```
              CALL DECITM ('BAR1',0)
      CALL POS (131071-75000-7000,131071-25000)
      CALL DRAWTR (14000,0)
      CALL ENDITM
              CALL DECINS ('MBAR1','BAR1',0)
      CALL MAKMT2 (0,0,0,1.0,IBAR1)
      CALL MAT2 (IBAR1,'KEY13')
      CALL ENDINS
      CALL ADD ('MBAR1','PIC2')
              CALL DECITM ('BAR2',0)
      CALL POS (-131071+75000-7000,131071-25000)
      CALL DRAWTR (14000,0)
      CALL ENDITM
              CALL DECINS ('MBAR2','BAR2',0)
      CALL MAKMT2 (0,0,0,1.0,IBAR2)
      CALL MAT2 (IBAR2,'KEY14')
      CALL ENDINS
      CALL ADD ('MBAR2','PIC2')
      CALL ADD ('MDOT','PIC2')
      CALL ADD ('MLINE','PIC2')
      CALL ADD ('BORDR','PIC2')
      CALL DISPLAY ('PIC2',0)
      RZ=0.
      RX=0.
      RY=-UNIT
      MZ=0
      MX=0
      MMOV=0
      MROT=0
      NDUM=1
      RRAN=3.1415
200   CALL DREAD
      CALL ADJDAT
      AY=DKNOB (1) *180.
      AX=DKNOB (2) *180.
C              AX IS FOR VIEW UP,DOWN.
      RX=RX-XJOY*RUNIT/10.
      IF (.NOT.SWITCH (17)) GOTO215
      RY=RY+YJOY*RUNIT/10.
      GO TO 217
215   RZ=RZ+YJOY*RUNIT/10.
217   CONTINUE
      IRX=RX
      IRY=RY
      IRZ=RZ
      RDUM=25000./131071.
      RYDUM=ISIGN (1,IRY) * (((IABS (IRY) +131071) /131071) /2)
      RXDUM=ISIGN (1,IRX) * (((IABS (IRX) +131071) /131071) /2)
      RZDUM=ISIGN (1,IRZ) * (((IABS (IRZ) +131071) /131071) /2)
      QX=RDUM* (RX-RXDUM*262142.)
      QZ=RDUM* (RZ-RZDUM*262142.)
      QY=RDUM* (RY-RYDUM*262142.)
      CALL MAKMT2 (0,0,25000.*SIN (AX) ,1.0,IBAR1)
      CALL UPDATE ('MAT2','KEY13',IBAR1)
      CALL MAKMT2 (0,0,-QY,1.0,IBAR2)
      CALL UPDATE ('MAT2','KEY14',IBAR2)
      CALL MAKMT2 (0,-QX,QZ,1.0,IDOT)
      CALL UPDATE ('MAT2','KEY5',IDOT)
```