

Relay Control system

etc

CAB3 SAME

TO TRACK

CAB1

FROM THROTTLE

+12V

TO MAIN DISPLAY POWER INDICATOR

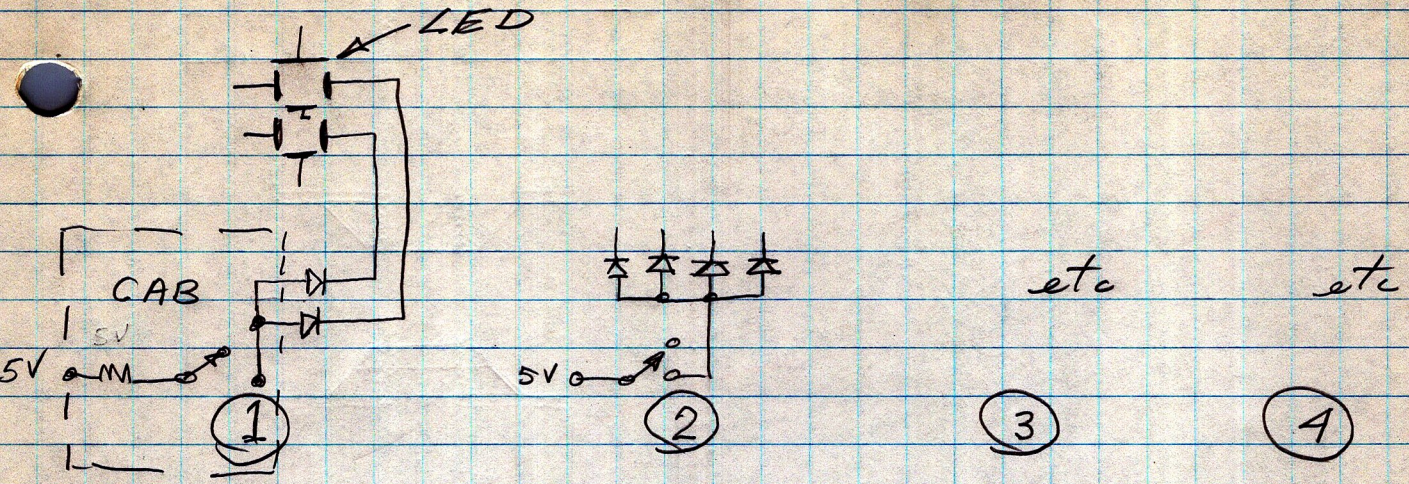
500

LED

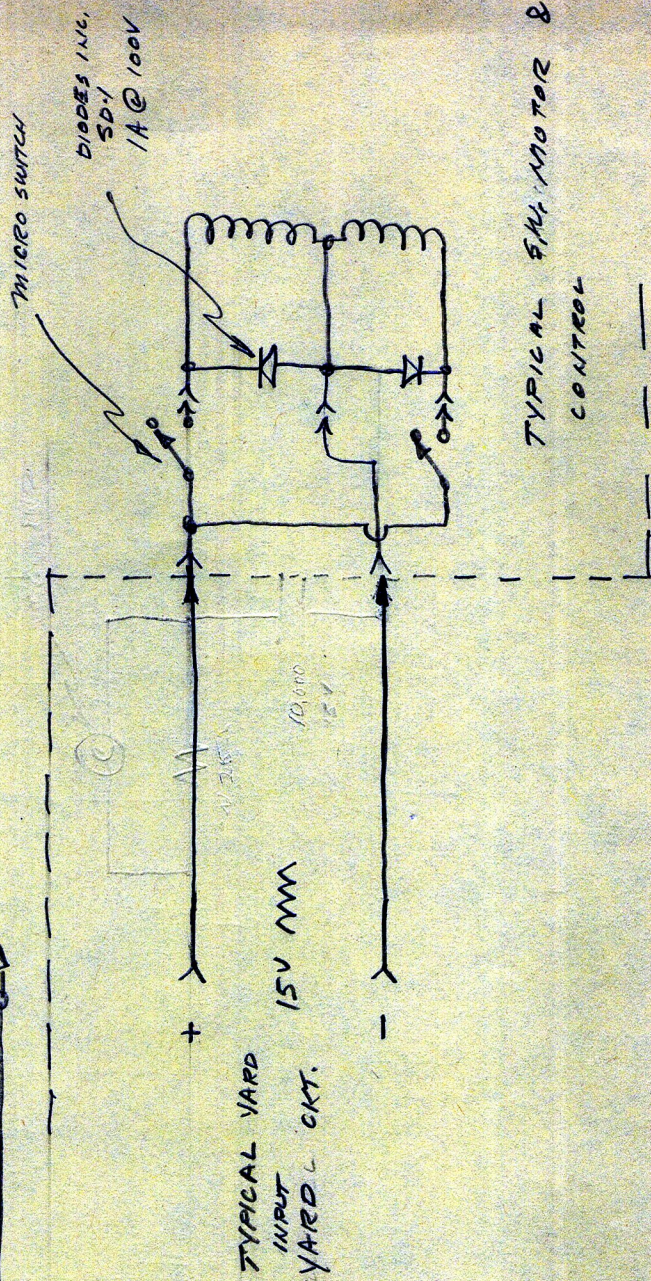
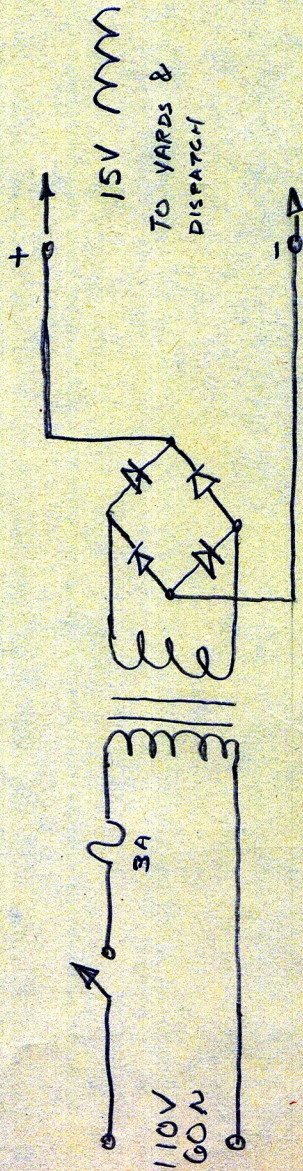
5D05

(\*)

# Dispatcher occupancy DISPLAY



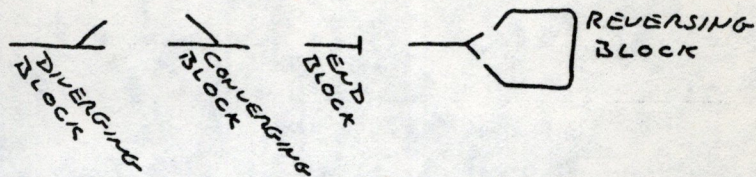
