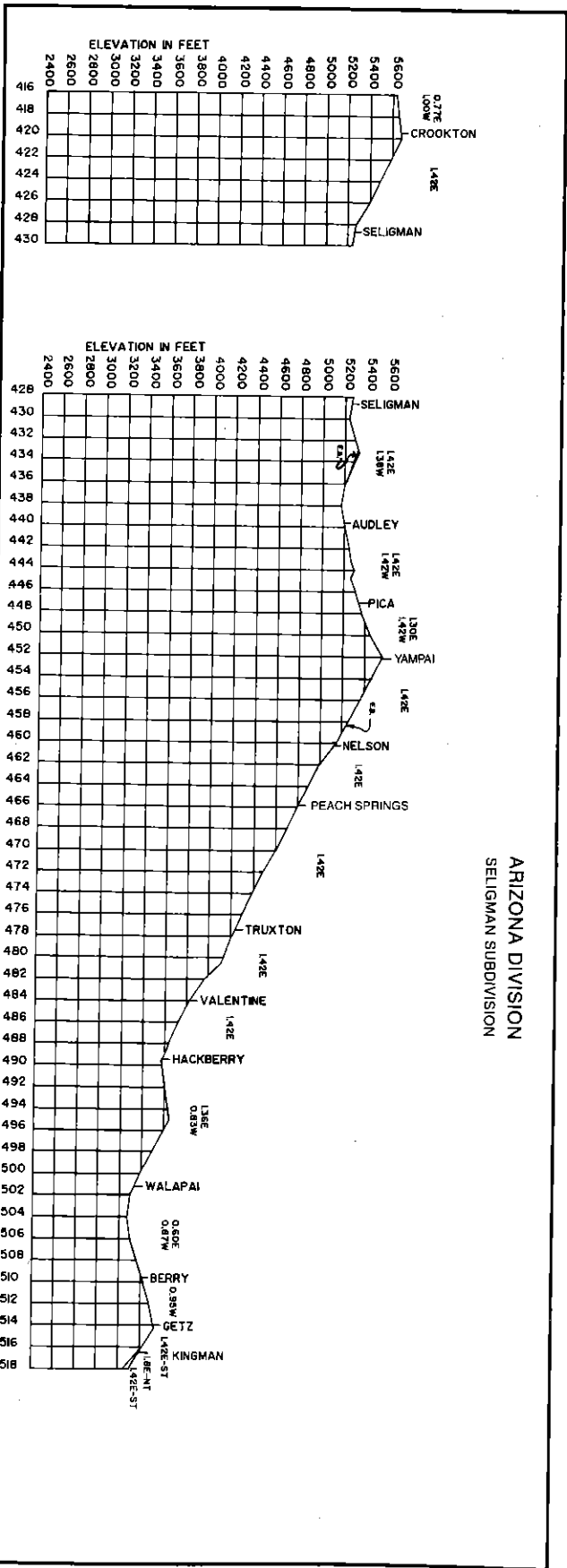
(4) Restriction applies only to loaded flatbed or opentop trucks and trailers and to loaded trucks and trailers without securely closed doors.

