

EMERGENCY TELEPHONE NUMBERS

Ambulance	0
Emergency operator	0
Fire	119
Police	110

DISPATCHERS' TELEPHONES

Located as follows:

Colon Station
Tower B
Cristobal Yard Office
Mt. Hope Station
Mindi
Gatun Station
Quebrancha (Span 11.15)
Monte Lirio Station
Bohio (South Switch)
Frijoles Station
Caimito (South Switch)
Gamboa Station
Summit (South Switch)
Madden (North Switch)
Track Span 38-3 (Dial 4-454)
Pedro Miguel Station
Tunnel (Span 42-1)
Corozal Station (In office)
Diablo (North Switch)
Balboa Yard Office
Balboa Station platform (North end)
Panama Station (Conductor's Room)

WATCH INSPECTORS

Colon:
C. Casullo,
45 Front St.
Panama:
Mrs. B. J. Burgoon,
159 Central Ave.

SPECIAL INSTRUCTIONS

1. SAFETY FIRST.

2. Trains 2 and 3 will stop at Frijoles for passengers to or from Panama, Balboa Heights, and Colon.

3. STANDARD CLOCK.

Dispatcher's office, Balboa Heights.

4. TRAIN ORDER STATIONS.

Followed by sign D are open:

Colon	6:30 a. m. to 6:30 p. m.
Gatun	6:45 a. m. to 6:30 p. m.
Frijoles daily ex S. & H.	6:00 a. m. to 6:00 p. m.
Frijoles Sun. & holidays	7:00 a. m. to 6:30 p. m.
Gamboa daily ex S. & H.	6:15 a. m. to 6:00 p. m.
Gamboa Sun. & holidays	7:00 a. m. to 6:00 p. m.
Pedro Miguel D ex S. & H.	6:45 a. m. to 6:15 p. m.
Pedro Miguel S. & H.	7:00 a. m. to 6:15 p. m.
Diablo (Intermittent)	7:00 a. m. to 5:00 p. m.
Panama	6:30 a. m. to 6:30 p. m.

72. SUPERIORITY OF TRAINS.

SOUTHWARD trains are superior to trains of the same class in the opposite direction.

CLEARING OF TRAINS.

A train must not leave its initial station without receiving Clearance Card (Form A).

Where the initial station is a nontelegraph office, conductor, or engineer in the absence of the conductor, will receive clearance direct from the dispatcher.

83. TRAIN REGISTERS.

Colon	Passenger station
Cristobal	Yard office
Balboa	Yard office
Panama	Passenger station

Train register at Cristobal and Balboa for trains originating and terminating at Mt. Hope and Diablo only.

BULLETIN BOARDS AND BOOKS.

Colon	Passenger station
Cristobal yard	Yard office Engine house
Balboa yard	Yard office Engine house
Panama	Passenger station

SPUR TRACKS AND AUXILIARY SIDINGS

Track span	Name of track	Switch connections
4-3	Mindi Dairy	South
4-17	Atlantic Depot	North
6-11	Gatun Old Passing Track	North
6-16	Gatun Old Passing Track	South
25-5	Darien	North
28-6	Dump Six	South
30-4	Gamboa Run Around	North
30-7	Gamboa Run Around	South
34-6	Summit Spur No. 1	South
34-15	Summit Spur No. 2	South
35-8	Gold Hill (Off Summit Siding)	North
35-17	Incinerator	South
40-4	Paraiso	South
41-14	Tunnel	North
42-13	Miraflores	South
43-29	Fort Clayton	South
44-15	Albrook Field	North

NOTE.—Gatun Old Passing track has a capacity of 40 cars and Gamboa Run Around of 7 cars.

