



OPERATIONS

OPSIG

SPECIAL INTEREST GROUP



Location in the United States

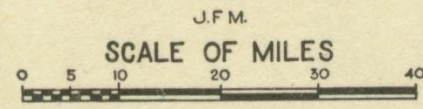
Coordinates:  34°25'N 119°42'W

Southern Pacific's Santa Barbara Subdivision



spsbsub.blogspot.com

MAP
OF THE
COAST DIVISION
SOUTHERN PACIFIC CO.

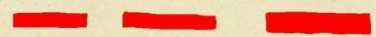


SANTA BARBARA
SUBDIVISION

TOWNS MODELED



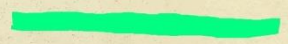
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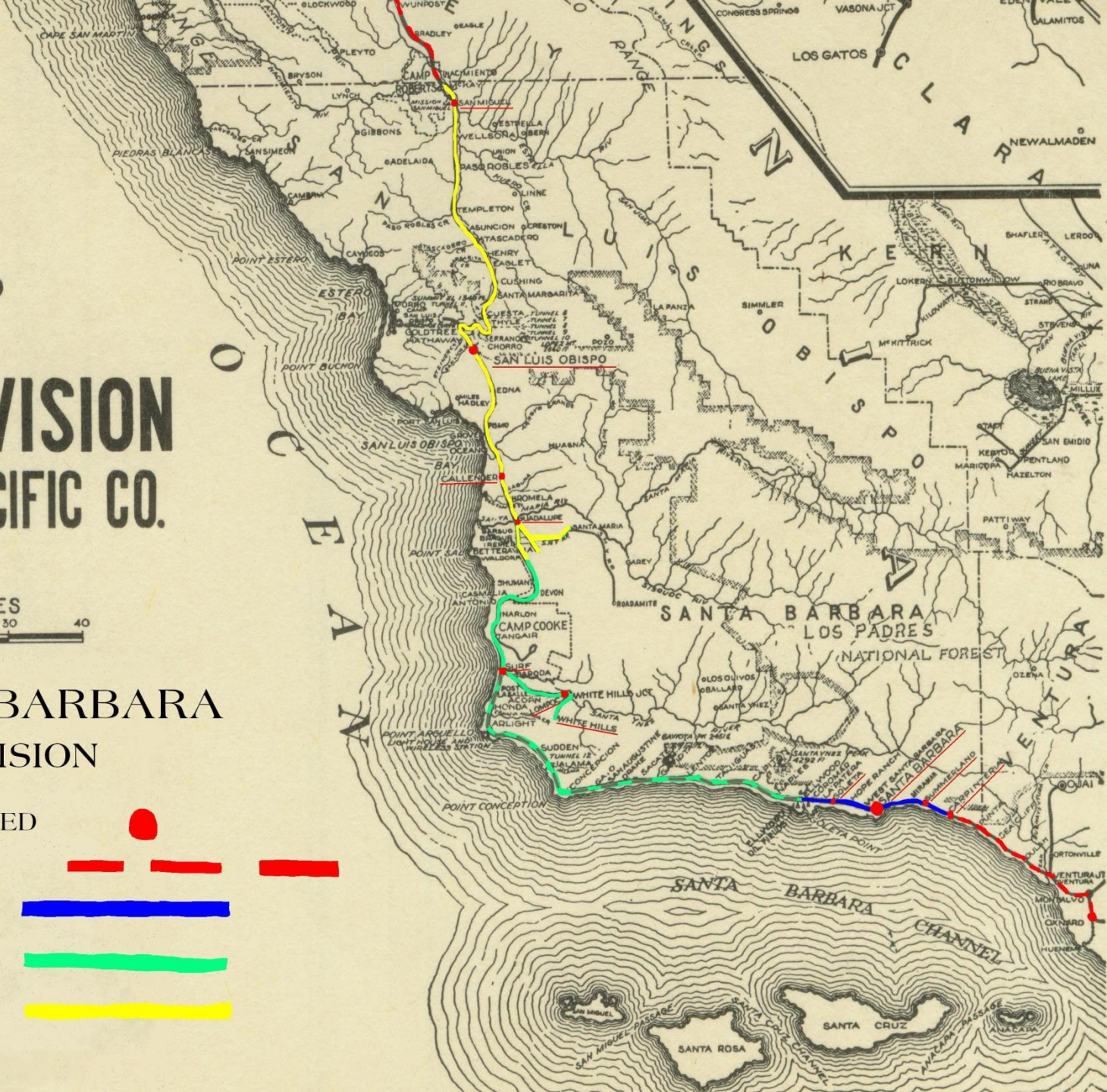
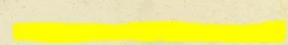
PHASE 1

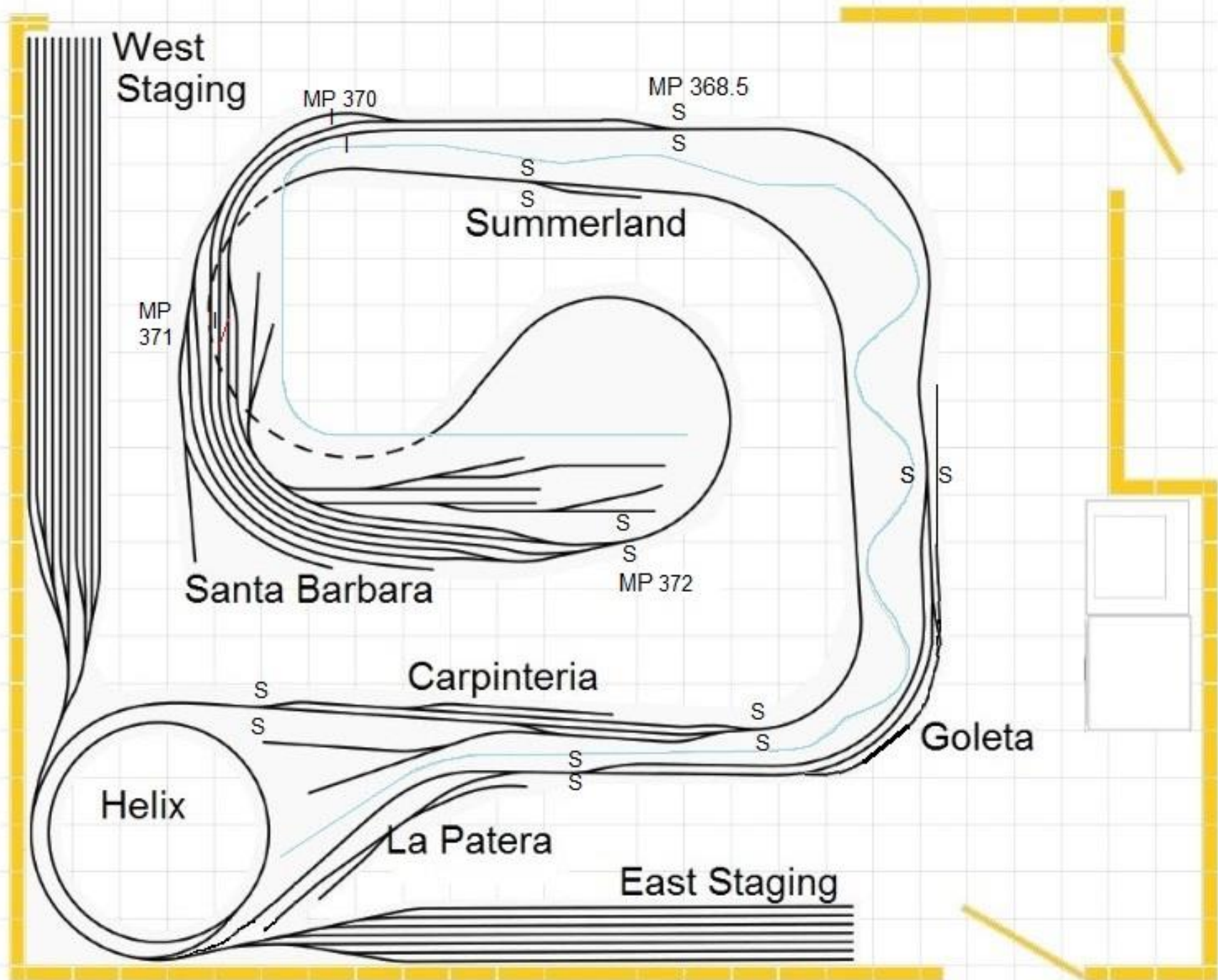


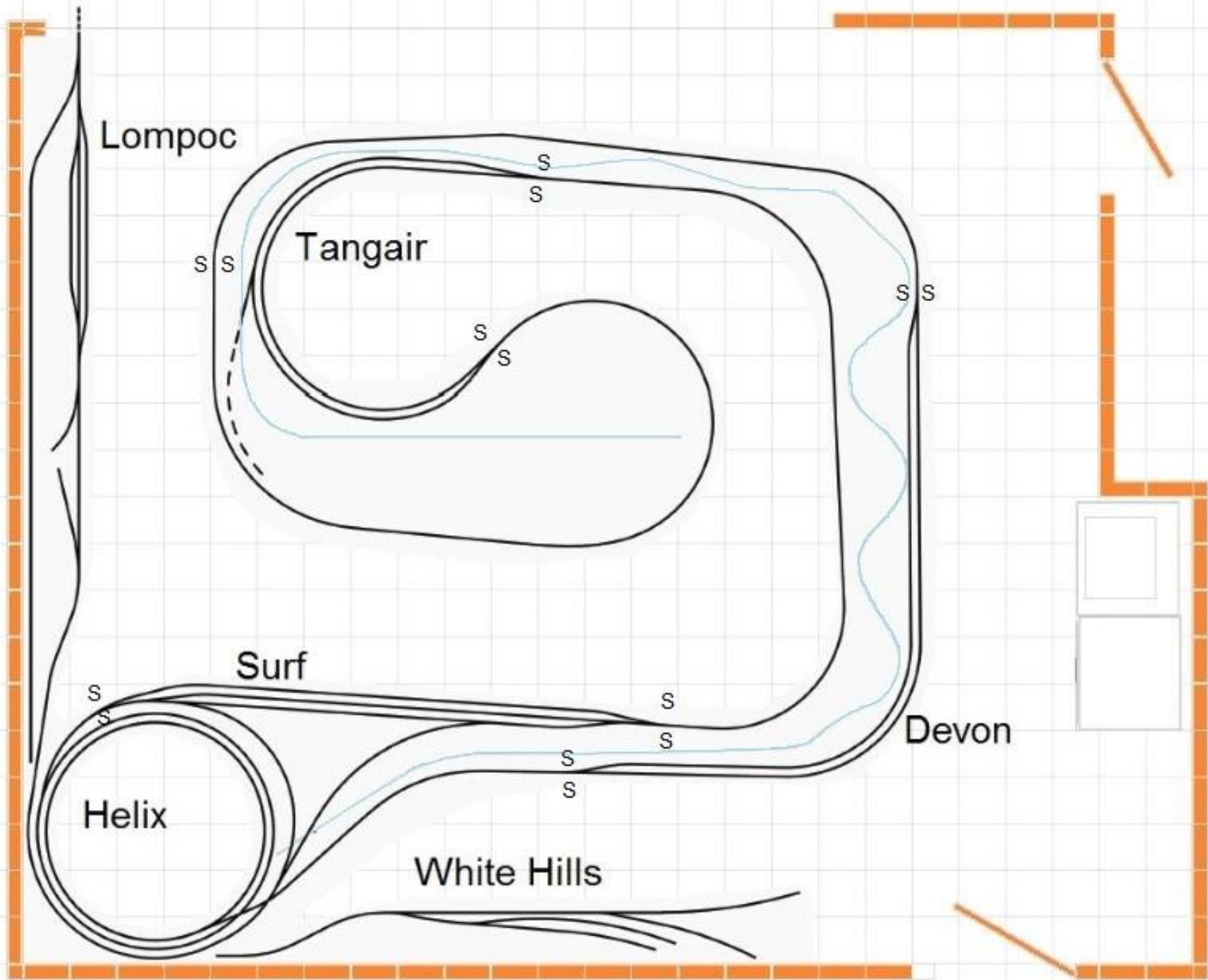
PHASE 2



PHASE 3









Direct Traffic Control

Bruce Morden

OPSIG

January 3, 2021

Overview

- Basics of Traffic Control and Methods
- DTC users
- DTC rules
- How it works
- References

Basics

- One train on a track at a time
- Methods of authorizing track authority
 - Timetable
 - Staff or Token
 - Train Orders
 - Direct Traffic Control
 - Track Warrant Control
 - CTC

Staff or Token

- Basically, one train on a track at a time.
- Like a relay race. You cannot run unless you have the baton/staff/token.



