

```

1380 IFD(B)>90ANDD(B)=<180THEN1500
1390 IFD(B)>180ANDD(B)=<270THEN1590
1400 IFD(B)>270THEN1680
1410 FORN=1T030
1420 IFTH(N,1)<X(B)ORTH(N,1)>(X(B)+200)THEN1480
1430 IFTH(N,2)<Y(B)ORTH(N,2)>(Y(B)+200)THEN1480
1440 G1=TH(N,1)-X(B):G2=TH(N,2)-Y(B):G3=SQR((G1^2)+(G2^2)):J3=G3
:G4=G1/G3
1450 G5=ATN(G4/SQR(-G4*G4+1.001))
1460 G5=(G5/6.284)*360:G6=G5-D(B):IFABS(G6)>20THEN1480
1470 J1=INT((21+G6)*1.47):GOSUB3420
1480 NEXTN
1490 GOTO1770
1500 FORN=1T030
1510 IFTH(N,1)<X(B)ORTH(N,1)>(X(B)+200)THEN1570
1520 IFTH(N,2)>Y(B)ORTH(N,2)<(Y(B)-200)THEN1570
1530 G2=TH(N,1)-X(B):G1=Y(B)-TH(N,2):G3=SQR((G1^2)+(G2^2)):J3=G3
:G4=G1/G3
1540 G5=ATN(G4/SQR(-G4*G4+1.001))
1550 G5=((G5/6.284)*360)+90:G6=G5-D(B):IFABS(G6)>20THEN1570
1560 J1=INT((21+G6)*1.47):GOSUB3420
1570 NEXTN
1580 GOTO1770
1590 FORN=1T030
1600 IFTH(N,1)>X(B)ORTH(N,1)<(X(B)-200)THEN1660
1610 IFTH(N,2)>Y(B)ORTH(N,2)<(Y(B)-200)THEN1660
1620 G1=X(B)-TH(N,1):G2=Y(B)-TH(N,2):G3=SQR((G1^2)+(G2^2)):J3=G3
:G4=G1/G3
1630 G5=ATN(G4/SQR(-G4*G4+1.001))
1640 G5=((G5/6.284)*360)+180:G6=G5-D(B):IFABS(G6)>20THEN1660
1650 J1=INT((21+G6)*1.47):GOSUB3420
1660 NEXTN
1670 GOTO1770
1680 FORN=1T030
1690 IFTH(N,1)>X(B)ORTH(N,1)<(X(B)-200)THEN1750
1700 IFTH(N,2)<Y(B)ORTH(N,2)>(Y(B)+200)THEN1750
1710 G2=X(B)-TH(N,1):G1=TH(N,2)-Y(B):G3=SQR((G1^2)+(G2^2)):J3=G3
:G4=G1/G3
1720 G5=ATN(G4/SQR(-G4*G4+1.001))
1730 G5=((G5/6.284)*360)+270:G6=G5-D(B):IFABS(G6)>20THEN1750
1740 J1=INT((21+G6)*1.47):GOSUB3420
1750 NEXTN
1760 IFF1=0THENF3=0
1770 M1=M1+1

```

1780-1820 Print stopwatch in cockpit

```

1780 R(B)=R(B)+1/120
1790 T9=R(B)-CINT(R(B)):T9=CINT(T9*60)/100
1800 PRINT@820," .00 ";
1810 PRINT@820,CINT(R(B));
1820 IFT9=0THEN1840ELSEPRINT@822,STR$(T9);
1830
1840 H(B)=S(B):K(B)=H(B)

```

1850-2080 Control input routine using INKEY for single commands and a keyboard PEEK for the steering command which needs to have a quasi analog function.

```

1850 C$=INKEY$
1852 IFC$="K"ANDQ5=0THENQ5=1:GOTO2080
1854 IFC$="K"ANDQ5=1THENQ5=0
1856 IFO5=1THEN2080
1860 PRINT@677," xxx ";
1870 PRINT@935," ";
1880 FORN=1T042
1890 T7=PEEK(14352)
1900 IFT7=32THENCZ=0
1910 IFT7=16THENCZ=CZ-3

```

```

1920 IFT7=64THENCZ=CZ+3
1930 IFCZ<-90THENCZ=-90
1940 IFCZ>90THENCZ=90
1950 IFCZ<0THENPRINT@935,ABS(CZ);
1960 IFCZ>0THENPRINT@938,CZ;
1970 IFCZ=0THENPRINT@935,"0 0";
1980 A$=INKEY$
1990 IFA$=""THEN2060
2000 IFA$="B"THENS(B)=S(B)+10
2010 IFA$="2"THENS(B)=S(B)-10
2020 IFA$="S"THENQ1=1
2030 IFA$="T"THENQ2=1
2040 IFA$="F"THENQ3=1
2050 IFA$="R"THENQ4=1
2055 IFA$="K"THENQ5=1
2060 NEXTN
2070 '
2080 PRINT@677," ";
2090 IFS(B)<40THENS(B)=40
2100 IFS(B)>120THENS(B)=120

```

2110-2140 Direct control to appropriate S/R for R,S,T,F functions.

```

2110 IFQ1=1THENGOSUB2800
2120 IFQ2=1THENGOSUB2860
2130 IFQ3=1THENGOSUB2950
2140 IFQ4=1THENGOSUB3930
2150 Q1=0:Q2=0:Q3=0

```

2160-2190 Calculate new compass heading.

```

2160 D(B)=D(B)+CZ
2170 IFD(B)>360THEND(B)=D(B)-360
2180 IFD(B)<0THEND(B)=360+D(B)
2190 D(B)=CINT(D(B))

```

2200 If less than one hour of flight has elapsed loop back to start of active program for next program loop.

```

2200 IFM1=<120THEN690
2210 IFB=P1THEN2390

```

2220-2340 If players hour of flight is over print map via S/R and print position report on sailplane.

```

2220 GOSUB3060
2230 IFL(B)=1THENPRINT@769,"LANDED";
2240 PRINT@513,B$(B);"-";PRINT@577,"POSITION";PRINT@641,"REPO
RT";
2250 T6=INT(X(B)/10)+30:IFT6<30THENT6=30
2260 IFT6>125THENT6=125
2270 T7=INT(Y(B)/20):T7=45-T7:IFT7<1THEN7=1
2280 IFT7>40THEN7=40
2290 FORO=1T07
2300 FORN=1T050
2310 SET(T6,T7):NEXTN
2320 FORN=1T050
2330 RESET(T6,T7):NEXTN
2340 NEXTO
2350 M1=0
2360 IFL(B)=1THENPRINT@769," ";
2370 B=B+1:IFL(B)=0THEN100
2380 B=B+1:IFL(B)=0THEN100

```

2390 At the end of an hour's flight for all the competitors a map and position report is printed for all competitors in order.

```

2390 B=1:M1=0
2400 GOSUB3060
2410 PRINT@513,B$(B);"-";PRINT@577,"POSITION";PRINT@641,"REPO

```