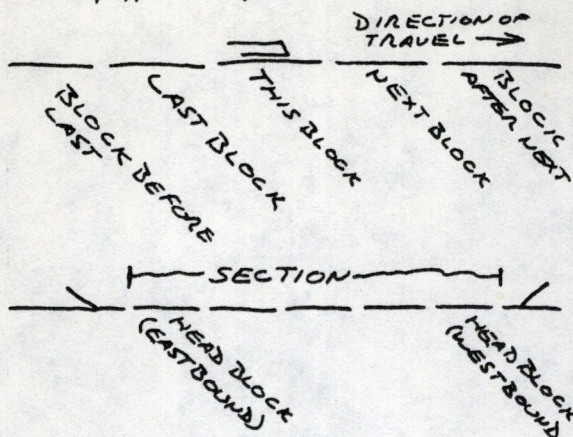
# SWITCH MACHINE POWER & CONTROL



## DISPLAY STATUS

		DISPATCHER		PUBLIC MAIN DISPLAY
		CLASS DISPLAY	ROUTE DISPLAY	
1)	TRAIN #	✓		
2)	CAB #	✓	✓	✓
3)	DIRECTION		✓	✓
4)	FREIGHT / PASS.	✓		
5)	OCCUPANCY		✓	✓
6)	TURNOUT		✓	
7)	TRAIN LOCATION		✓	✓
8)	TRAIN MOTION			✓