Timetable and Train Order

- Timetable is a train schedule. If all trains run on time, no need for train orders.
- Extra trains require train orders. Second sections require train orders. Regular schedules can be modified by train order.
- Class and directional superiority.
- Orders are sent to an operator, who copies the order, repeats it back to the dispatcher, gets an OK and then physically relays it to the train crew.
- Charles Minot, Erie RR 1851?

Train Orders – TO

Form 174a

C. S. 2699

36 JUNE 19 1976

TRAIN ORDER No. _____ 19 _____

To C & E

SECOND 836

At SANTA BARBARA STATION X _____ Opr. _____ M. _____

SECOND 835 ENG 6599 WAIT AT
 VENTURA UNTIL 701 AM
 SEACLIFF 710 AM
 CARPINTERIA 720 AM
 ORTEGA 730 AM
 FOR SECOND 836 ENG 6655

RMG

Repeated and Complete Time 627 A M. BACON Opr. _____

C. S. 2643
REV. 4-74

1976

Santa Barbara Station June 19

To C. & E. Second 836 Display _____ Signals.

(Insert "No" or "Green" for each regular train at initial station.)

I have 1 orders for your train as follows:
 (If no orders, insert "No".)

Orders	{	No. <u>36</u> No. _____ No. _____ No. _____ No. _____
		No. _____ No. _____ No. _____ No. _____ No. _____
		No. _____ No. _____ No. _____ No. _____ No. _____
		No. _____ No. _____ No. _____ No. _____ No. _____

O.K. at 627 a M. Rm G Chief Train Dispatcher.

Do not leave before _____ M.

(Fill in this line only when necessary to comply with Rule 221)

_____ Operator. *Time _____ M.

Conductor and each engineer must have a copy and see that their train is correctly designated above, also that the number of orders, and the numbers of all orders received correspond with the numbers inserted above.
 Operators must retain a carbon copy.
 *To be filled in only when clearance is not OK'd.

© f

Direct Traffic Control – DTC

- Talk directly to dispatcher
- Copy times on block form
- Acknowledge authority by repeating back to dispatcher
- Release blocks behind
- Specific block limits designated in timetable and marked with track side signs

Track Warrant Control – TWC

- Talk directly to dispatcher
- Copy authority on a form
- Repeat back to dispatcher
- Authority approved on correct read back
- Authority voided on subsequent track warrant
- No prescribed blocks

Track Warrant Control Forms

TRACK WARRANT

No.,

To at

1. Track Warrant No. is void.
2. Proceed from to
3. Proceed from to
4. Work between and
5. Not in effect until am / pm
6. This authority expires at am / pm
7. Not in effect until after arrival of at
..... at
8. Do not foul limits ahead of
9. Clear Main Track at last named point.
10. Hold Main Track at last named point.
11. Between & make all movements
at restricted speed. Limits occupied by train or engine.
12. Do not exceed mph between &
13. Other specific instructions

14. Joint with between &
..... between &

Ok am / pm Dispatcher Copied

Reported clear at am / pm by

Reorder Micro-Mark #84187

Track Warrant

NO. _____, 19__

To: _____ At: _____

1. Track Warrant NO. _____ Is Void.
2. Proceed From _____ To _____ On _____ Track.
3. Proceed From _____ To _____ On _____ Track.
4. Work Between _____ And _____ On _____ Track.
5. Not In Effect Until _____.
6. This Authority Expires At _____.
7. Not in Effect Until After Arrival Of _____
At _____.
8. Hold Main Track At Last Named Point.
9. Do Not Foul Limits Ahead Of _____.
10. Clear Main Track At Last Named Point.
11. Between _____ And _____ Make All Movements
At Restricted Speed. Limits Occupied By Train.
12. Between _____ And _____ Make All Movements
At Restricted Speed. Limits Occupied By Men Or
Equipment.
13. Do Not Exceed _____ MPH Between _____
And _____.
14. Do Not Exceed _____ MPH Between _____
And _____.
15. Flag Protection Not Required Against Following
Trains On The Same Track.
16. Track Bulletins In Effect _____, _____, _____,
_____, _____, _____, _____.
17. Other Specific Instructions: _____

OK _____ Dispatcher _____

Relayed To _____ Copied By _____

Limits Reported Clear At _____ By _____

Track Warrant Control Forms

- BNSF Track Warrant Blank

TRACK WARRANT

No: _____ Date: _____ 20____

To: _____ At: _____ (on _____ Subdiv)

1 Track Warrant No _____ is void.

2 Proceed from _____ to _____ on _____ track.

3 Proceed from _____ to _____ on _____ track.

4 Work between _____ and _____ on _____ track.

5 Not in effect until _____

6 This authority expires at: _____

7 Not in effect until after arrival of: _____
_____ at _____

8 Hold main track at last named point.

9 Do not foul limits ahead of: _____

10 Clear main track at last named point.

11 Between _____ and _____ make all movements at restricted speed. Limits occupied by train.

12 Between _____ and _____ make all movements at restricted speed. Limits occupied by men or equipment.

13 Do not exceed _____ MPH between _____ and _____

14 Do not exceed _____ MPH between _____ and _____

15 Flag protection not required against following trains on the same track.

16 Track Bulletins in effect: _____, _____, _____, _____, _____, _____.

17 Other specific instructions: (joint with) _____

20 Be prepared to stop at following switch(es) until known to be in normal position: _____

21 Permission to leave following switch(es) in reverse position: _____

This warrant has _____ boxes marked: _____, _____, _____, _____, _____, _____, _____, _____, _____, _____.

OK _____ Dispatcher _____
Relayed to _____ Copied by _____
Limits reported clear at _____ By _____

Centralized Traffic Control – CTC

- Dispatcher has complete control – Board automatically controls turnouts and signals.



Centralized Traffic Control – CTC

- Dispatcher has complete control – Crews just follow signals – Red Light, Green Light
- No class or superiority
- First established in 1927 on the NYC in Ohio



- Video on CTC operation
<https://www.youtube.com/watch?v=GrvDbTjRVMM>

DTC Users

- Southern Pacific system wide
- CNW ?
- KCS ?
- Alton & Southern ?
- Ferrocarriles Nacionales de Mexico used CDT (Control Directo de Trafico)
- Alaska Railroad
- CSX [ex-Georgia Railroad] east of Atlanta to Augusta, Toledo Sub?
- Queensland Rail

Rules

- Individual rulebooks for specific railroads
- Uniform Code of Operating Rules
- Consolidated Code of Operating Rules
- General Code of Operating Rules
- Northeast Operating Rules Advisory Committee (NORAC) rule book
- Canadian Rail Operating Rules

DTC Rules

GCOR 16.0: RULES APPLICABLE ONLY IN DIRECT TRAFFIC CONTROL (DTC) LIMITS

- 16.1: Authority to Enter DTC Limits
- 16.1.1: Switches Between DTC Blocks
- 16.2: DTC Authority
- 16.3: Movement in a Specified Direction
- 16.3.1: Leaving the Main Track
- 16.4: Work and Time
- 16.5: Changing DTC Authority
- 16.6: Releasing DTC Authority
- 16.7: Communication Failure

DTC Rules

GCOR 16.1

Authority to Enter DTC Limits

The timetable will designate DTC limits. A train may enter DTC limits only after receiving authority from the train dispatcher.

Men or equipment may be issued DTC authority in the same manner as trains.

DTC territory will not include territory where Rule 6.13 (Yard Limits) or Rule 6.14 (Restricted Limits) is in effect.

DTC Rules

GCOR 16.1.1

- **Switches Between DTC Blocks**

Switches between DTC blocks may be occupied only when authority includes at least one block on each side of the switch;

however, men or equipment may be authorized to occupy a switch located between DTC blocks without authority on each side of the switch when the DTC authority includes the name of the switch and the instructions "Switch Yes."

DTC authority must not be released until the rear of the movement has completely entered the adjoining block.

DTC Rules

GCOR 16.2

- **DTC Authority**

The train dispatcher will issue DTC authority to a crew member on the head end of the train when possible. An employee operating the controls of a moving engine or on-track equipment may not copy DTC authority.

- A. Recorded in Writing**

When transmitted verbally, the employee who receives or releases DTC authority must record it in writing and include the following:

1. Name of first and last DTC block where authority is issued.
2. Time that work and time expires.
3. Train identity when DTC authority is issued behind a train or radio blocking behind a preceding train is in effect.
4. Time DTC authority is released to the train dispatcher.

DTC authority must not be transferred to a relieving crew, unless authorized to do so by the train dispatcher.

When verbal authority is received from the train dispatcher to leave equipment in a DTC block, the train dispatcher may instruct a crew member to void the DTC authority.

Employees cannot act upon DTC authority until the train dispatcher says, "That is correct."

DTC Rules

GCOR 16.2 continued

- DTC Authority

B. Multiple Authorities

Not more than one DTC authority may be issued in the same DTC block except:

1. In ABS territory, as provided by Rule 16.3 (Movement in a Specified Direction), authority may be issued to more than one train in the same direction.
2. As provided by Rule 16.4 (Work and Time). Or
3. Where radio blocking is designated by special instructions, in non-signaled territory, more than one train may be authorized to proceed in the same direction within the same or overlapping limits, provided the following train:

- Is notified on DTC authority of the identity of the preceding train.
- Notifies the crew of the preceding train that radio blocking has been authorized stating the limits.
- Does not occupy the block limits ahead of the preceding train.
- Is notified by the preceding train that the entire train has cleared a specific block. Location specified must not be beyond block limits of the following train. The following words must be used: "(Train) clear of (block)."
- Does not proceed beyond the last block the preceding train has reported to have cleared.

All instructions between trains must be written, repeated, and acknowledged with "That is correct" before being acted on.

These written instructions between the trains must be retained until the end of tour of duty.

DTC Rules

GCOR 16.2 continued

- DTC Authority

Written Instructions Between Trains:

"(Preceding Train ID) has cleared (Block) at (Time)." When all available lines on DTC form have been filled in, new DTC authority must be obtained.

Notify the train dispatcher if communication cannot be established between the two trains. If necessary, radio blocking information may be relayed only by the train dispatcher.

The last named point of the following train's authority must not extend beyond the authority of the preceding train.

In the application of Rule 6.4 (Reverse Movements) and Rule 6.6 (Picking Up Crew Member), the movement must not enter the last block reported cleared to the following train.

DTC Rules

GCOR 16.3

- **Movement in a Specified Direction**

Issue Format

One or Two Blocks.

The train dispatcher will issue authority and an employee will acknowledge it using the following sample format:

Train Dispatcher: "RR 4321 East, with Engineer Jones, you are authorized to proceed Eastward in one block, Anna."

Crew Member: "RR 4321 East, with Engineer Jones, I am authorized to proceed Eastward in one block, Anna."

Train Dispatcher: "RR 4321 East, that is correct."

More than Two Blocks.

The train dispatcher will issue authority in more than two blocks using the following sample format:

Train Dispatcher: "RR 4321 East, with Engineer Jones, you are authorized to proceed Eastward in three blocks, Anna through Cloy."

DTC Rules

GCOR 16.3.1

- **Leaving the Main Track**

A train authorized to proceed in one direction must inform the train dispatcher when it leaves the main track before reaching the last named point, unless a crew member is left to prevent a following movement from passing.

