

```

PPPPPPPP RRRRRRRR 000000 BBBB BBBB 11
PPPPPPPP RRRRRRRR 000000 BBBB BBBB 11
PP PP RR RR 00 00 BB BB 1111
PP PP RR RR 00 00 BB BB 1111
PP PP RR RR 00 00 BB BB 11
PP PP RR RR 00 00 BB BB 11
PPPPPPPP RRRRRRRR 00 00 BBBB BBBB 11
PPPPPPPP RRRRRRRR 00 00 BBBB BBBB 11
PP RR RR 00 00 BB BB 11
PP RR RR 00 00 BB BB 11
PP RR RR 00 00 BB BB 11
PP RR RR 00 00 BB BB 11
PP RR RR 00 00 BB BB 11
PP RR RR 000000 BBBB BBBB 111111
PP RR RR 000000 BBBB BBBB 111111

```

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44 44 000000 000000 44 44 000000 5555555555
44 44 000000 000000 44 44 000000 5555555555
44 44 00 00 00 00 44 44 00 00 55
44 44 00 00 00 00 44 44 00 00 55
44 44 00 0000 00 0000 44 44 00 0000 555555
44 44 00 0000 00 0000 44 44 00 0000 555555
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4444444444 00 00 00 00 00 00 4444444444 00 00 00 55
44 0000 00 0000 00 44 0000 00 55
44 0000 00 0000 00 44 0000 00 55
44 00 00 00 00 44 00 00 55 55
44 00 00 00 00 44 00 00 55 55
44 000000 000000 44 000000 555555
44 000000 000000 44 000000 555555

```

```

BBBB U U N N DDDD Y Y AAA
B B U U N N D D Y Y A A
B B U U N N D D Y Y A A
BBBB U U N N D D Y A A
B B U U N N D D Y A A A A A
B B U U N N D D Y A A
BBBB UUUUU N N DDDD Y A A

```

LPTSPL VERSION 6(344) RUNNING ON LPT500  
\*START\* USER BUNDY A [400,405] JOB MECH1 SEQ. 3224 DATE 17-NOV-75 12:22:48 MONITOR NETMON 5.07B V3 (AUG 12 T \*START\*  
REQUEST CREATED: 17-NOV-75 12:23:41  
FILE: DSKA0:PROB1[400,405] CREATED: 17-NOV-75 12:04:00 <055> PRINTED: 17-NOV-75 12:25:27  
QUEUE SWITCHES: /PRINT:ARROW /FILE:ASCII /COPIES:1 /SPACING:1 /LIMIT:33 /FORMS:NORMAL

\*\*\*\*\*.  
\* PROB1.  
\* PROLOG TRAIN PROBLEM.  
\* STAGE 5.  
\* ALAN BUNDY JULY 1975.  
\*\*\*\*\*.

+TFLAG.

+GIVEN(NIL).

+STANDSYS(SYS).

+STANDUNIT(L,FT,SYS) -/.

+STANDUNIT(T,MINS,SYS) -/.

+STANDUNIT(\*U,\*U,\*SYS) -ISCONST(\*U) -/.

+STANDUNIT(\*D,\*U,\*SYS) -UNIV(\*D,\*S,\*ARGS)  
-LSTANDUNIT(\*ARGS,\*UARGS,\*SYS) -UNIV(\*U,\*S,\*UARGS).

+LSTANDUNIT(NIL,NIL,\*SYS).

+LSTANDUNIT(\*D,\*DL,\*U,\*UL,\*SYS) -STANDUNIT(\*D,\*U,\*SYS)  
-LSTANDUNIT(\*DL,\*UL,\*SYS).

*Position*  
+SEGMENT(EPISODE,PERIOD1,PERIOD2,PERIOD3,NIL).

+PERIOD(PERIOD1).

+PERIOD(PERIOD2).

+PERIOD(PERIOD3).

+PERIOD(EPISODE).

+DURATION(PERIOD1,TI1).

+DURATION(PERIOD2,TI2).

+DURATION(PERIOD3,TI3).

+DURATION(EPISODE,TI0).

+INITIAL(PERIOD1,DEPARTURE).

+INITIAL(PERIOD2,CHANGE1).

+INITIAL (PERIOD3, CHANGE2).  
+INITIAL (EPISODE, DEPARTURE).  
+FINAL (PERIOD1, CHANGE1).  
+FINAL (PERIOD2, CHANGE2).  
+FINAL (PERIOD3, ARRIVAL).  
+FINAL (EPISODE, ARRIVAL).  
+MOMENT (DEPARTURE).  
+MOMENT (CHANGE1).  
+MOMENT (CHANGE2).  
+MOMENT (ARRIVAL).

+DISTANCE (TRAIN, D1, PERIOD1).  
+DISTANCE (TRAIN, D2, PERIOD2).  
+DISTANCE (TRAIN, D3, PERIOD3).  
+DISTANCE (TRAIN, D0, EPISODE).

+VEL (TRAIN, ZERO, DEPARTURE).  
+VEL (TRAIN, ZERO, ARRIVAL).  
+VEL (TRAIN, V, PERIOD2).  
+VEL (TRAIN, V, CHANGE1).  
+VEL (TRAIN, V, CHANGE2).

+ACCEL (TRAIN, A1, PERIOD1).  
+ACCEL (TRAIN, ZERO, PERIOD2).  
+ACCEL (TRAIN, A3, PERIOD3).

+MEASURE (ZERO, 0).  
+MEASURE (TI1, T1).  
+MEASURE (TI2, T2).  
+MEASURE (TI3, T3).

+MEASURE(T10,T0).  
+MEASURE(D1,X1).  
+MEASURE(D2,X2).  
+MEASURE(D3,X3).  
+MEASURE(D0,7).  
+MEASURE(A1,/(1,2)). <sup>2:-1</sup>  
+MEASURE(A3,-2).  
+MEASURE(V,45).

+UNIT(ZERO,\*W).  
+UNIT(TI1,MINS).  
+UNIT(TI2,MINS).  
+UNIT(TI3,MINS).  
+UNIT(TI0,MINS).  
+UNIT(D1,MLS).  
+UNIT(D2,MLS).  
+UNIT(D3,MLS).  
+UNIT(D0,MLS).

+UNIT(A1,PT/SECS+2). PT. SEC:-2  
+UNIT(A3,ET/SECS+2). — " —  
+UNIT(V,MLS/HRS). MLS, Hrs:-1

~~+DIRECTION(ZERO,\*U,\*V).  
+DIRECTION(V,0,0).  
+DIRECTION(A1,0,0).  
+DIRECTION(A3,0,0).~~

+G01 -FIND(TI1.NIL,\*ANS).  
+G02 -FIND(TI3.NIL,\*ANS).



+G03 -FIND(TI2.NIL,\*ANS).

+GO -FIND(TIØ.NIL,\*ANS).

+FIN.