## DEFINITIONS



"BLOCK AVAILABLE" - NO THROTTLE IS CONNECTED TO THE BLOCK

"BLOCK IN USE" - SOME OTHER THROTTLE IS CONNECTED TO THE BLOCK

### 1. IN ALL BLOCKS

- A. CONNECT NEXT BLOCK, IF IT IS AVAILABLE, WHEN FRONT OF TRAIN ENTERS THIS BLOCK
- B. DISCONNECT LAST BLOCK WHEN END OF TRAIN ENTERS THIS BLOCK
- C. INDICATE YELLOW AND SLOW TRAIN TO 15 MPH IF BLOCK AFTER NEXT IS OCCUPIED AND AVAILABLE
- D. INDICATE FLASHING YELLOW AND SLOW TRAIN TO 15 MPH IF BLOCK AFTER NEXT IS IN USE (OCCUPIED OR NOT)
- E. INDICATE RED AND STOP TRAIN IF NEXT BLOCK IS OCCUPIED AND AVAILABLE
- F. INDICATE FLASHING RED AND STOP TRAIN IF NEXT BLOCK IS IN USE (OCCUPIED OR NOT)
- G. IN BOTH E & F THE STOP CAN BE FORSTALLED BY PRESSING A BUTTON WHICH WILL ALLOW A MAXIMUM SPEED OF 3 MPH THROUGH THE BLOCK. IF TRAIN ENTERS THE NEXT BLOCK UNDER CONDITION I.E. AN ALARM SOUNDS AND THE TRAIN STOPS. THE ALARM IS SILENCED BY RELEASING THE FORSTALL BUTTON, WHICH MUST BE PRESSED AGAIN TO CONTINUE MOVEMENT THROUGH THE BLOCK.
- H. INDICATE GREEN AND ALLOW MAXIMUM SPEED IF BOTH BLOCKS AHEAD ARE UNOCCUPIED AND NEXT BLOCK IS CONNECTED AND BLOCK AFTER NEXT IS AVAILABLE.

## 2. IN DIVERGING BLOCKS

- A. INDICATE AND ACT AS IN 1.A. THRUH. FOR THE NEXT BLOCK AND AFTER NEXT FOR THE ROUTE SELECTED BY THE TURNOUT

## 3. IN CONVERGING BLOCKS

- A. ADD THE REQUIREMENT THAT AN OPEN SWITCH BE TREATED AS THOUGH THIS BLOCK IS IN USE (i.e. 1.D. and 1.F.)

## 4. END BLOCKS

- A. ADD THE REQUIREMENT THAT THIS BLOCK INDICATES AS IF IT WERE THE LAST BLOCK BEFORE A BLOCK IN USE (i.e. 1.F. HAPPENS UPON ENTERING THIS BLOCK)

## 5. HEAD BLOCKS

- A. ADD THE REQUIREMENT THAT A TRAIN ENTERING THIS BLOCK CAUSE THE HEAD BLOCK FOR THE OPPOSITE DIRECTION TO ACT AS IF IT WERE IN USE TO TRAINS IN THE OPPOSITE DIRECTION. IF THERE ARE WAYSIDE SIGNALS, THE SIGNALS FOR THE OPPOSING DIRECTION ARE TO SHOW RED UNTIL THE TRAIN IN THE SECTION PASSES AT WHICH TIME THEY WILL CLEAR