DTC Rules

GCOR 16.4

- Work and Time

A. Issue Requirements

1. Work and time authority may be issued to an employee in charge of on-track equipment when:
 - The DTC block is clear.
 - The DTC block is occupied by a train and/or employee in charge of on-track equipment that has already been issued work and time. Before joint work and time may be issued, the train dispatcher must first notify the engineer of train or employee in charge of on-track equipment affected that the DTC block will be jointly occupied. All movements must be made at restricted speed within joint work and time limits. Or
 - All trains issued Rule 16.3 (Movement in a Specified Direction) have passed the location where the track will be occupied, and the employee receiving the DTC authority is notified that work and time is granted behind such trains.

DTC Rules

GCOR 16.4 Continued

- Work and Time

A. Issue Requirements

2. Work and time authority may be issued to a train when:

- The DTC block is clear.
- The DTC block is occupied by a train and/or employee in charge of on-track equipment that has already been issued work and time. Before joint work and time may be issued, the train dispatcher must first notify the engineer of train or employee in charge of on-track equipment affected that the DTC block will be jointly occupied. All movements must be made at restricted speed within joint work and time limits. or
- All trains issued Rule 16.3 (Movement in a Specified Direction) have passed the location where the track will be occupied and the employee receiving the DTC authority must be notified that work and time is granted behind such trains as prescribed by Rule 16.2 (DTC Authority).

A train or on-track equipment issued work and time may occupy the designated block and move in either direction.

An employee in charge of on-track equipment granted work and time behind a train must not pass train(s) specified.

DTC Rules

GCOR 16.4 Continued

- Work and Time

B. Issue Format

- **One or Two Blocks.**

The train dispatcher will issue work and time and an employee will acknowledge it using the following sample format:

Train Dispatcher: "RR 4321 East, with Engineer Jones, I am granting you work and time in one block, Anna, until 10:10 AM."

Crew Member: "RR 4321 East, with Engineer Jones, I am granted work and time in one block, Anna, until 10:10AM."

Train Dispatcher: "RR 4321 East, that is correct."

DTC Rules

GCOR 16.4 Continued

- Work and Time

B. Issue Format

- **More than Two Blocks.**

The train dispatcher will issue authority in more than two blocks using the following sample format:

Train Dispatcher: "RR 4321 East, with Engineer Jones, I am granting you work and time in 3 blocks, Anna through Cloy, until 10:10 AM."

Crew Member: "RR 4321 East, with Engineer Jones, I am granted work and time in three blocks, Anna through Cloy, until 10:10 AM."

Unless the train and/or employee in charge of on-track equipment receives a time extension, they must clear the block and report "Released" before the time limit expires. The train dispatcher may issue an unspecified time limit by using the words "until released."

A train dispatcher must not authorize a train to enter a DTC block under Rule 16.3 (Movement in a Specified Direction) until work and time in that block is released.

DTC Rules

GCOR 16.4 Continued

- Work and Time

C. Additional Time

Trains or the employee in charge of on-track equipment must release work and time before the time granted expires. If the train or employee in charge requires additional time, the authority must be obtained from the train dispatcher before time expires. If a train crew member or employee in charge is unable to contact the train dispatcher, and the time limit expires, authority is extended until the train dispatcher is contacted.

DTC Rules

GCOR 16.5

- **Changing DTC Authority**

When it becomes necessary to change the authority previously granted to a train, a new authority will be issued in accordance with Rule 16.3 (Movement in a Specified Direction) or Rule 16.4 (Work and Time).

After the "(_____), that is correct" response is received from the train dispatcher, the authority previously granted becomes void.

The train dispatcher must notify the engineer before withdrawing previously issued DTC authority.

DTC Rules

GCOR 16.6

- **Releasing DTC Authority**

Unless the train dispatcher specifies otherwise, when a train with directional authority clears a DTC block, an employee will immediately release it to the train dispatcher. The train must not re-enter the DTC block it has been released from.

Before a DTC block is released, engineer and conductor must communicate with each other and confirm that their train is clear of DTC block(s) to be released.

A. Release Format

One or Two Blocks.

An employee will release a DTC block, and the train dispatcher will acknowledge it using the followingsample format:

Crew Member:"RR 4321 East, with Engineer Jones, I am releasing one block, Anna."

Train Dispatcher:"RR 4321 East, with Engineer Jones, you are releasing one block, Anna."

Crew Member:"Train dispatcher, that is correct."

More than Two Blocks.

An employee will release more than two blocks using the following sample format:

Crew Member:"RR 4321 East, with Engineer Jones, I am releasing three blocks, Anna through Cloy."

A DTC block is not released until the employee releasing the block reports, "Train dispatcher, that is correct."

DTC Rules

GCOR 16.6 continued

- **Releasing DTC Authority**

- B. Operating in Non-Signaled or Double Track Territory**

In non-signaled or double track territory, a train without a crew member on the rear of the train may release a DTC block only when the complete train is clear of the limits, which is determined by one of the following:

1. The rear of the train has an operating rear-end telemetry device, and the air pressure on the head-end device indicates brake pipe continuity.
2. An employee verifies that a marker is on the rear of the train.
3. A crew member can observe the rear car of the train on which the marker has been placed.
4. A trackside warning detector transmits an axle count for the train, and the axle count duplicates the axle count transmitted by the previous trackside warning detector.

In addition, a train clearing in a siding or other track must comply with requirements outlined in Rule 8.3 (Main Track Switches) before reporting clear of the limits.

DTC Rules

GCOR 16.7

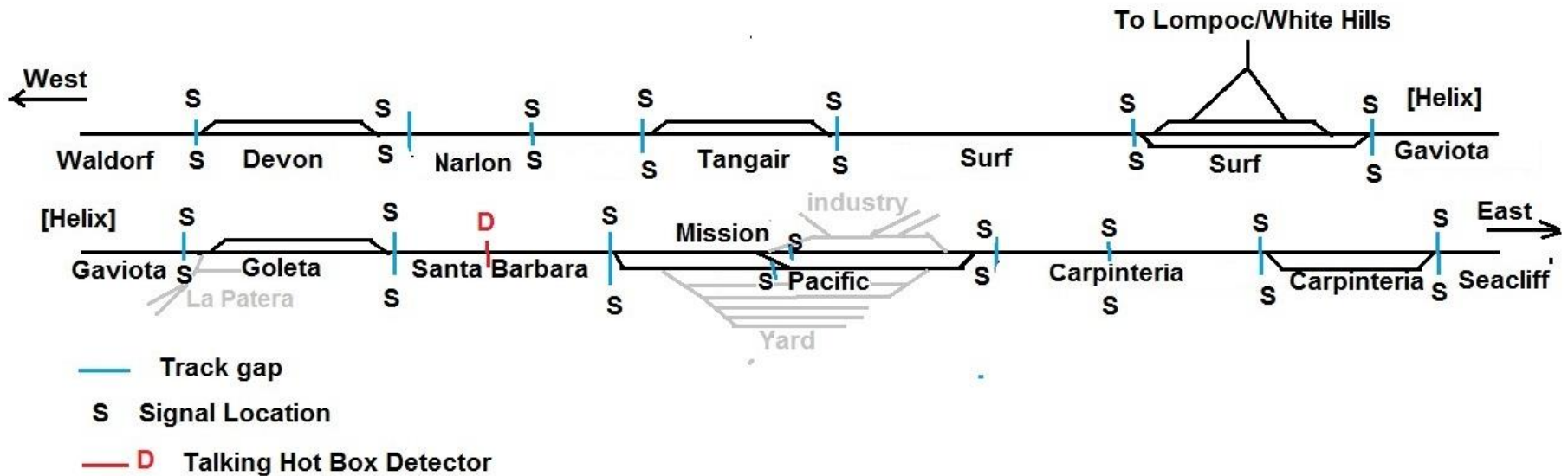
- **Communication Failure**

If communication fails, a third party may relay the authority to enter and/or release a DTC block as follows:

- The train dispatcher must transmit the DTC authority to the third party.
- The third party must repeat it back to the train dispatcher.
- If correct, the train dispatcher will respond, "(Third Party Identification), that is correct for relay," which authorizes the third party to transmit the DTC authority to a crew member.
- The crew member receiving the DTC authority must repeat it back to the third party.
- If correct, the third party will respond, "(_____)", that is correct" and inform the train dispatcher that DTC authority has been relayed correctly.

How DTC Works

Railroad Separated into Blocks



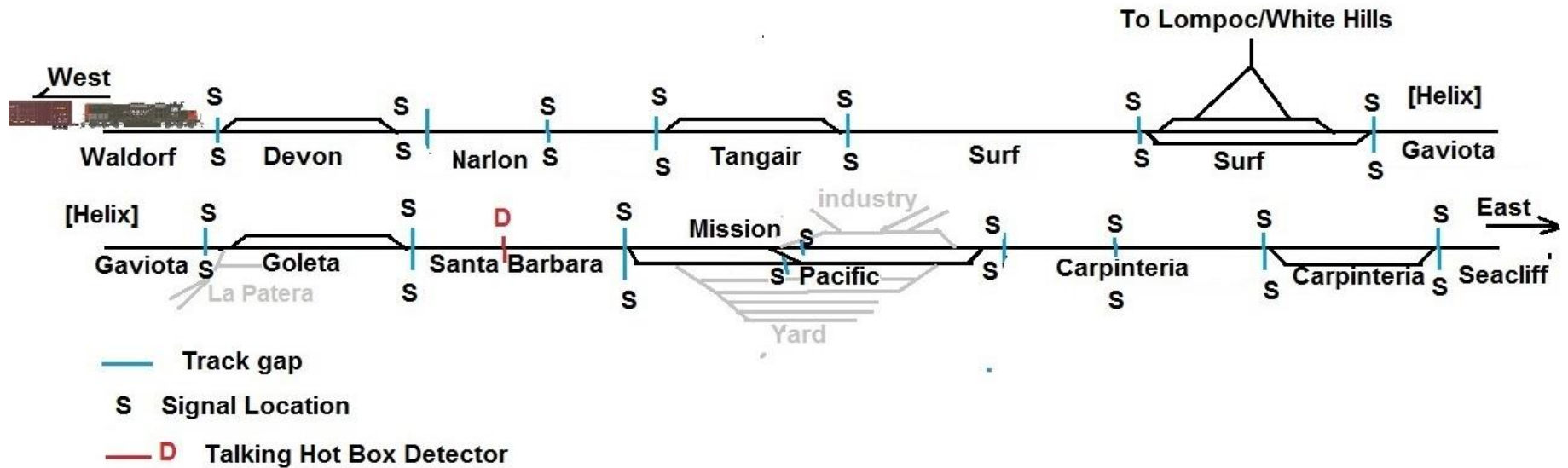
DIRECT TRAFFIC CONTROL
IN EFFECT BETWEEN VENTURA MP 389.6 AND GUADALUPE 276.9

GUADALUPE (SAN LUIS OBISPO)	DEVON		TANGAIR		SURF		GOLETA		SANTA BARBARA		CARPINTERIA		VENTURA (OXNARD)/LOS ANGELES		
	WALDORF BLOCK	DEVON BLOCK	NARLON BLOCK	TANGAIR BLOCK	SURF BLOCK	GAVIOTA BLOCK	GOLETA BLOCK	SANTA BARBARA BLOCK	DOUBLE TRACK RULE D-97	CARPINTERIA BLOCK	SEACLIFF BLOCK				
A	— m	A	— m	A	— m	A	— m	A	— m	A	— m	A	— m	A	— m
R	— m	R	— m	R	— m	R	— m	R	— m	R	— m	R	— m	R	— m
CLOCK TIME LIMIT	— m	CLOCK TIME LIMIT	— m	CLOCK TIME LIMIT	— m	CLOCK TIME LIMIT	— m	CLOCK TIME LIMIT	— m	CLOCK TIME LIMIT	— m	CLOCK TIME LIMIT	— m	CLOCK TIME LIMIT	— m
TRACK #1 MISSION BLOCK		TRACK #2 PACIFIC BLOCK													

A — m = ENTER TIME BLOCK AUTHORITY RECEIVED R — m = ENTER TIME BLOCK RELEASED CLOCK TIME LIMIT = ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES — m = ENTER "X" IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING