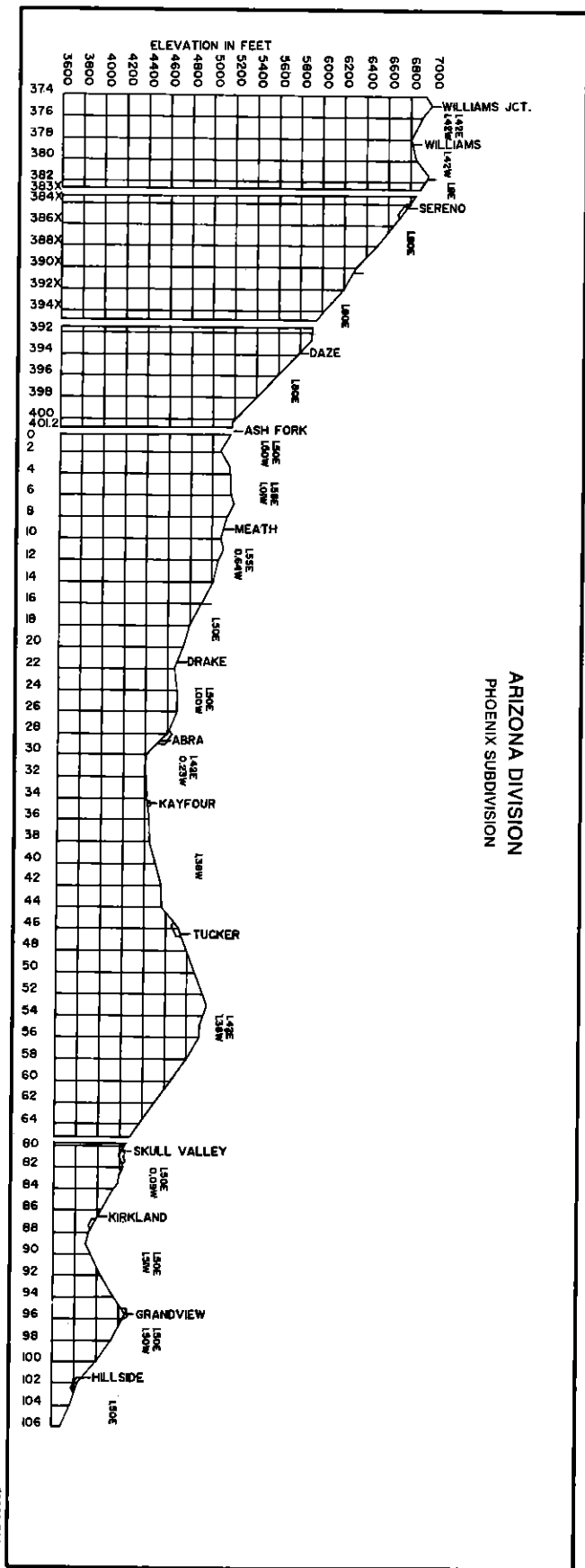
(5) Restriction does NOT apply to a car loaded with vehicles secured by a device designed for that purpose and permanently installed on the car and of a type generally accepted for handling in interchange between railroads.

* Examples of Residue Placards are shown on following page.