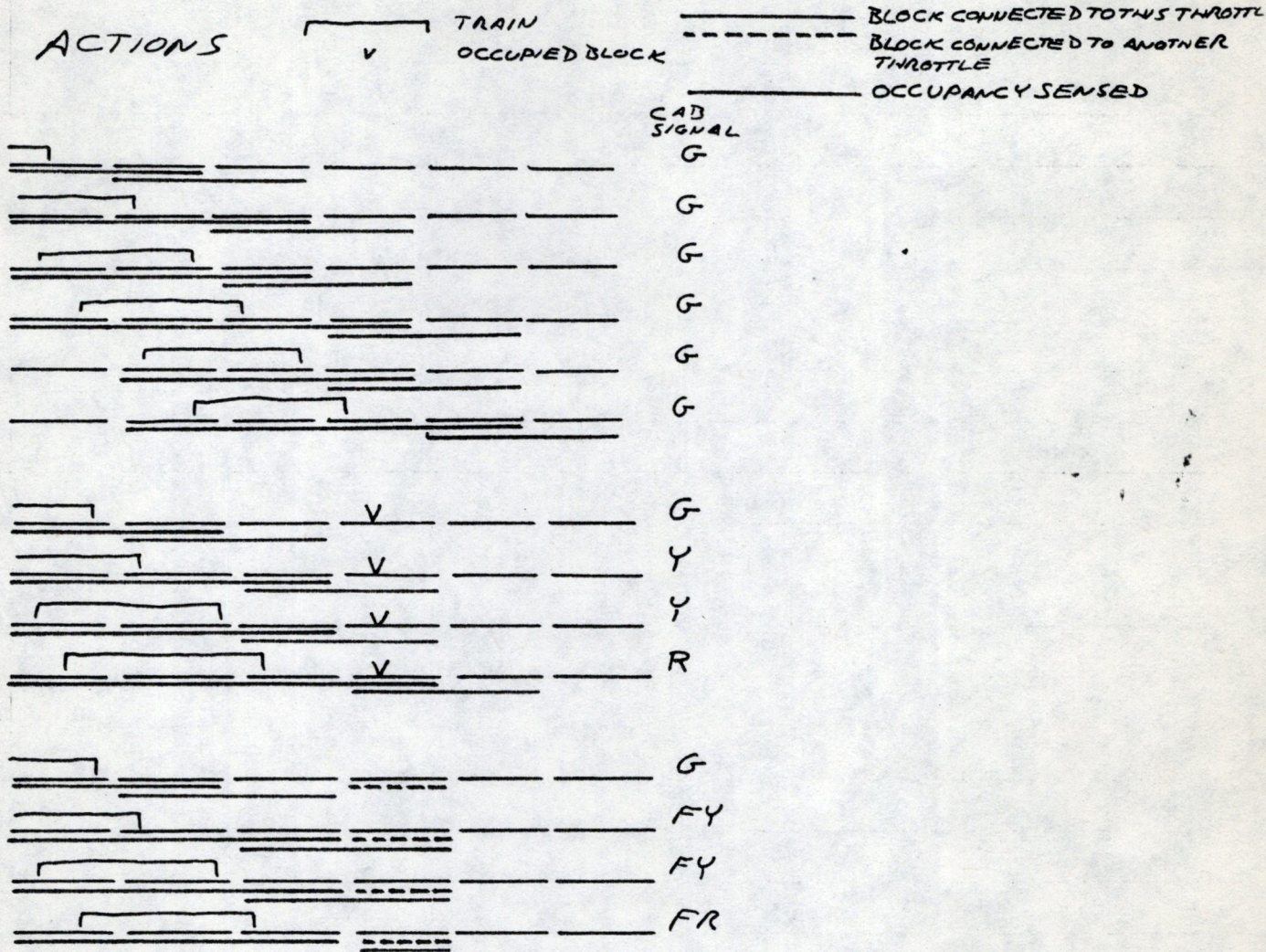
## 6. REVERSING BLOCKS

- A. WHEN THE TRAIN IS ENTIRLY IN THIS BLOCK THE TURNOUT IS TO ALIGN ITSELF FOR THE EXITING TRAIN AND THE MAIN DIRECTION RELAY WILL REVERSE ITSELF

## 7. INITIALIZATION BLOCKS

- A. WHEN THE BLOCK IS OCCUPIED, THE DIRECTION RELAY HAS BEEN SET, AND THE START BUTTON PRESSEDD, THE THROTTLE WILL BE CONNECTED TO THE BLOCK AND THE AUTOMATIC SEQUENCE STARTED. ALSO, ANY

OCCUPIED BLOCKS NOT CONNECTED TO ANY THROTTLE OPPOSITE THE DIRECTION CHOSEN WILL BE ASSUMED PART OF THE TRAIN AND ALSO CONNECTED TO THE SAME THROTTLE.