How DTC Works

Authority Given and Recorded in Writing



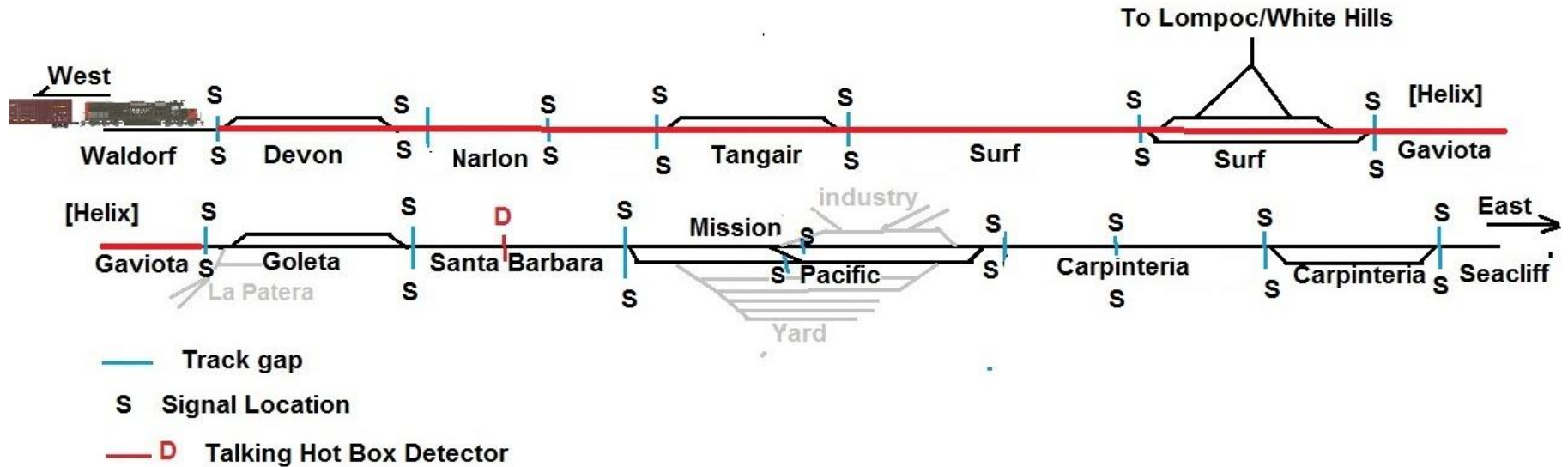
DIRECT TRAFFIC CONTROL
IN EFFECT BETWEEN VENTURA MP 389.6 AND GUADALUPE 276.9

Jan 3 1994 OAWCM
SP8283 Engineer Morden

GUADALUPE (SAN LUIS OBISPO)	DEVON		TANGAIR		SURF		GOLETA		SANTA BARBARA	CARPINTERIA		VENTURA (OXNARD/LOS ANGELES)
	WALDORF BLOCK	DEVON BLOCK	NARLON BLOCK	TANGAIR BLOCK	SURF BLOCK	GAVIOTA BLOCK	GOLETA BLOCK	SANTA BARBARA BLOCK	DOUBLE TRACK RULE D-97 TRACK #1 MISSION BLOCK	CARPINTERIA BLOCK	SEACLIFF BLOCK	
	A <u> </u> m R <u> </u> m	A <u> </u> m R <u> </u> m	A <u> </u> m R <u> </u> m	A <u> </u> m R <u> </u> m	A <u> </u> m R <u> </u> m	A <u> </u> m R <u> </u> m	A <u> </u> m R <u> </u> m	A <u> </u> m R <u> </u> m	A <u> </u> m R <u> </u> m	A <u> </u> m R <u> </u> m		
	CLOCK TIME LIMIT <u> </u> m	CLOCK TIME LIMIT <u> </u> m	CLOCK TIME LIMIT <u> </u> m	CLOCK TIME LIMIT <u> </u> m	CLOCK TIME LIMIT <u> </u> m	CLOCK TIME LIMIT <u> </u> m	CLOCK TIME LIMIT <u> </u> m	CLOCK TIME LIMIT <u> </u> m	TRACK #2 PACIFIC BLOCK	CLOCK TIME LIMIT <u> </u> m	CLOCK TIME LIMIT <u> </u> m	
A <u> </u> m = ENTER TIME BLOCK AUTHORITY RECEIVED		R <u> </u> m = ENTER TIME BLOCK RELEASED		CLOCK TIME LIMIT = ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES		= ENTER 'X' IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING						

How DTC Works

Authority Given and Recorded in Writing



DIRECT TRAFFIC CONTROL
IN EFFECT BETWEEN VENTURA MP 389.6 AND GUADALUPE 276.9

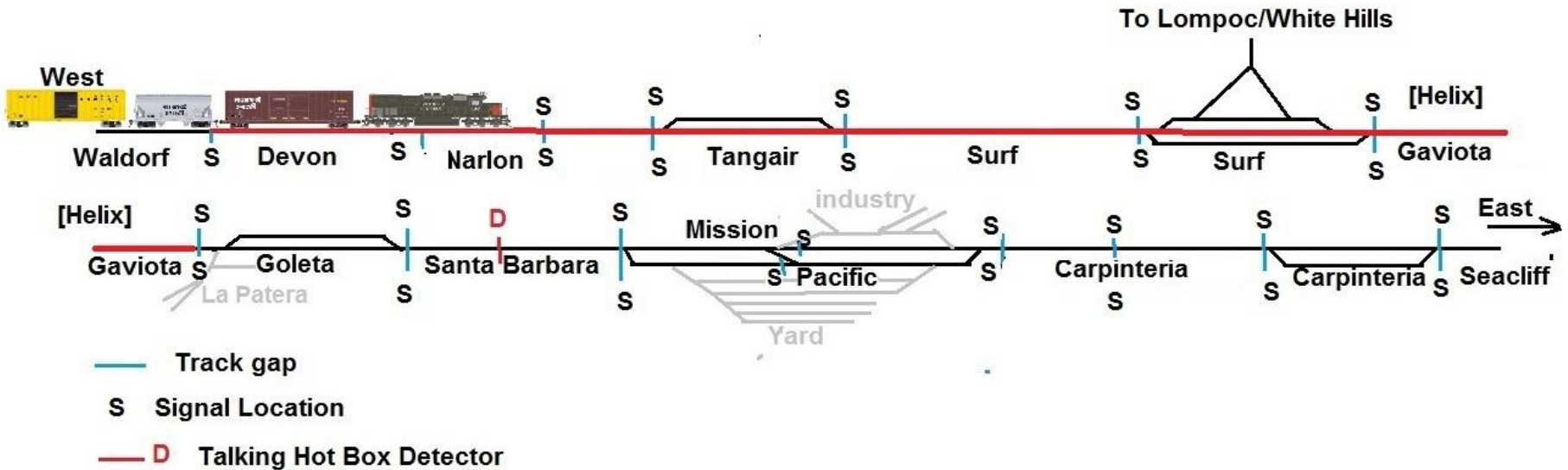
Jan 3 1994 OAWCM
SP8283 Engineer Morden

GUADALUPE (SAN LUIS OBISPO)	DEVON		TANGAIR		SURF		GOLETA		SANTA BARBARA		CARPINTERIA		VENTURA (OXNARD)/LOS ANGELES
	WALDORF BLOCK	DEVON BLOCK	NARLON BLOCK	TANGAIR BLOCK	SURF BLOCK	GAVIOTA BLOCK	GOLETA BLOCK	SANTA BARBARA BLOCK	DOUBLE TRACK RULE D-97	CARPINTERIA BLOCK	SEACLIFF BLOCK		
	A <u>623</u> a R _____ m	A <u>705a</u> m R _____ m	A <u>705a</u> m R _____ m	A <u>705a</u> m R _____ m	A <u>705a</u> m R _____ m	A <u>705a</u> m R _____ m	A _____ m R _____ m	A _____ m R _____ m	TRACK #1 MISSION BLOCK	A _____ m R _____ m	A _____ m R _____ m		
	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	TRACK #2 PACIFIC BLOCK	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m		

A _____ m = ENTER TIME BLOCK AUTHORITY RECEIVED R _____ m = ENTER TIME BLOCK RELEASED CLOCK TIME LIMIT _____ m = ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES _____ m = ENTER "X" IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING

How DTC Works

Authority Released



DIRECT TRAFFIC CONTROL
IN EFFECT BETWEEN VENTURA MP 389.6 AND GUADALUPE 276.9

Jan 3 1994 OAWCM
SP8283 Engineer Morden

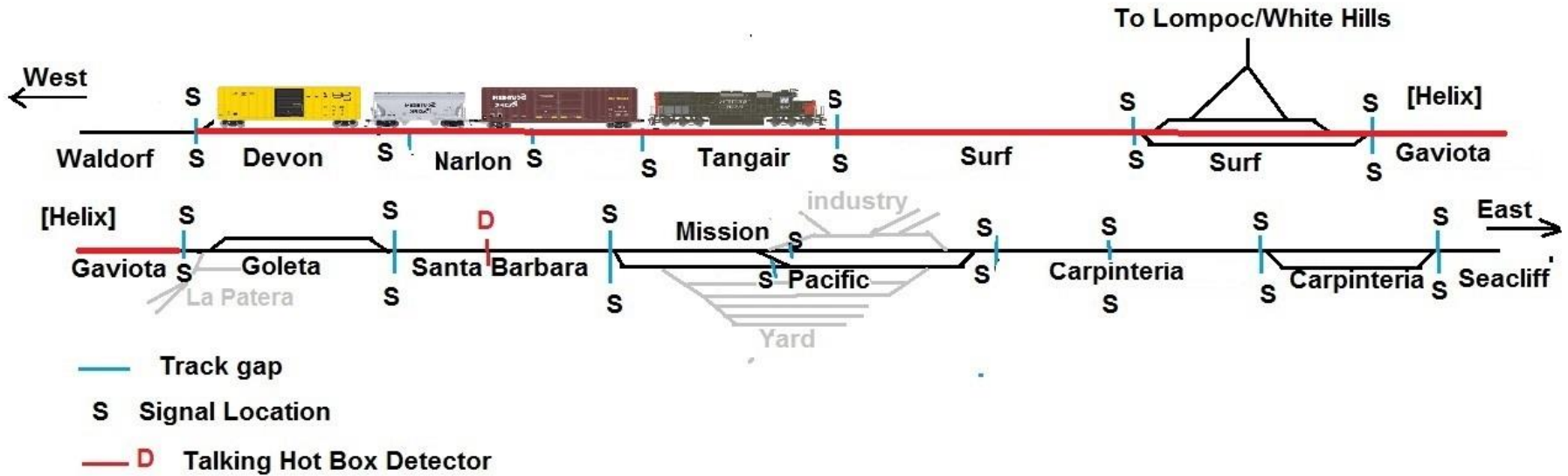
	DEVON		TANGAIR		SURF		GOLETA		SANTA BARBARA	CARPINTERIA	
GUADALUPE (SAN LUIS OBISPO)	WALDORF BLOCK	DEVON BLOCK	NARLON BLOCK	TANGAIR BLOCK	SURF BLOCK	GAVIOTA BLOCK	GOLETA BLOCK	SANTA BARBARA BLOCK	DOUBLE TRACK RULE D-97 TRACK #1 MISSION BLOCK TRACK #2 PACIFIC BLOCK	CARPINTERIA BLOCK	SEACLIFF BLOCK
	A <u>623</u> a _m	A <u>705a</u> a _m	A <u>705a</u> a _m	A <u>705a</u> a _m	A <u>705a</u> a _m	A <u>705a</u> a _m	A _____ m	A _____ m		A _____ m	A _____ m
	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m		R _____ m	R _____ m
	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT		CLOCK TIME LIMIT	CLOCK TIME LIMIT
	_____ m	_____ m	_____ m	_____ m	_____ m	_____ m	_____ m	_____ m		_____ m	_____ m

VENTURA (OXNARD/LOS ANGELES)

A _____ m = ENTER TIME BLOCK AUTHORITY RECEIVED R _____ m = ENTER TIME BLOCK RELEASED CLOCK TIME LIMIT = ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES _____ m = ENTER "X" IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING

How DTC Works

Authority Released



DIRECT TRAFFIC CONTROL
IN EFFECT BETWEEN VENTURA MP 389.6 AND GUADALUPE 276.9

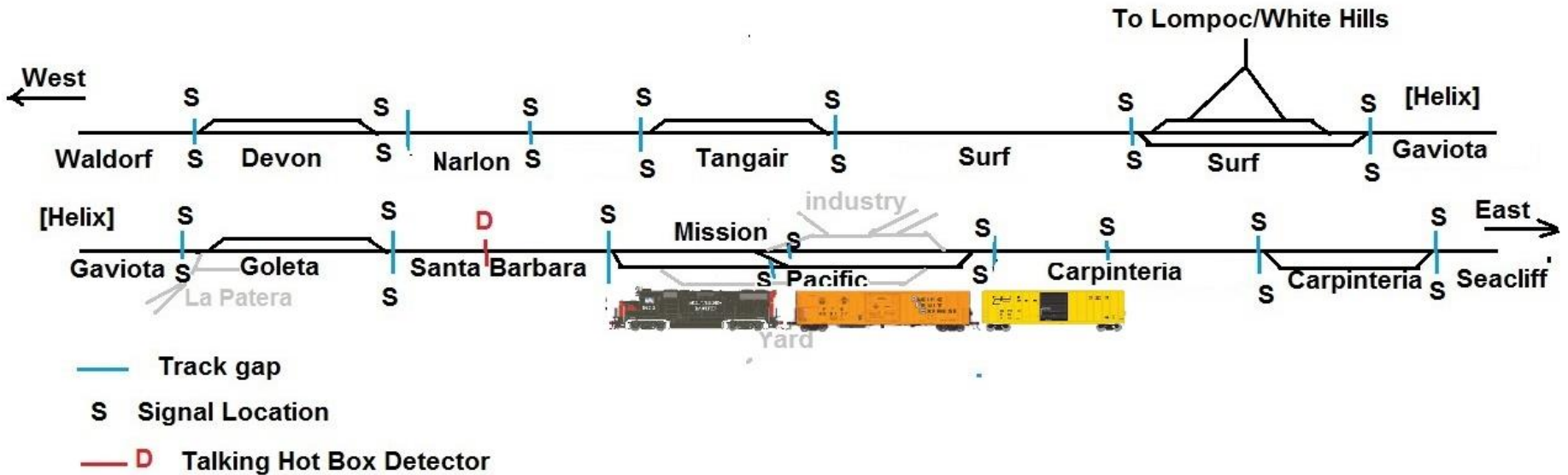
Jan 3 1994 OAWCM
SP8283 Engineer Morden

GUADALUPE (SAN LUIS OBISPO)	DEVON		TANGAIR		SURF		GOLETA		SANTA BARBARA		CARPINTERIA		VENTURA (OXNARD/LOS ANGELES)
	WALDORF BLOCK	DEVON BLOCK	NARLON BLOCK	TANGAIR BLOCK	SURF BLOCK	GAVIOTA BLOCK	GOLETA BLOCK	SANTA BARBARA BLOCK	DOUBLE TRACK RULE D-97	CARPINTERIA BLOCK	SEACLIFF BLOCK		
A 623 a R 722 a	A 705 a R _____	A 705 a R _____	A 705 a R _____	A 705 a R _____	A 705 a R _____	A _____ R _____	A _____ R _____	TRACK #1 MISSION BLOCK	A _____ R _____	A _____ R _____			
CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	TRACK #2 PACIFIC BLOCK	CLOCK TIME LIMIT	CLOCK TIME LIMIT			

A _____ = ENTER TIME BLOCK AUTHORITY RECEIVED R _____ = ENTER TIME BLOCK RELEASED CLOCK TIME LIMIT = ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES [X] = ENTER 'X' IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING

How DTC Works

Authority Given and Recorded in Writing



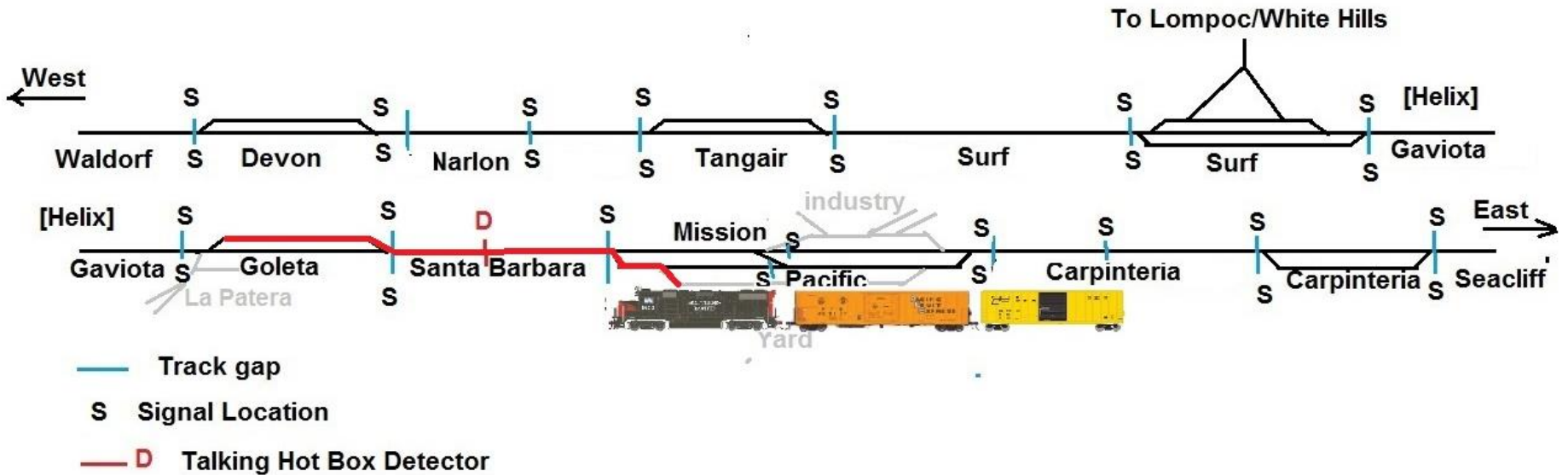
DIRECT TRAFFIC CONTROL *Jan 3 1994 Goleta local*
 IN EFFECT BETWEEN VENTURA MP 389.6 AND GUADALUPE 276.9 *SP 4800 Engineer Ryan*

GUADALUPE (SAN LUIS OBISPO)	DEVON		TANGAIR		SURF		GOLETA		SANTA BARBARA		CARPINTERIA		VENTURA (OXNARD/LOS ANGELES)
	WALDORF BLOCK	DEVON BLOCK	NARLON BLOCK	TANGAIR BLOCK	SURF BLOCK	GAVIOTA BLOCK	GOLETA BLOCK	SANTA BARBARA BLOCK	DOUBLE TRACK RULE D-97	CARPINTERIA BLOCK	SEACLIFF BLOCK		
	A _____ m	A _____ m	A _____ m	A _____ m	A _____ m	A _____ m	A _____ m	A _____ m	TRACK #1 MISSION BLOCK	A _____ m	A _____ m		
	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	TRACK #2 PACIFIC BLOCK	R _____ m	R _____ m		
	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m		CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m		

A _____ m = ENTER TIME BLOCK AUTHORITY RECEIVED
 R _____ m = ENTER TIME BLOCK RELEASED
 CLOCK TIME LIMIT _____ m = ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES
 [Symbol] = ENTER "X" IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING

How DTC Works

Authority Given and Recorded in Writing



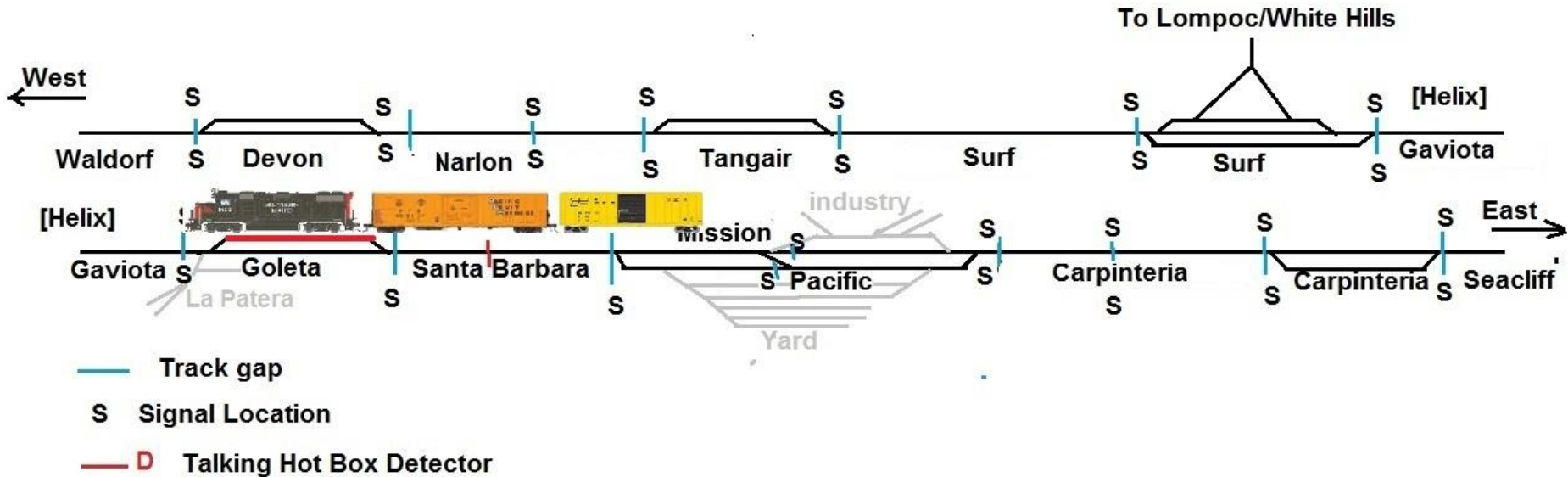
DIRECT TRAFFIC CONTROL *Jan 3 1994 Goleta local*
 IN EFFECT BETWEEN VENTURA MP 389.6 AND GUADALUPE 276.9 *SP 4800 Engineer Ryan*

	DEVON		TANGAIR	SURF	GOLETA		SANTA BARBARA	CARPINTERIA			
	WALDORF BLOCK	DEVON BLOCK	NARLON BLOCK	TANGAIR BLOCK	SURF BLOCK	GAVIOTA BLOCK	GOLETA BLOCK	SANTA BARBARA BLOCK	DOUBLE TRACK RULE D-97 TRACK #1 MISSION BLOCK	CARPINTERIA BLOCK	SEACLIFF BLOCK
GUADALUPE (SAN LUIS OBISPO)	A _____ m	A _____ m	A _____ m	A _____ m	A _____ m	A _____ m	A _____ m	A <u>755am</u> m		A _____ m	A _____ m
	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m		TRACK #2 PACIFIC BLOCK	R _____ m	R _____ m
	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m		CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m
	A _____ m = ENTER TIME BLOCK AUTHORITY RECEIVED		R _____ m = ENTER TIME BLOCK RELEASED		CLOCK TIME LIMIT _____ m	ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES		ENTER 'X' IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING			