DERAILS

Location	Type of derail
Mt. Hope, Sub-station	Hand throw
Mindi, Dairy Track	Pipe connected
Mindi, Powder Dock track	Pipe connected
Gatun, North end Old Passing Track	Pipe connected
Gatun, Sub-station	Hand throw
Gatun, Lead to lower level locks	Hand throw
Dump Six	Pipe connected
Gamboa, Dredging Div. lead	Hand throw
Summit, House track	Pipe connected
Incinerator	Pipe connected
Madden, South end of siding	Pipe connected
Miraflores, Sub-station	Hand throw
Balboa, Sosa Hill Quarry track	Hand throw
Ancon, Spur to Commissary & M. E. Yard	Pipe connected

NOTE.—All turnouts having derails have been identified by painting base of switch stand with aluminum paint.

33. CROSSING WATCHMEN.

Crossing watchmen will use stop paddles by day, and white lanterns by night, to stop highway traffic.

PROTECTION OF MOVEMENTS OVER HIGHWAY CROSSINGS

Visual and audible signals for protection at highway crossings do not operate for movements in either direction on tracks other than Main Track, such as sidings, industrial tracks, etc.; nor do they operate on Main Track if a movement is reversed before running over and clearing the entire length of the bell-ringing track circuit. Therefore, the following instructions govern except when otherwise provided by special instructions: When a reverse movement is made on Main Track at a highway crossing in such a manner that the crossing signals do not operate, or on sidings or other tracks so protected, a member of the train crew must protect the crossing while the movement is being made.

Train and engine service employees must familiarize themselves with the location of crossings protected with the visual and audible signals.

When passing over any highway crossing protected by crossing bells or visual signals, motormen or engine-

(Continued on page 6)

SOUTHWARD							NORTHWARD										
SECOND CLASS		FIRST CLASS					Telegraph Calls	STATIONS	Station Numbers	Distance from Colon	Car Capacity of Sidings	FIRST CLASS				SECOND CLASS	
41	31	9	7	5	3	2						4	6	8	32	40	
DAILY	DAILY EXCEPT SUNDAY	DAILY	DAILY	DAILY	DAILY	DAILY	Leave	Arrive	Yard	Yard	Yard	Yard	MIXED	DAILY EXCEPT SUNDAY	DAILY		
MIXED																	
PM	AM	PM	PM	AM	AM	AM			AM	PM	PM	PM	AM	PM			
		10.00	5.00	11.00	7.00	J	COLON	D	0	0.00	Yard	8.30	2.30	6.25	9.15		
		10.02	5.02	11.02	7.02		Tower B			1.12	Yard	8.27	2.27	6.22	9.13		
8.00	5.30	f 10.04	s 5.04	s 11.04	s 7.04		Mount Hope		2	1.58	Yard	s 8.26	s 2.26	s 6.21	f 9.12	11.30	9.45
8.04	5.34	10.08	5.08	11.08	7.08		Mindi		4	4.58		8.21	2.21	6.16	9.07	11.25	9.40
							Fort Davis		6	5.74							
8.18	s 5.45	f 10.14	s 5.14	s 11.14 ³²	s 7.14	G	Gatun	D	7	6.79	29	s 8.17	s 2.17	s 6.13	f 9.04	s 11.14 ⁵	9.35
							Quebrancha		12	11.77	55	8.08	2.07	6.04	8.56	f 10.50	9.27
8.27	f 5.54	10.20	5.21	11.21	7.21		Monte Lirio		15	14.46	68	8.04	2.04	6.01	8.52	f 10.45	9.22
8.32	f 6.00	10.24	5.24	11.24	7.25		Bohio		18	17.81	24	8.00	2.00	5.57	8.47	f 10.37	9.17
8.37	f 6.05	10.28	5.28	11.28	7.29		Frijoles	D	21	20.92	55	f 7.56	1.56	f 5.53	8.42 ⁴¹	s 10.30	9.12
8.42 ⁸	s 6.15	10.34	f 5.34	11.32	f 7.35	JR	Darien		25	25.32						f 10.10	
	f 6.25						Caimito		27	27.03	28	7.45 ³	1.48	5.43 ⁷	8.32	10.07	8.56 ⁴¹
8.56 ⁴⁰	6.28	10.42	5.43 ⁶	11.40	7.45 ²		Gamboa	D	30	30.25	56	s 7.40	s 1.44	s 5.37	f 8.27	s 10.00	8.50
9.06	s 6.40	f 10.48	s 5.48	s 11.45	s 7.50	BO	Summit		35	35.18	55	7.31	1.35	5.27	8.18	f 9.35	8.40
9.17	f 6.50	10.57	5.56	11.53	7.58		Madden		36	36.18	11	7.29	1.33	5.25	8.16	9.20	8.38
9.19	6.52	10.58	5.57	11.54	7.59		Pedro Miguel	D	40	40.24	79	s 7.23 ³¹	s 1.26	s 5.18	f 8.10	s 9.10	8.30
9.28	s 7.23 ²	f 11.05	s 6.06	s 12.03	s 8.07	W	Fort Clayton		43	42.95							
							Corozal		44	44.23	30	s 7.15	1.18	s 5.09	8.03	f 8.55	8.22
9.38	f 7.32	11.11	s 6.14	12.09	s 8.15		Diablo	D	45	45.06	Yard	7.12	1.17	5.07	8.02	8.52	8.20
9.40	7.33	11.12	6.15	12.10	8.16	JN	Balboa Heights		46	46.26	Yard	s 7.10	s 1.15	s 5.05	s 8.00	8.50	
s 9.45	7.35	s 11.15	s 6.20	s 12.15	s 8.20		Tower J		47	46.40	Yard						
9.50	7.40	11.20	6.25	12.20	8.25	D	PANAMA	D	48	47.61	Yard	7.05	1.10	5.00	7.55	8.45	
PM	AM	PM	PM	PM	AM		Arrive	Leave				AM	PM	PM	PM	AM	PM
41	31	9	7	5	3							2	4	6	8	32	40
DAILY	DAILY EXCEPT SUNDAY	DAILY	DAILY	DAILY	DAILY							DAILY	DAILY	DAILY	DAILY	DAILY EXCEPT SUNDAY	DAILY

