

RUNS ON A TANDY TRS-80 IN 16K

BY MAX CHAUVET

10000 ' GRAND PRIX RACING
10010 ' 1980. M. CHAUVET
10020 CLEAR500:DEFINTA-Y:CLS
10025 RPS=0:R0=0:RD=0:EC=0:B=0:KB=0:LC=0:RC=0:TW=2:Z=0:T=0:QZ=17
UN=1:NL=128

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10026 SN=0:LP=0:DX=10:SC=600:T1=0:T2=0
10040 M$=STRING$(255,0):M0$=STRING$(75,0)
10050 ADDR=VARPTR(M0$):IF PEEK(16396)=201 THEN POKE 16526, PEEK(AD+1)
10052 FST=AD
10054 ID=PEEK(AD+1)+PEEK(AD+2)*256
10056 IF ID>32767 ID=ID-65536
10058 AD=ID
10060 IF PEEK(16396)<>201 THEN DEFUSR0=AD:CMD="T"
10070 CAR=ADDR+182
10080 EC=16: DIM LAP(50)
10090 KBOARD=14400: TWO=2: BL=32
10100 B$=STRING$(8,24): C$=CHR$(26)
10110 A$=STRING$(2,176)+LEFT$(B$,4)+C$+"*"+STRING$(2,191)+"*"+
LEFT$(B$,5)+C$+CHR$(170)+CHR$(93)+CHR$(94)+CHR$(149)+LEFT$(
B$,6)+C$+"*"+STRING$(2,191)+"*"+LEFT$(B$,5)+C$+CHR$(
34)+CHR$(34)
10200 ' SCROLLING ROUTINE
10210 DATA CD7F0A7D00018E40C5FD218D00FD09DD21B600DD092600DD6E000
1
10220 DATA 003C09C1B72802FDE9114003E519E5D101400009EB0E10ED
10230 DATA B0110003E1E519E5D101400009EB0E38EDB011BF02E1E519E5D1
10240 DATA 01400009EB0E39EDB0117F02E1E519E5D101400009EB0E3AEDB0
10250 DATA 113D02E1E519E5D101400009EB0E3CEDB011EE02FDE1FDE5FD19
10260 DATA FD7E00FD7710FD7E01FD7711FD7E18FD7708FD7E19FD7709113A
10270 DATA 022600DD6E0019E5FDE1E119E5D101400009EBFDE5C1EDB83E00
10280 DATA C900000000000000
10290 ' MOVE CAR
10300 DATA DD213101DD093D20313E05117C0219E5D11313E50600DD4E00EDB
823E5FDE1FD4610
10310 DATA FD7000FD4611FD7001E13DC80600DD4E0109DD23DD2318D53E051
10A00DD19117B02
10320 DATA 19E5D11B1BE50600DD4E00EDB0011200ED42E5FDE1FD4600FD701
0FD
10330 DATA 4601FD7011E13DC80600DD4E0109DD23DD2318D1
10340 DATA 0242063F044208400500
10350 DATA 023E0641043E08400500
10360 DATA END
10370 READ D$: IF D$="END" THEN 10440 ELSE GOSUB 15000
10380 FOR I=1 TO LEN(D$) STEP 2
10390 D=ASC(MID$(D$,I,1)):D1=ASC(MID$(D$,I+1,1))
10400 IF D>57 THEN D=D-7
10410 IF D1>57 THEN D1=D1-7
10420 D=(D-48)*16+D1-48: POKE ADDR,D: AD=AD+1
10430 NEXT I: GOTO 10370
10440 DATA 0,1,1,2,3,3,2,1,1,0
10450 FOR I=1 TO 10: READ C(I): NEXT I
10460 POKE ID+6, PEEK(FST+1)
10470 POKE ID+7, PEEK(FST+2)
10500 ' CIRCUIT SET UP
10510 TM=30+RND(20): TB=TM*10.1: TK=TM-5: TL=TM-1: CN=0
10520 FOR I=2 TO TM-2: DIR=RND(3)-2: CN=CN+DIR: IF ABS(CN)>1 THEN CN=
CN-2*DIR: DIR=-DIR
10524 IF PRV=0 PRV=DIR
10526 IF DIR THEN IF DIR=PRV THEN TB=TB+14: PRV=DIR ELSE TB=TB+6:
PRV=DIR
10530 LAP(I)=DIR: NEXT I
10540 LAP(1)=0: LAP(TM)=0: LAP(TM-1)=0: CLS
10542 PRINT#466, "THE CIRCUIT IS "; PRINT USING "### MILES LONG"; T
M/20;
10545 PRINT#530, "THE LAP RECORD IS "; T1=TB/600: T2=TB-T1*600: PRI
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To reach the final of a Grand Prix race you must first experience a gruelling qualifying round in which speed alone counts.