755am

How DTC Works

Authority Released



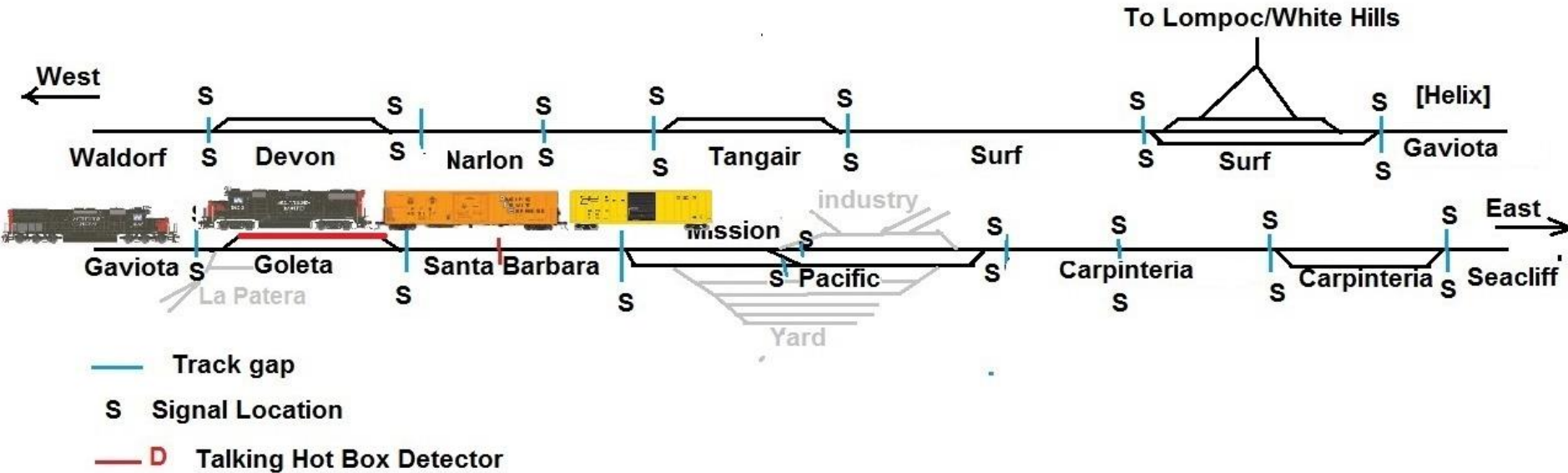
DIRECT TRAFFIC CONTROL *Jan 3 1994 Goleta local*
 IN EFFECT BETWEEN VENTURA MP 389.6 AND GUADALUPE 276.9 *SP 4800 Engineer Ryan*

GUADALUPE (SAN LUIS OBISPO)	DEVON		TANGAIR		SURF	GOLETA		SANTA BARBARA	CARPINTERIA		VENTURA (OXNARD/LOS ANGELES)	
	WALDORF BLOCK	DEVON BLOCK	NARLON BLOCK	TANGAIR BLOCK	SURF BLOCK	GAVIOTA BLOCK	GOLETA BLOCK	SANTA BARBARA BLOCK	DOUBLE TRACK RULE D-97	CARPINTERIA BLOCK		SEACLIFF BLOCK
	A _____ m R _____ m	A _____ m R _____ m	A _____ m R _____ m	A _____ m R _____ m	A _____ m R _____ m	A _____ m R _____ m	A _____ m R _____ m	A <i>755am</i> R <i>820am</i>	TRACK #1 MISSION BLOCK	A _____ m R _____ m		A _____ m R _____ m
	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	R <i>820am</i> TRACK #2 PACIFIC BLOCK	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	

A _____ m = ENTER TIME BLOCK AUTHORITY RECEIVED
 R _____ m = ENTER TIME BLOCK RELEASED
 CLOCK TIME LIMIT _____ m = ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES
 [X] = ENTER 'X' IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING

How DTC Works

Meets



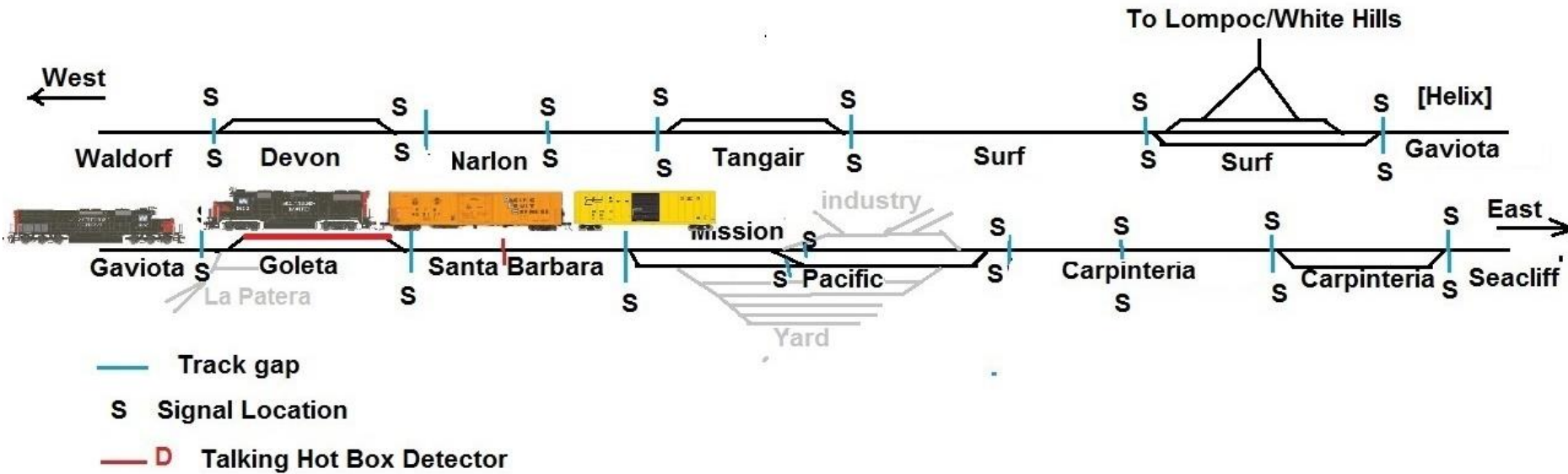
DIRECT TRAFFIC CONTROL *Jan 3 1994 Goleta local*
IN EFFECT BETWEEN VENTURA MP 389.6 AND GUADALUPE 276.9 *SP 4800 Engineer Ryan*

GUADALUPE (SAN LUIS OBISPO)	DEVON		TANGAIR		SURF	GOLETA		SANTA BARBARA	CARPINTERIA		VENTURA (OXNARD/LOS ANGELES)	
	WALDORF BLOCK	DEVON BLOCK	NARLON BLOCK	TANGAIR BLOCK	SURF BLOCK	GAVIOTA BLOCK	GOLETA BLOCK	SANTA BARBARA BLOCK	DOUBLE TRACK RULE D-97 TRACK #1 MISSION BLOCK	CARPINTERIA BLOCK	SEACLIFF BLOCK	
	A _____ m	A _____ m	A _____ m	A _____ m	A _____ m	A _____ m	A _____ m	A <i>755am</i> m	R <i>820am</i> m	A _____ m	A _____ m	
	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	R <i>820am</i> m		R _____ m	R _____ m	
	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	R <i>820am</i> m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	
									R <i>755am</i> m			

A _____ m = ENTER TIME BLOCK AUTHORITY RECEIVED
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 CLOCK TIME LIMIT _____ m = ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES
 [Symbol] = ENTER "X" IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING

How DTC Works

Authority Released



DIRECT TRAFFIC CONTROL
IN EFFECT BETWEEN VENTURA MP 389.6 AND GUADALUPE 276.9

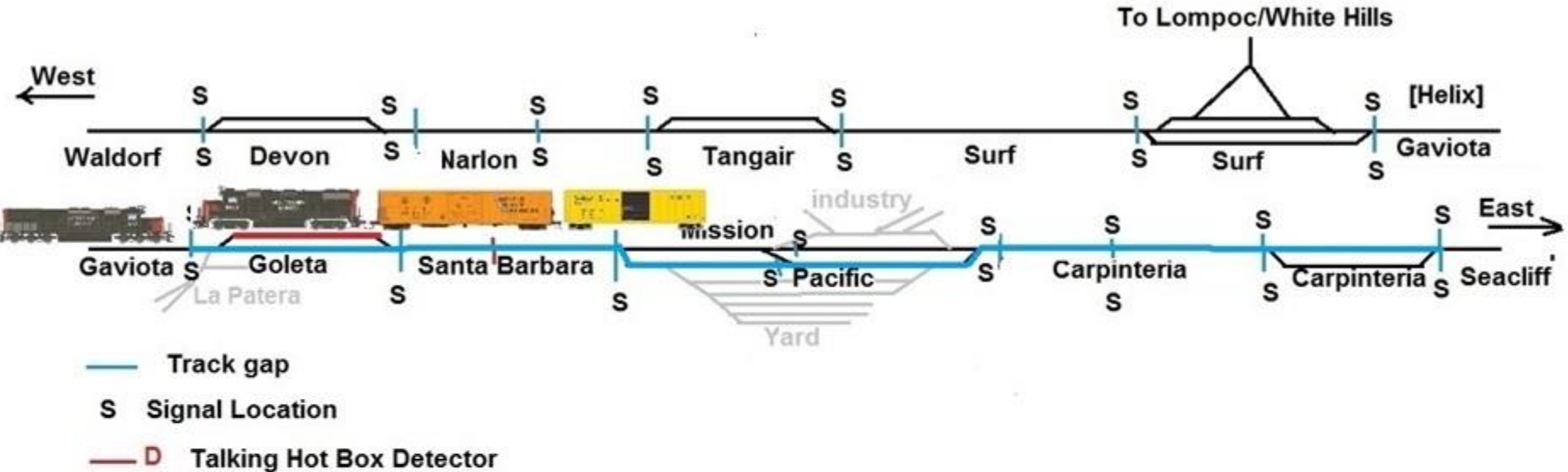
Jan 3 1994 OAWCM
SP8283 Engineer Morden

GUADALUPE (SAN LUIS OBISPO)	DEVON		TANGAIR		SURF	GOLETA		SANTA BARBARA	CARPINTERIA		VENTURA (OXNARD/LOS ANGELES)
	WALDORF BLOCK	DEVON BLOCK	NARLON BLOCK	TANGAIR BLOCK	SURF BLOCK	GAVIOTA BLOCK	GOLETA BLOCK	SANTA BARBARA BLOCK	DOUBLE TRACK RULE D-97 TRACK #1 MISSION BLOCK	CARPINTERIA BLOCK	
A	623 a _m	A 705 a _m	A 705 a _m	A 705 a _m	A 705 a _m	A 705 a _m	A _____ m	A _____ m		A _____ m	A _____ m
R	722 a _m	R 840 a _m	R 840 a _m	R 840 a _m	R 840 a _m	R _____ m	R _____ m	R _____ m		R _____ m	R _____ m
	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT	CLOCK TIME LIMIT		CLOCK TIME LIMIT	CLOCK TIME LIMIT
	_____ m	_____ m	_____ m	_____ m	_____ m	_____ m	_____ m	_____ m		_____ m	_____ m

A _____ m = ENTER TIME BLOCK AUTHORITY RECEIVED R _____ m = ENTER TIME BLOCK RELEASED CLOCK TIME LIMIT _____ m = ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES _____ m = ENTER "X" IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING

How DTC Works

Authority Given and Recorded in Writing



DIRECT TRAFFIC CONTROL *Jan 3 1994 OAWCM*
SP8283 Engineer Morden

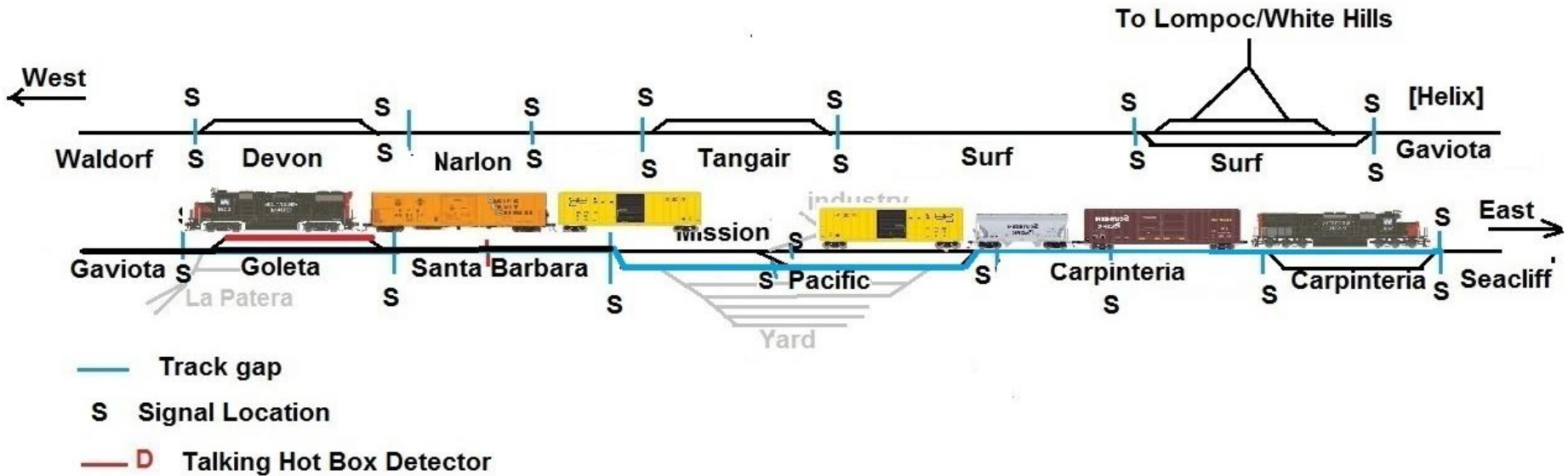
IN EFFECT BETWEEN VENTURA MP 389.6 AND GUADALUPE 276.9