**SIGNAL NAMES**

EB - EAST BOUND

WB - WEST BOUND

D - BLOCK OCCUPIED

P - BLOCK CONNECTED TO THIS THROTTLE

C - BLOCK CONNECTED TO ANY THROTTLE

CT - CONNECT THROTTLE

DT - DISCONNECT THROTTLE

E/WG - EAST/WEST GREEN

E/WY - EAST/WEST YELLOW

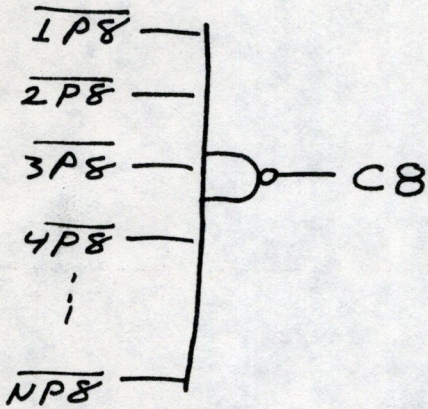
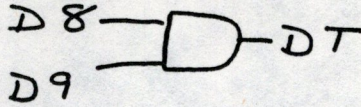
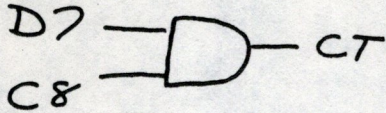
E/WR - EAST/WEST RED

A NUMBER AT THE LEFT IS THE THROTTLE, AT THE

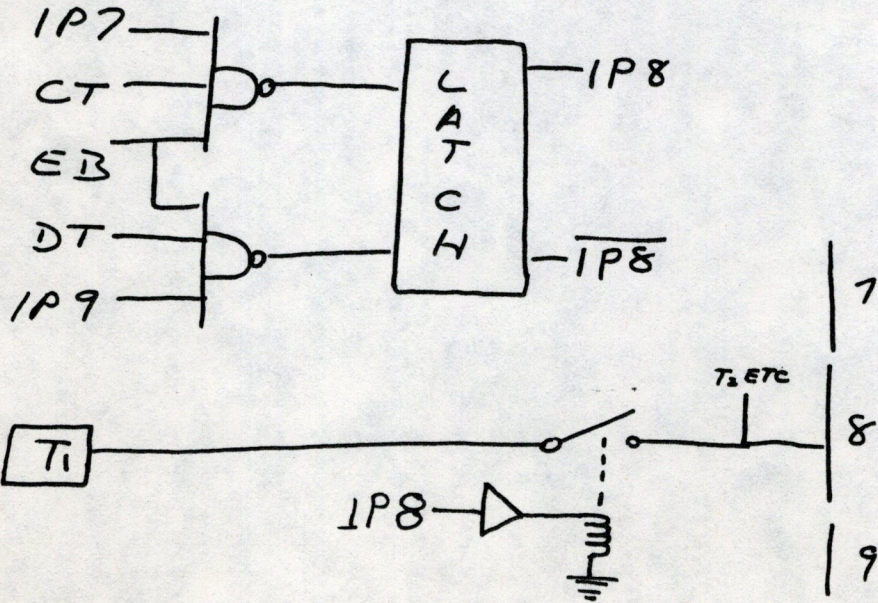
RIGHT THE BLOCK 3ER6 IS THROTTLE 3 RED SIGNAL EAST SIDE BLOCK 6 LOW ACTIVE

1 AB

1 FOR EACH BLOCK

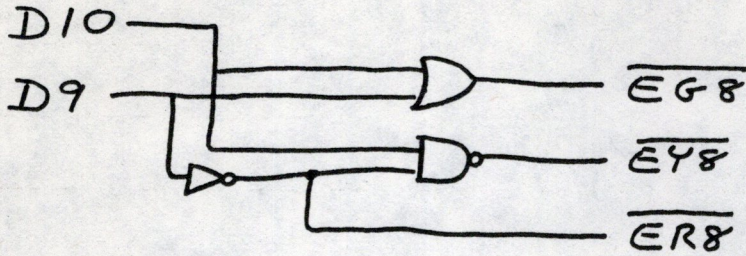
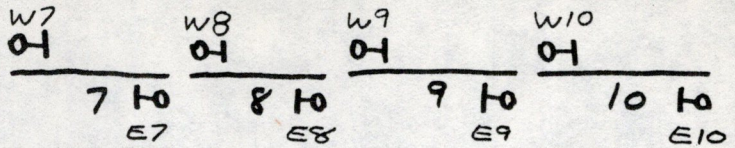