(Special instructions—continued from page 3)

men will observe if signals are operating. If not operating properly, notify Master of Transportation promptly by wire so that proper protection may be given the crossing.

YARD LIMITS.

Yard limit board located at mile post 2 governs all tracks north of that point.

Yard limit board located at track span 44-9 governs all tracks south of that point.

93. YARDS.

Northward movements, except scheduled first class trains, Panama to "Tower J," must be made on track No. 2, unless otherwise provided.

211. TRAIN ORDERS.

When conductors or engineers copy train orders direct from the dispatcher, they will write them in manifold during transmission, and repeat from the manifold copy. After the order is completed, a copy must be left in the train order box provided for that purpose.

LOCOMOTIVE CRANES.

Steam cranes 72 and 88 must be handled with boom forward when in train.

AIR BRAKES.

In switching passenger equipment, air brakes must be used unless impracticable, and cars which are occupied must not be uncoupled while in motion.

A running test of air brakes will be made on all passenger trains as soon as practicable after leaving initial station.

500 (a) (c).

Two arms are operated on masts of Automatic Block Signals Nos. 4505 and 4612, the top arms of which function as Automatic Block Signals. The

lower arms are defined as Take Siding Signals. Take Siding Signals are displayed in the manner prescribed in Rule 501 in two positions only, horizontal and 90 degrees above horizontal. Night indications are displayed in the manner prescribed in Rule 500 (a) and (c).

When a Take Siding Signal indicates "stop," a train will take siding and must not again enter main track until it has received Clearance Form A properly filled out, or until a verbal clearance is received from the Dispatcher. Take Siding Signals govern as prescribed herein but do not dispense with the use or observance of other signals.

501-221.

Two arms are operated on the masts of Automatic Block Signals Nos. 4583 and 4584, the top arms of which function as Automatic Block Signals. The lower arms are operated as Train Order Signals, govern trains at Diablo in accordance with Rule 221 and are controlled by the Operator from Diablo.

NOTE.—Diablo siding extends from north end of Balboa yard to Balboa Heights station; switches must be lined for normal position. No part of Diablo siding may be used for the storing of cars.

221-500.