You control a Formula One car, aiming to complete one lap of the international race track in the shortest possible time. The car travels at top speed on the straight sections of the circuit, but you must steer it round the corners, some of them sharp bends.

When the car is steered to the right or left it automatically slows down so a good tactic to employ is to manoeuvre the car as little as possible to keep at the highest speed you can without crashing.

If your steering fails you then you end up off the track and crash into the rails. Don't despair if that happens, you find the seconds will tick quickly away building up your final lap time, but you don't have to start the lap again.

You will need a TRS-80 Level II with 16K memory to run this program.

To control the car you use the arrow keys to turn the steering wheel to right or left, but those are all you can use. There is no accelerator or brake for you to take advantage of, you have to rely on your steering to see you through. Be careful not to keep one of the arrow keys depressed because if you do the car will continue turning.

An extra feature written into this program comes near the end of the lap. When you near the finish line the lap record (time for you to beat) is displayed on the left of the screen, while on the right hand side of the screen your own lap time is shown to see if an extra spurt of speed is needed.



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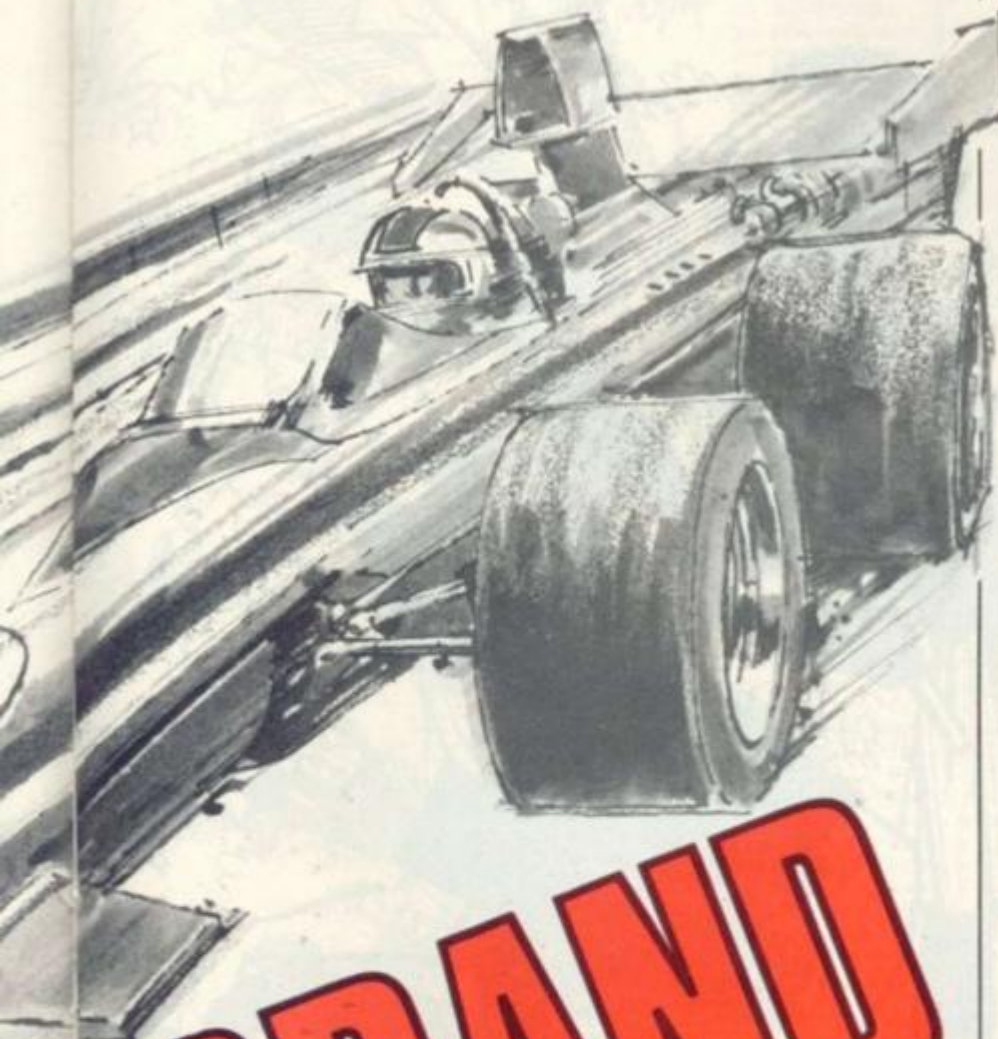
NTUSING*00:00.0";T1,T2/10;TB$=""
10547 FORI=548TO554:TB$=TB$+CHR$(PEEK(15360+I));NEXT
10548 ME$=TB$:M=548:GOSUB21000:FORI=1TO200:NEXTI:CLS
10550 CH$=CHR$(28)+CHR$(255)
10570 CLS:PRINT#671,A$;
10580 POKE CAR,36:RCRASH=15360+733+EC+1:LCRASH=RC+5-2*EC-1
10590 RPS=15384:ROAD=132:RD=13
10600 FOR LP=1 TO TM
10610 SN=LAP(LP):IF SN THEN RD=132:RD=0 ELSE RD=13
10620 FORI=1TO10:RPS=RPS+C(I)*SN:Z=USR(0):PRINTCH$;POKE RPS,RD:
POKE RPS+EC,RD:RD=RD+RD:RD=-RD:BI=B:B=PEEK(KB):IF SN POKE RPS-U
N,NL:POKE RPS+QZ,NL
10625 IFB=0THEN10800
10630 T=T+2:IFB=32THEN10700
10650 Z=USR(1):POKE CAR,PEEK(CAR)+TWO:LC=LC+TWO:RC=RC+TWO:GOTO10
710
10700 Z=USR(2):POKE CAR,PEEK(CAR)-TWO:LC=LC-TWO:RC=RC-TWO
10710 IFB1>0THENIFB1<>BTHEN12000
10800 IFPEEK(LC)=BLANDPEEK(LC-1)=BL AND PEEK(RC)=BLANDPEEK(RC+1)
=BL GOTO11000
10810 T=T+20:IF PEEK(LC)<>BLORPEEK(LC-1)<>BL THEN LEFT=0 ELSE LE
FT=-1
10812 L1=PEEK(CAR)+640:IF LEFT THEN L1=L1-17
10815 PRINT#L1,"#CRASH#";
10820 IF NOT(LEFT) THEN GOSUB20000:GOSUB20010:GOSUB20000:GOSUB20
000 ELSE GOSUB20010:GOSUB20000:GOSUB20010:GOSUB20010