1 FOR EACH THROTTLE FOR EACH BLOCK THROTTLE 1 ASSUMED

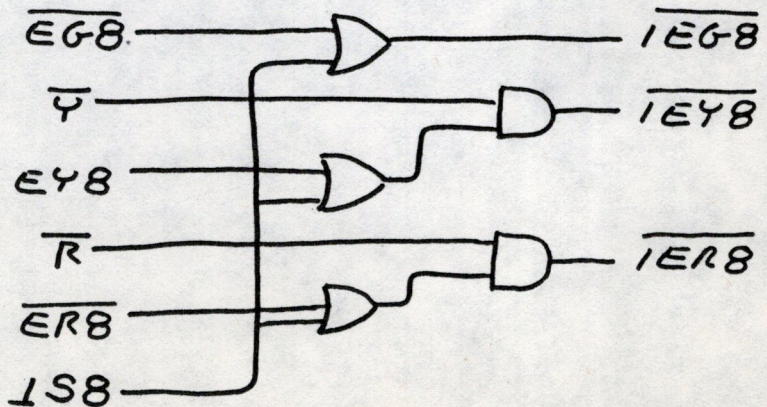
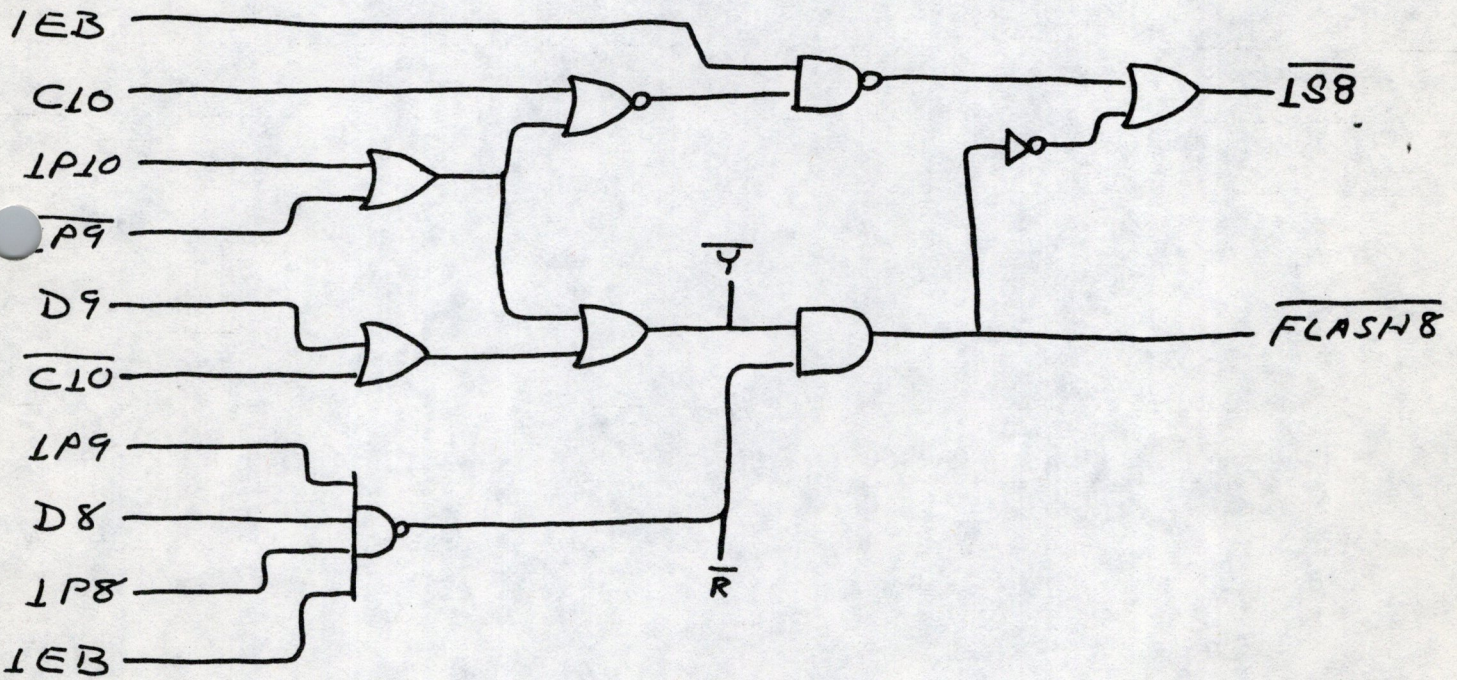


1 CDEFH

1 FOR EACH BLOCK



1 FOR EACH BLOCK FOR EACH THROTTLE



1 C D E F H

1 FOR EACH THROTTLE