GUADALUPE (SAN LUIS OBISPO)	DEVON		TANGAIR		SURF		GOLETA		SANTA BARBARA		CARPINTERIA		VENTURA (OXNARD)/LOS ANGELES
	WALDORF BLOCK	DEVON BLOCK	NARLON BLOCK	TANGAIR BLOCK	SURF BLOCK	GAVIOTA BLOCK	GOLETA BLOCK	SANTA BARBARA BLOCK	DOUBLE TRACK RULE D-97	CARPINTERIA BLOCK	SEACLIFF BLOCK		
	A <u>623 a</u> R <u>722 a</u>	A <u>705 a</u> R <u>840 a</u>	A <u>705 a</u> R <u>840 a</u>	A <u>705 a</u> R <u>840 a</u>	A <u>705 a</u> R <u>840 a</u>	A <u>705 a</u> R _____	A <u>835 a</u> R _____	A <u>835 a</u> R _____	TRACK #1 MISSION BLOCK	A <u>835 a</u> R _____	A _____ R _____		
	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____	TRACK #2 PACIFIC BLOCK	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____		

A _____ * ENTER TIME BLOCK AUTHORITY RECEIVED R _____ * ENTER TIME BLOCK RELEASED CLOCK TIME LIMIT _____ * ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES _____ * ENTER "X" IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING

How DTC Works

Authority Released



DIRECT TRAFFIC CONTROL
IN EFFECT BETWEEN VENTURA MP 389.6 AND GUADALUPE 276.9

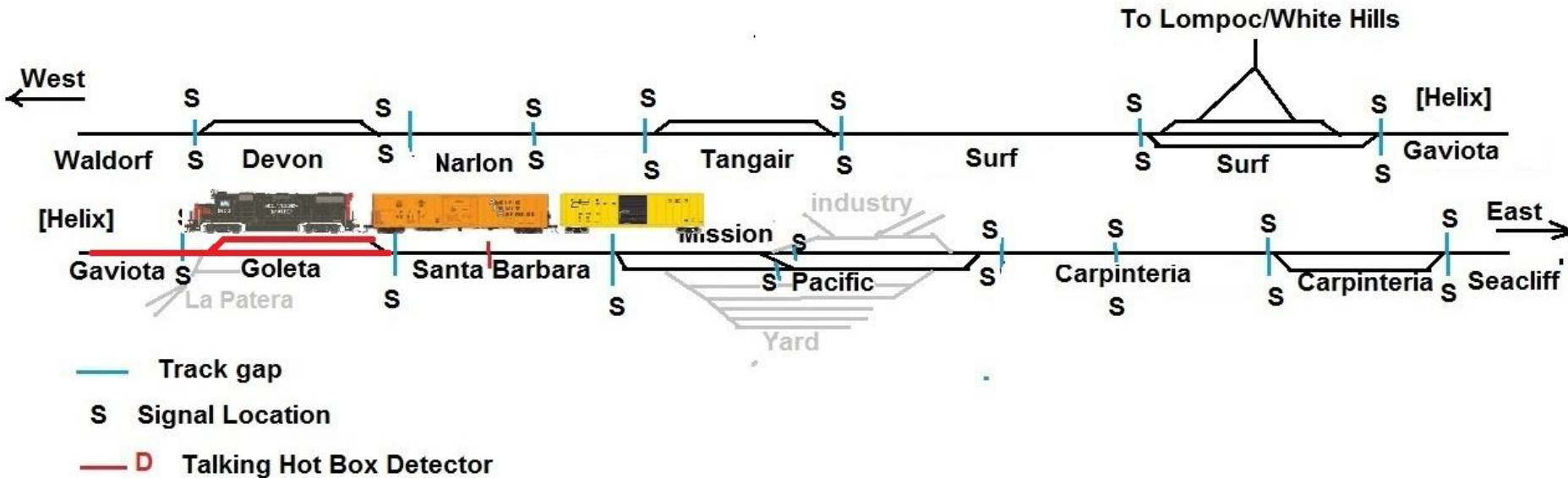
Jan 3 1994 OAWCM
SP8283 Engineer Morden

GUADALUPE (SAN LUIS OBISPO)	DEVON		TANGAIR		SURF		GOLETA		SANTA BARBARA		CARPINTERIA		VENTURA (OXNARD/LOS ANGELES)
	WALDORF BLOCK	DEVON BLOCK	NARLON BLOCK	TANGAIR BLOCK	SURF BLOCK	GAVIOTA BLOCK	GOLETA BLOCK	SANTA BARBARA BLOCK	DOUBLE TRACK RULE-97	CARPINTERIA BLOCK	SEACLIFF BLOCK		
	A <u>623 a</u> R <u>722 a</u>	A <u>705 a</u> R <u>840 a</u>	A <u>705 a</u> R <u>840 a</u>	A <u>705 a</u> R <u>840 a</u>	A <u>705 a</u> R <u>840 a</u>	A <u>705 a</u> R <u>855 a</u>	A <u>835 a</u> R <u>855 a</u>	A <u>835 a</u> R <u>855 a</u>	TRACK #1 MISSION BLOCK	A <u>835 a</u>	A _____	R _____	
	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____	TRACK #2 PACIFIC BLOCK	CLOCK TIME LIMIT _____	CLOCK TIME LIMIT _____		

A _____ = ENTER TIME BLOCK AUTHORITY RECEIVED R _____ = ENTER TIME BLOCK RELEASED CLOCK TIME LIMIT _____ = ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES [X] = ENTER 'X' IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING

How DTC Works

Work and Time Authority



DIRECT TRAFFIC CONTROL Jan 3 1994 *Goleta local*
 IN EFFECT BETWEEN VENTURA MP 389.6 AND GUADALUPE 276.9 SP 4800 *Engineer Ryan*

GUADALUPE (SAN LUIS OBISPO)	DEVON		TANGAIR		SURF		GOLETA		SANTA BARBARA	CARPINTERIA		VENTURA (OXNARD)/LOS ANGELES
	WALDORF BLOCK	DEVON BLOCK	NARLON BLOCK	TANGAIR BLOCK	SURF BLOCK	GAVIOTA BLOCK	GOLETA BLOCK	SANTA BARBARA BLOCK	DOUBLE TRACK RULE D-97	CARPINTERIA BLOCK	SEACLIFF BLOCK	
	A _____ m	A _____ m	A _____ m	A _____ m	A _____ m	A _____ m	A _____ m	A <i>755a</i> m	TRACK #1 MISSION BLOCK	A _____ m	A _____ m	
	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	R <i>820a</i> m	TRACK #2 PACIFIC BLOCK	R _____ m	R _____ m	
	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	R <i>820am</i>	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	
						<i>1000a</i> m	<i>1000a</i> m		<i>755am</i>			

A _____ m = ENTER TIME BLOCK AUTHORITY RECEIVED R _____ m = ENTER TIME BLOCK RELEASED CLOCK TIME LIMIT _____ m = ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES [X] = ENTER "X" IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING

Signs -CSX



Signs –SP CA and KS



Signs – Oregon SP



Signs - NWP



Signs – Alaska RR



Signs - CA



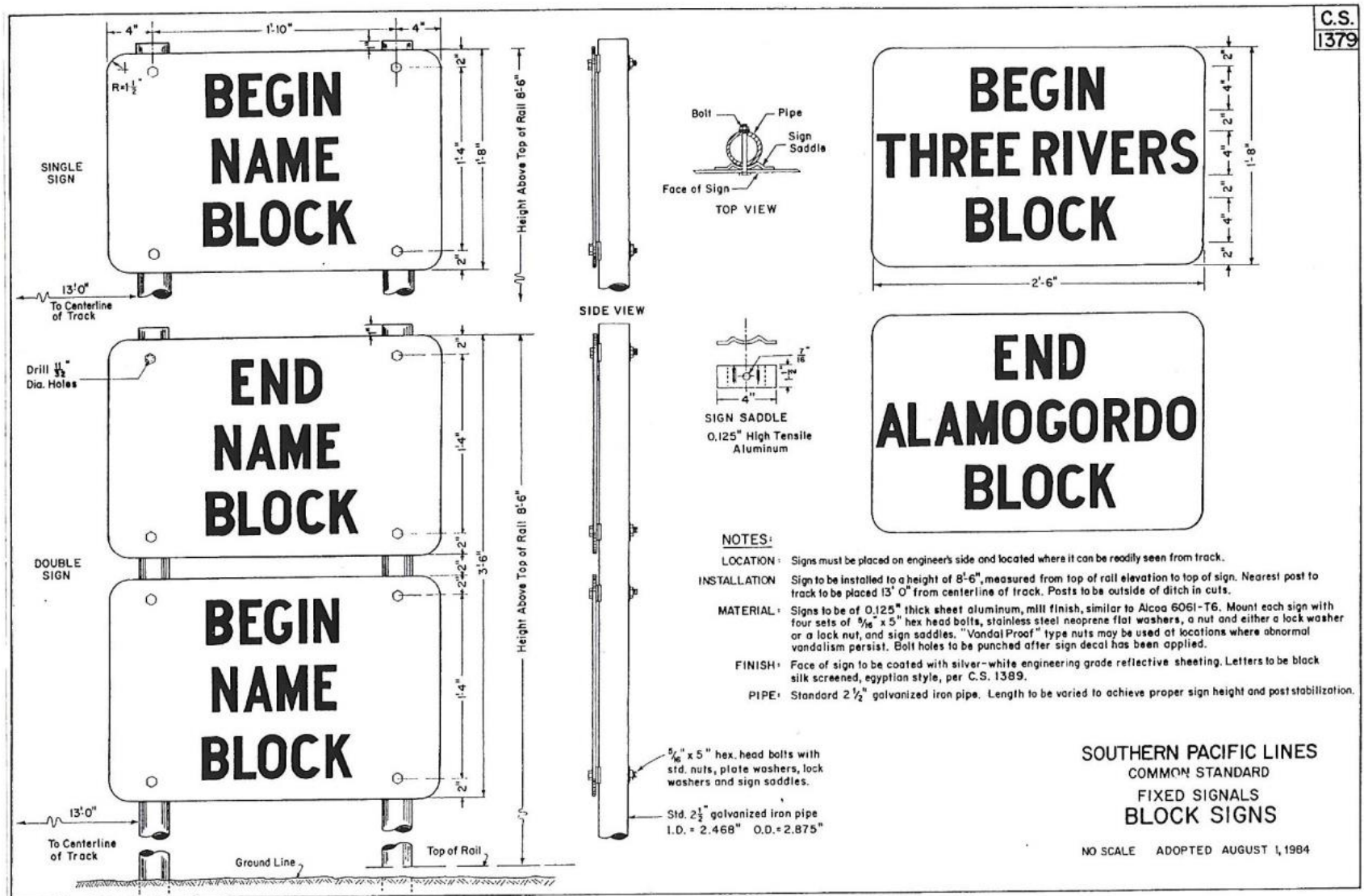
Signs on the Model

Model signs



Fascia signs

Southern Pacific Common Standard



Timetable



LOS ANGELES DIVISION TIMETABLE

1

EFFECTIVE SUNDAY, APRIL 10, 1994
AT 12:01 A.M.