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10830 FORL=1TO50:NEXTL
10850 PRINT#L1,CHR$(201);
11000 NEXTI
11010 T=T+DX:IFL<TKTHEN11200
11020 T1=T/SC:T2=T-T1*SC:PRINT#965,TB$;PRINT#1010,;:PRINTUSING"
00:00.0";T1,T2/DX;
11030 IFL=TLTHENPRINT#RPS-15360,STRING$(5,153)*"FINISH"STRING$(5
,166);
11200 NEXT LP
11205 FORI=1TO10:PRINT#0,CHR$(255);Z=USR(0):NEXTI
11210 IFT<TB THEN ME$="YOU BROKE THE LAP RECORD !":M=470:GOSUB21
000:GOTO11280
11220 IFT-TB>200 PRINT#464,"YOUR DRIVER'S LICENCE HAS BEEN CANCE
LLED!":GOTO11280
11230 IFT-TB>100 PRINT#464,"PERHAPS YOU NEED A WIDER TRACK":GOTO
11280
11240 PRINT#464,"YOU'VE QUALIFIED IN ";
11250 PLACE=INT((T-TB)/5)+1:IFPL=1THENPRINT"1ST";ELSEIFPL=2THENP
RINT"2ND";ELSEIFPL=3THENPRINT"3RD";ELSEPRINTPLACE"TH";
11260 PRINT" PLACE";
11280 T=0
11290 FORI=1TO1000:NEXTI
11300 PRINT#528,CHR$(31);"HIT ENTER TO TRY AGAIN OR"
11305 PRINT#592,"X TO MOVE TO ANOTHER CIRCUIT";
11310 Y$=INKEY$:IFY$=CHR$(13)THEN10570ELSEIFY$="X"THEN10500ELSE1
1310
12000 IF B=32 THEN L1=LC-15360-6:LEFT=-1 ELSE L1=RC-15360+1:LEFT
=0
12005 L1=570+PEEK(CAR)
12010 PRINT#L1,"OOPS!";:FORL=1TO50:NEXTL:PRINT#L1,CHR$(198);
12020 IF LEFT THEN12500
12030 IFPEEK(LC)<>BLORPEEK(LC-1)<>BL THEN12600
12040 GOSUB20010:GOTO12030
12500 IFPEEK(RC)<>BLORPEEK(RC+1)<>BL THEN12600
12510 GOSUB20000:GOTO12500
12600 T=T+10
12620 GOTO10812
15000 PART=PART+1:IFINT(PART/2)*2<>PART RETURN
15050 ONPART/2GOTO16000,16025,16030,16040,16050,16070
15060 RETURN
16000 PRINT#25,"## GRAND PRIX ##"
16010 PRINT#192,"YOU ARE ABOUT TO TAKE PART IN THE QUALIFYING SE
SSION"
16020 PRINT"OF AN INTERNATIONAL GRAND PRIX RACE."
16022 RETURN
16025 PRINT"YOUR 'FORMULA ONE' CAR IS CONTROLLED BY THE ARROW KE
YS *CHR$(93)* AND *CHR$(94)"
16027 RETURN
16030 PRINT"YOU WILL TRY TO TURN IN THE FASTEST LAP KEEPING IN M
IND THAT : "
16035 RETURN
16040 PRINT" - EVERY TIME YOU STEER YOU LOOSE 2/10 OF A SECO
ND"
16042 PRINT" SO YOU SHOULD DRIVE CLOSE TO EDGE OF THE TRAC
K."
16045 RETURN
16050 PRINT" - IF YOU LEAVE THE TRACK YOU'LL BOUNCE BACK IN
AND"
16060 PRINT" LOOSE 2 SECONDS"
16065 RETURN
16070 PRINT" - IF YOU CHANGE STEERING DIRECTION TOO SUDDENLY
YOU"
16080 PRINT" WILL SKID, LEAVE THE TRACK AND LOOSE 1 SECOND
."
17000 RETURN
20000 Z=USR(2):POKE CAR,PEEK(CAR)-TWO:LC=LC-TWO:RC=RC-TWO
20008 RETURN
20010 Z=USR(1):POKE CAR,PEEK(CAR)+TWO:LC=LC+TWO:RC=RC+TWO
20020 RETURN
21000 FORK=1TO10:PRINT#M,CHR$(192+LEN(ME$));:FORI=1TO50:NEXTI:PR
INT#M,ME$;:FORI=1TO25:NEXTI,K:RETURN

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GRAND PRIX