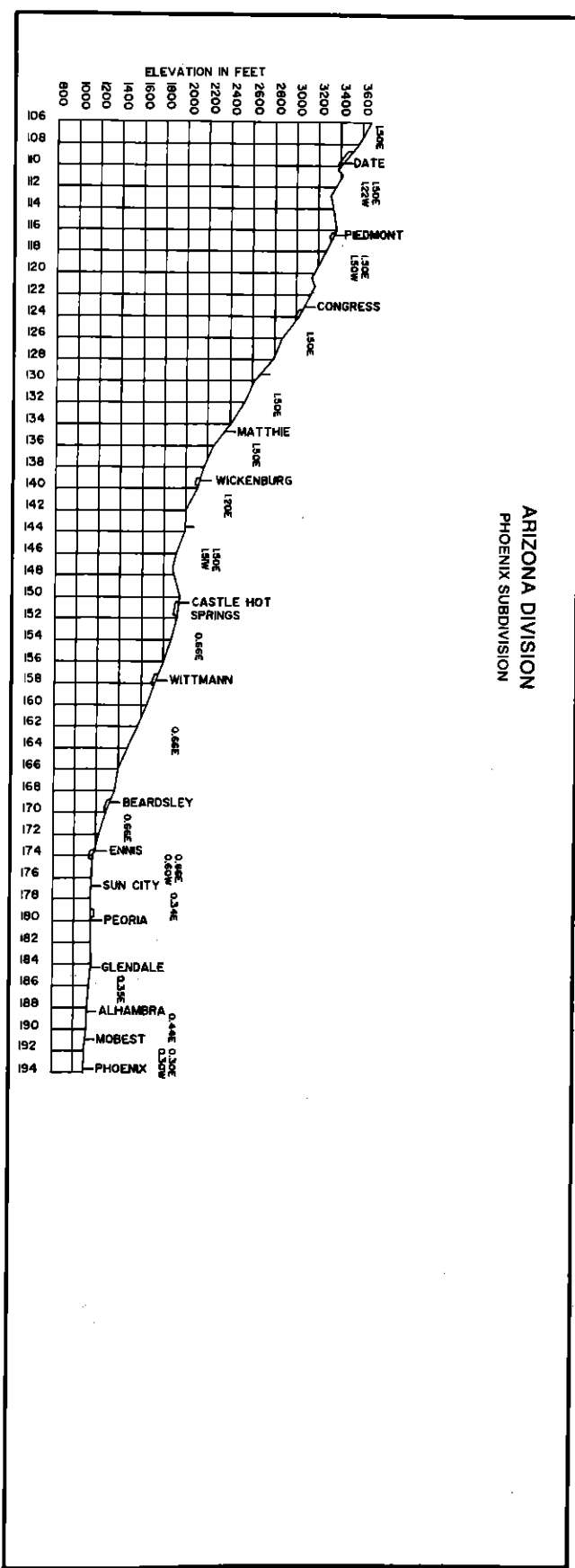








50088-305



50088-307

ALL SUBDIVISIONS

When helper engine is placed behind a caboose, not more than two six-axle operating units totaling not more than 179,400 pounds tractive effort, or not more than two four-axle operating units totaling not more than 135,600 pounds tractive effort or a combination of one six-axle and one four-axle unit totaling not more than 157,600 pounds tractive effort will be used. Below is list showing the weight, tractive effort and horsepower rating of units by class:

CLASS	MAKE	TYPE	WEIGHT	TRACTION EFFORT	HORSE POWER	DYNAMIC BRAKE***
*200	EMD	F40PH	259,500	38,240	3000	4BF
1310	EMD	GP7	249,000	41,300	1500	No
1460	EMD	SWBLW	262,500	41,300	1500	No
1556	EMD	SD39	389,000	82,284	2500	6EF
2000	EMD	GP7	249,000	41,300	1500	No
2244	EMD	GP9	249,000	45,200	1750	No
2300	EMD	GP38	262,500	55,460	2000	4ET
2370	EMD	GP38-2	260,800	55,400	2000	No
2700	EMD	GP30	262,900	51,400	2500	4BT
2800	EMD	GP35	266,000	51,400	2500	4BT
3000	EMD	GP20	265,000	44,800	2000	4BT
3400	EMD	GP39-2	270,000	55,400	2300	4EF
3600	EMD	GP39-2	264,400	55,400	2300	4EF
3800	EMD	GP40X	264,400	62,685	3500	4EF
3810	EMD	GP50	271,663	64,200	3500	4EF
3840	EMD	GP50	273,120	64,200	3500	4EF
**4000	EMD	GP60	274,500	57,500	3800	4EF
5000	EMD	SD40	391,500	82,100	3000	6ET
5020	EMD	SD40-2	391,500	83,160	3000	6EF
5200	EMD	SD40-2	391,500	90,475	3000	6EF
5250	EMD	SDF-40-2	388,000	83,100	3000	6EF
5300	EMD	SD45	391,500	72,286	3600	6ET
5381	EMD	SD45	391,500	72,286	3600	6EF
5426	EMD	SD45	389,500	72,286	3500	6ET
5501	EMD	SD45B	393,920	72,286	3600	6ET
5502	EMD	SD45B	392,860	82,100	3600	6EF
5510	EMD	SD45-2B	395,500	83,100	3600	6EF
5705	EMD	SD45-2	391,500	73,650	3600	6EF
5800	EMD	SD45-2	395,500	83,100	3600	6EF
5950	EMD	SDF45	395,000	71,290	3600	6ET
5990	EMD	SDFP45	399,000	68,006	3600	6ET
6300	GE	U23B	262,500	60,400	2250	4EF
6350	GE	B23-7	268,000	60,400	2250	4EF
6364	GE	B23-7	265,000	60,400	2250	4EF
6390	GE	B23-7	264,000	61,000	2250	4EF
6405	GE	B23-7	266,000	61,000	2250	4EF
7200	GE	SF30-B	285,150	71,200	3000	4EF
**7400	GE	B39-8	285,940	68,100	3900	4EF
**7410	GE	B40-8	283,000	69,200	4000	4EF
7484	GE	B36-7	274,500	64,600	3600	4EF
8010	GE	C30-7	398,800	90,600	3000	6EF
8020	GE	C30-7	392,500	90,600	3000	6EF
8099	GE	C30-7	395,000	91,500	3000	6EF
8153	GE	C30-7	392,500	91,500	3000	6EF
8736	GE	U36C	391,500	90,600	3600	6EF
9500	GE	SF30C	391,500	91,500	3000	6EF

* Amtrak passenger units.

** For the purpose of calculating dynamic braking effort, Units 4000 - 4019 and 7400 - 7429 must be considered as having six axles.

*** Information relating to dynamic brake is designated as follows:
 Number indicates number of axles.
 Type is indicated by B - Basic, E - Extended Range.
 System is indicated by F - Flat, T - Taper.

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