During the hours train order stations at Gatun and Pedro Miguel are open, Automatic Block Signal 698, located at north end of siding at Gatun, and Automatic Block Signal 4034, located at north end of siding at Pedro Miguel may be operated as Semi-Automatic Block Signals requiring manual assistance from the Operator to bring them to either of their "proceed" indications. When either of these Semi-Automatic Block Signals indicates "stop," a train will stop clear of the route of opposing trains entering the siding.

NOTE.—The semi-automatic operation of Automatic Block Signals 698 and 4034 is provided primarily to safeguard the movements when the superiority of northward trains at Gatun or Pedro Miguel is restricted by train order received at the point where superiority is restricted.

767. SWITCHING.

Rule 767 and 821 are revised:

The dropping of cars will be restricted to a minimum. When practicable, and conditions permit, cars will be run around instead of dropped.

When necessary to make running switches, ENGINE must use straight or main route; cars only may be dropped through the turnout.

793. At meeting points where there is no open train order office, but where there are other means of communication available, conductors will immediately communicate with train dispatcher if train to be met is not in sight.

WEED BURNING RESTRICTIONS

COROZAL ORDNANCE DEPOT

Flame on weed-burner must be shut off when entering gate to Ordnance Section, Corozal, and not turned on again until the concrete apron beyond the magazine has been passed.

The spur track to the magazine within the gate will not be burned.

BALBOA SHOP AREA

The Gas Production Plant at Balboa manufactures hydrogen and acetylene gases, both are highly inflammable. On account of the fire hazard, all open flames are prohibited in and around the building. Crews on weed-burner must extinguish all flames when on either track running to the Coaling Plant or Dock 7, when within 100 feet of the building, and the burners are not to be reignited within 100 feet of the building in either direction.

P. L. MALONE
MASTER OF TRANSPORTATION

DISPATCHERS:

A. C. WOOD
T. J. GROSS
L. E. NEAL

EXTRA DISPATCHERS:

V. B. DINGLEDINE
S. N. BELANGER
J. W. O'CONNELL

SPEED TABLE

NOTE—This table is for information only and does not authorize exceeding speed limitations of special instructions or however issued.