G. P. MICHAEL
Vice President - Operations

A. M. HENSON
Vice President - Transportation

T. B. CHASE
General Manager

M. L. IRVINE
Superintendent

RULE 16.1. Direct Traffic Control Designated Limits:

East MP	Block Name	West MP	East MP	Block Name	West MP
Coast Line			339.7	Gaviota	325.3
453.1	Northridge	445.3	325.3	Concepcion	317.5
445.3	Chatsworth	437.6	317.5	Sudden	308.0
437.6	Santa Susana	432.9	308.0	Honda	303.2
426.4	Moorpark	416.2	303.2	Surf	298.1
416.2	Camarillo	408.8	298.1	Tangair	293.9
408.8	Oxnard	399.2	293.9	Narlon	286.9
399.2	Ventura	389.6	286.9	Devon	280.9
389.6	Seacliff	371.9	280.9	Waldorf	276.9
No. 1 Track			276.9	Guadalupe	270.7
371.9	Mission	368.4	270.7	Callender	264.9
No. 2 Track			264.9	Grover	254.8
371.9	Pacific	368.4	No. 1 Track		
368.4	Santa Barbara	362.9	254.8	San Simeon	251.8
362.9	Naples	349.9	No. 2 Track		
349.9	Capitan	339.7	254.8	El Camino	251.8

RULE 16.3. May be granted for Westward movement on westward track in the Mission and San Simeon blocks or for Eastward movement on eastward track in the Pacific or El Camino blocks. Movements against the current of traffic may only be made under the provisions of Rule 16.4.

Dispatcher's Train Sheet

SOUTHERN PACIFIC TRANSPORTATION COMPANY
 DIVISION OF PASADENA
 PASADENA, CALIF. 92369

Form No. 10
 10-1-77

SANTA BARBARA BLOCK		PACIFIC BLOCK		MISSOURI BLOCK		CHICAGO BLOCK		VENTURA BLOCK		SARASOTA BLOCK		SARASOTA BLOCK		MISSISSIPPI BLOCK		SANTA SUSANA BLOCK		CHATTANOOGA BLOCK		NORTHWIDE BLOCK		NEWITT BLOCK		NEWITT BLOCK					
UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN	UP	DN
[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]			
[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]		[Handwritten notes]			

HOME DEPOT HOME OF THE FINEST PAINTS SKU# 611-269

Dispatcher's Train Sheet

Supt. G. R. FETTY
 Ass't. Supt. R. A. BAKER
 Chief Disp. R. E. MOHA / W. K. BEDWELL

SOUTHERN PACIFIC TRANSPORTATION COMPANY
 DISPATCHER'S RECORD OF MOVEMENT OF TRAINS
 Los Angeles, Ca., THURSDAY FEB 2, 1989

Time Table No. 2
 Los Angeles Division
 Rule For Today
WESTWARD

IDENTIFICATION		Distance	STATIONS	Designation	1	02	WORK	WORK	1	02	CHARGE	Los Angeles
TRAIN	CONDUCTOR ON DUTY				LABR	AKSON	TRAIN	TRAIN	WELCH		NLR	
ANTRAK 13 LOUSTON	ANTRAK 13 LAWASTON	0.0	SAN LUIS OBISPO	BI	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM
ANTRAK 13 GARD	ANTRAK 13 GARD	24.4	GUADALUPE	GD	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM
ANTRAK 13 7:25	ANTRAK 13 11:30	50.6	SURF	RF	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM
HAGEN ORAR	BELL BURKE	155.7	OXNARD	RD	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM
ATL 244	ATL 234	210.6	BURBANK JCT.	BU	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM
ATL 253	ATL 248	226.4	LA YARD	OD	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM
7:55	9:25	230.7	LAUPT	UD	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM	7:00 PM
CE 240R C 1140	CE 235R C 1218R											
FOOTAGE			CABOOSE			CARS						

DEVON BLOCK					NARLON BLOCK					TANGAIR BLOCK					SURF BLOCK					HONDA BLOCK				
Employee	Time Block	Work and Time	Time Block	Enter Siding	Employee	Time Block	Work and Time	Time Block	Enter Siding	Employee	Time Block	Work and Time	Time Block	Enter Siding	Employee	Time Block	Work and Time	Time Block	Enter Siding	Employee	Time Block	Work and Time	Time Block	Enter Siding
GILES	1100L	10:00	10:00		Salazar	105P	11:52	10:58		Salazar	105P	11:45	10:58		HADLEY	138R	4:02	10:58		Salazar	1240R	12:30	10:58	
GILES	125R	10:00	10:00		FRISON	123R	2:08	11:01		"	123R	2:08	11:01		Salazar	123R	11:45	10:58		Salazar	1240R	12:30	10:58	
Salazar	127R	11:45	11:45		"	123R	2:08	2:08		"	123R	2:08	2:08		"	123R	11:45	10:58		"	1240R	12:30	10:58	
ARISON	111R	2:08	2:08		"	314P	3:54	3:54		"	314P	3:54	3:54		"	123R	11:45	10:58		"	1240R	12:30	10:58	
Brake	114R	2:08	2:08		"	606P	7:00	7:00		"	606P	7:00	7:00		"	123R	11:45	10:58		"	1240R	12:30	10:58	
GILES	305R	3:07	3:07		"	606P	7:00	7:00		"	606P	7:00	7:00		"	123R	11:45	10:58		"	1240R	12:30	10:58	
"	314P	3:54	3:54		"	606P	7:00	7:00		"	606P	7:00	7:00		"	123R	11:45	10:58		"	1240R	12:30	10:58	
GILES	606P	6:04	6:04		"	606P	7:00	7:00		"	606P	7:00	7:00		"	123R	11:45	10:58		"	1240R	12:30	10:58	
"	606P	7:00	7:00		"	606P	7:00	7:00		"	606P	7:00	7:00		"	123R	11:45	10:58		"	1240R	12:30	10:58	

Forms

- Engine Crew forms

DIRECT TRAFFIC CONTROL
IN EFFECT BETWEEN VENTURA MP 389.6 AND GUADALUPE 276.9

GUADALUPE (SAN LUIS OBISPO)	DEVON <input type="checkbox"/>		TANGAIR <input type="checkbox"/>		SURF <input type="checkbox"/>		GOLETA <input type="checkbox"/>		SANTA BARBARA <input type="checkbox"/>		CARPINTERIA <input type="checkbox"/>		VENTURA (OXNARD/LOS ANGELES)
	WALDORF BLOCK	DEVON BLOCK	NARLON BLOCK	TANGAIR BLOCK	SURF BLOCK	GAVIOTA BLOCK	GOLETA BLOCK	SANTA BARBARA BLOCK	DOUBLE TRACK RULE D-97	CARPINTERIA BLOCK	SEACLIFF BLOCK		
	A _____ m R _____ m	A _____ m R _____ m	A _____ m R _____ m	A _____ m R _____ m	A _____ m R _____ m	A _____ m R _____ m	A _____ m R _____ m	A _____ m R _____ m	A _____ m R _____ m	TRACK #1 MISSION BLOCK	A _____ m R _____ m	A _____ m R _____ m	
CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	TRACK #2 PACIFIC BLOCK	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m		

A _____ m = ENTER TIME BLOCK AUTHORITY RECEIVED
 R _____ m = ENTER TIME BLOCK RELEASED
 CLOCK TIME LIMIT _____ m = ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES
 = ENTER "X" IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING

Prototype Forms

DATE 2-15-86 DIRECT TRAFFIC CONTROL IN EFFECT BETWEEN BIRBANK JCT. AND EAST SAN LUIS OBISPO TRAIN 9366

GROVER	CALLENDER	GUADALUPE	WALDORF	DEVON	NARLON	TANGAIR	SURF	HONDA	SUDDEN	CONCEPCION	GAVIOTA	CAPITAN
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GROVER BLOCK	CALLENDER BLOCK	GUADALUPE BLOCK	WALDORF BLOCK	DEVON BLOCK	NARLON BLOCK	TANGAIR BLOCK	SURF BLOCK	HONDA BLOCK	SUDDEN BLOCK	CONCEPCION BLOCK	GAVIOTA BLOCK	CAPITAN BLOCK
A <u>6:47</u> m	A <u>6:47</u> m	A <u>6:47</u> m	A <u>6:47</u> m	A <u>6:47</u> m	A <u>6:47</u> m	A <u>5:38</u> m	A <u>5:38</u> m	A <u>5:38</u> m	A <u>4:34</u> m	A <u>4:34</u> m	A <u>4:34</u> m	A <u>4:34</u> m
R _____ m	R _____ m	R _____ m	R <u>7:22</u> m	R <u>7:22</u> m	R <u>7:22</u> m	R _____ m	R <u>6:36</u> m	R <u>6:36</u> m	R <u>6:36</u> m	R _____ m	R _____ m	R _____ m
CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m

12 A _____ m = ENTER TIME BLOCK AUTHORITY RECEIVED R _____ m = ENTER TIME BLOCK AUTHORITY RELEASED CLOCK TIME LIMIT _____ m = ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES = ENTER 'X' IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING

DOE 440. - 441.5 w

GOLETA	SANTA BARBARA	DOUBLE TRACK RULE D-97	SEACLIFF	VENTURA	OXNARD	CAMARILLO	MOORPARK	SANTA SUSANA	CHATS-WORTH	NORTHBRIDGE	HEWITT
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GOLETA BLOCK	SANTA BARBARA BLOCK	DOUBLE TRACK RULE D-97	SEACLIFF BLOCK	VENTURA BLOCK	OXNARD BLOCK	CAMARILLO BLOCK	MOORPARK BLOCK	SANTA SUSANA BLOCK	CHATS-WORTH BLOCK	NORTHBRIDGE BLOCK	HEWITT BLOCK
A <u>4:34</u> m	A <u>4:34</u> m		A <u>4:34</u> m	A <u>3:06</u> m	A <u>3:06</u> m	A <u>3:06</u> m	A <u>3:06</u> m	A <u>3:34</u> m	A <u>2:35</u> m	A <u>2:35</u> m	A <u>2:35</u> m
R <u>5:46</u> m	R <u>5:46</u> m		R <u>5:46</u> m	R _____ m	R _____ m	R _____ m	R _____ m	R _____ m	R <u>3:20</u> m	R <u>3:00</u> m	R <u>3:00</u> m
CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m		CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m	CLOCK TIME LIMIT _____ m

A _____ m = ENTER TIME BLOCK AUTHORITY RECEIVED R _____ m = ENTER TIME BLOCK AUTHORITY RELEASED CLOCK TIME LIMIT _____ m = ENTER TIME WORK AND CLOCK TIME LIMIT EXPIRES = ENTER 'X' IN APPROPRIATE BOX WHEN DIRECTED TO ENTER SIDING

Signals

- Southern Pacific used Absolute Block Signals

- Showcase Miniatures with tri-color LED



- Dennis Drury Dual ABS Signal Controller – MRCS
<http://www.modelrailroadcontrolsystems.com/dual-abs-signal-controller/>

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- E O Gibson's Dome of Foam web pages
http://www.wx4.org/to/foam/sp/train_orders/primers/dtc_primer.html
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or <http://www2.belrailway.com/wp-content/uploads/2020/03/gcor-2020-x1a-print3.pdf>

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- Queensland Rail <https://qrig.org/safeworking/direct-traffic-control-an-overview>
- U.S. Department of Transportation, Federal Railroad Administration “Methods of Operation”
<https://railroads.dot.gov/elibrary/methods-operation>
- Direct Traffic Control Video
https://www.youtube.com/watch?v=K_ABmLoLXhs

A photograph of a desert railway station. The tracks curve through a sandy landscape under a clear sky. A tall signal tower stands on the right, and a blue building with a white door and window is nearby. A signal box is visible on the left. The word "Thanks" is overlaid in large black text in the center.

Thanks

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