Time per mile	Miles per hour	Time per mile	Miles per hour	Time per mile	Miles per hour	Time per mile	Miles per hour
1 min. 0 sec.	60.00	1 min. 47 sec.	33.64	2 min. 35 sec.	23.23	3 min. 23 sec.	17.73
1 " 1 "	59.02	1 " 48 "	33.33	2 " 36 "	23.08	3 " 24 "	17.65
1 " 2 "	58.06	1 " 49 "	33.03	2 " 37 "	22.93	3 " 25 "	17.56
1 " 3 "	57.14	1 " 50 "	32.73	2 " 38 "	22.78	3 " 26 "	17.48
1 " 4 "	56.25	1 " 51 "	32.43	2 " 39 "	22.64	3 " 27 "	17.39
1 " 5 "	55.38	1 " 52 "	32.14	2 " 40 "	22.50	3 " 28 "	17.31
1 " 6 "	54.55	1 " 53 "	31.86	2 " 41 "	22.36	3 " 29 "	17.22
1 " 7 "	53.73	1 " 54 "	31.58	2 " 42 "	22.22	3 " 30 "	17.14
1 " 8 "	52.94	1 " 55 "	31.30	2 " 43 "	22.08	3 " 31 "	17.06
1 " 9 "	52.17	1 " 56 "	31.03	2 " 44 "	21.95	3 " 32 "	16.98
1 " 10 "	51.43	1 " 57 "	30.77	2 " 45 "	21.82	3 " 33 "	16.90
1 " 11 "	50.70	1 " 58 "	30.51	2 " 46 "	21.69	3 " 34 "	16.82
1 " 12 "	50.00	1 " 59 "	30.25	2 " 47 "	21.56	3 " 35 "	16.74
1 " 13 "	49.31	2 " 0 "	30.00	2 " 48 "	21.43	3 " 36 "	16.67
1 " 14 "	48.65	2 " 1 "	29.75	2 " 49 "	21.30	3 " 37 "	16.59
1 " 15 "	48.00	2 " 2 "	29.51	2 " 50 "	21.18	3 " 38 "	16.51
1 " 16 "	47.37	2 " 3 "	29.27	2 " 51 "	21.05	3 " 39 "	16.44
1 " 17 "	46.75	2 " 4 "	29.03	2 " 52 "	20.93	3 " 40 "	16.36
1 " 18 "	46.15	2 " 5 "	28.80	2 " 53 "	20.81	3 " 41 "	16.29
1 " 19 "	45.57	2 " 6 "	28.57	2 " 54 "	20.69	3 " 42 "	16.22
1 " 20 "	45.00	2 " 7 "	28.35	2 " 55 "	20.57	3 " 43 "	16.14
1 " 21 "	44.44	2 " 8 "	28.12	2 " 56 "	20.45	3 " 44 "	16.07
1 " 22 "	43.90	2 " 9 "	27.91	2 " 57 "	20.34	3 " 45 "	16.00
1 " 23 "	43.37	2 " 10 "	27.69	2 " 58 "	20.22	3 " 46 "	15.93
1 " 24 "	42.86	2 " 11 "	27.48	2 " 59 "	20.11	3 " 47 "	15.86
1 " 25 "	42.35	2 " 12 "	27.27	3 " 0 "	20.00	3 " 48 "	15.79
1 " 26 "	41.86	2 " 13 "	27.07	3 " 1 "	19.89	3 " 49 "	15.72
1 " 27 "	41.38	2 " 14 "	26.87	3 " 2 "	19.78	3 " 50 "	15.65
1 " 28 "	40.91	2 " 15 "	26.67	3 " 3 "	19.67	3 " 51 "	15.58
1 " 29 "	40.45	2 " 16 "	26.47	3 " 4 "	19.57	3 " 52 "	15.52
1 " 30 "	40.00	2 " 17 "	26.28	3 " 5 "	19.46	3 " 53 "	15.45
1 " 31 "	39.56	2 " 18 "	26.09	3 " 6 "	19.35	3 " 54 "	15.38
1 " 32 "	39.13	2 " 19 "	25.90	3 " 7 "	19.25	3 " 55 "	15.32
1 " 33 "	38.71	2 " 20 "	25.71	3 " 8 "	19.15	3 " 56 "	15.25
1 " 34 "	38.30	2 " 21 "	25.53	3 " 9 "	19.05	3 " 57 "	15.19
1 " 35 "	37.89	2 " 22 "	25.35	3 " 10 "	18.95	3 " 58 "	15.13
1 " 36 "	37.50	2 " 23 "	25.17	3 " 11 "	18.85	3 " 59 "	15.06
1 " 37 "	37.11	2 " 24 "	25.00	3 " 12 "	18.75	4 " 0 "	15.00
1 " 38 "	36.73	2 " 25 "	24.83	3 " 13 "	18.65	4 " 17 "	14.00
1 " 39 "	36.36	2 " 26 "	24.66	3 " 14 "	18.56	4 " 36 "	13.00
1 " 40 "	36.00	2 " 27 "	24.49	3 " 15 "	18.46	5 " 0 "	12.00
1 " 41 "	35.64	2 " 28 "	24.32	3 " 16 "	18.37	5 " 27 "	11.00
1 " 42 "	35.29	2 " 29 "	24.16	3 " 17 "	18.27	6 " 0 "	10.00
1 " 43 "	34.95	2 " 30 "	24.00	3 " 18 "	18.18	6 " 40 "	9.00
1 " 44 "	34.62	2 " 31 "	23.84	3 " 19 "	18.09	7 " 30 "	8.00
1 " 45 "	34.29	2 " 32 "	23.68	3 " 20 "	18.00	8 " 34 "	7.00
1 " 46 "	33.96	2 " 33 "	23.53	3 " 21 "	17.91	10 " 0 "	6.00
		2 " 34 "	23.38	3 " 22 "	17.82	12 " 0 "	5.00