'{$STAMP BS2}

'{$PBASIC 2.5}

RcChannel6 PIN 0

BeaconLed PIN 1

BallastSSR PIN 2

MotorSSR1 PIN 3

MotorSSR2 PIN 4

MotorSSR3 PIN 5

MotorSSR4 PIN 6

MastHeadlightLed PIN 7

Water1 PIN 8

Water2 PIN 9

PeriscopeDOWN PIN 14

PeriscopeUP PIN 15

Ptime VAR Word

PeriscopeMove VAR Byte

TimeCount VAR Word

Initialize:

OUTPUT BeaconLed

OUTPUT BallastSSR

OUTPUT MotorSSR1

OUTPUT MotorSSR2

OUTPUT MotorSSR3

OUTPUT MotorSSR4

OUTPUT MastHeadlightLed

OUTPUT Water1

INPUT Water2

INPUT RcChannel6

INPUT PeriscopeUP

INPUT PeriscopeDOWN

PeriscopeMove = 0

TimeCount = 0

BallastSSR = 0

Water1 = 1

Main:

IF PeriscopeDOWN = 0 THEN

GOSUB MainA

ELSE

GOSUB MainB

ENDIF

GOTO Main

MainA:

BeaconLed = 0

MastHeadlightLed = 0

GOSUB Routine

GOSUB LeakBlow

GOSUB MotorStop

RETURN

MainB:

BeaconLed=1

MastHeadlightLed = 1

GOSUB Routine

GOSUB LeakBlow

GOSUB MotorStop

PAUSE 500

BeaconLed=0

PAUSE 500

BeaconLed=1

GOSUB Routine

GOSUB LeakBlow

GOSUB MotorStop

PAUSE 500

BeaconLed=0

PAUSE 500

BeaconLed=1

GOSUB Routine

GOSUB LeakBlow

GOSUB MotorStop

PAUSE 500

BeaconLed=0

TimeCount = 0

FOR TimeCount = 0 TO 25 STEP 1

GOSUB Routine

GOSUB LeakBlow

GOSUB MotorStop

PAUSE 2

NEXT

RETURN

'\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Routine:

PULSIN RcChannel6, 1, Ptime

IF (Ptime > 0) THEN

DEBUG HOME,

DEC Ptime, " units ", CLREOL

DEBUG CR,

DEC Ptime, " us "

ELSE

DEBUG CLS, "Out of Range"

ENDIF

IF (Ptime < 550) THEN

PeriscopeMove = 2

ELSEIF (Ptime < 850) AND (Ptime > 550) THEN

PeriscopeMove = 0

ELSEIF (Ptime > 850) THEN

PeriscopeMove = 1

ENDIF

SELECT PeriscopeMove

CASE 0

PAUSE 1

MotorSSR1 = 0

MotorSSR3 = 0

PAUSE 1

MotorSSR2 = 0

MotorSSR4 = 0

CASE 1

IF PeriscopeDOWN = 1 THEN

MotorSSR1 = 0

MotorSSR3 = 0

PAUSE 1

MotorSSR2 = 0

MotorSSR4 = 0

PAUSE 1

MotorSSR4 = 1

PAUSE 1

MotorSSR3 = 1

ELSE

PAUSE 1

MotorSSR1 = 0

MotorSSR3 = 0

PAUSE 1

MotorSSR2 = 0

MotorSSR4 = 0

ENDIF

CASE 2

IF PeriscopeUP = 1 THEN

MotorSSR1 = 0

MotorSSR3 = 0

PAUSE 1

MotorSSR2 = 0

MotorSSR4 = 0

PAUSE 1

MotorSSR2 = 1

PAUSE 1

MotorSSR1 = 1

ELSE

PAUSE 1

MotorSSR1 = 0

MotorSSR3 = 0

PAUSE 1

MotorSSR2 = 0

MotorSSR4 = 0

ENDIF

ENDSELECT

RETURN

'\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

LeakBlow:

Pause 10

IF Water2 = 1 THEN

TOGGLE BallastSSR

PAUSE 1

MotorSSR1 = 0

MotorSSR3 = 0

PAUSE 1

MotorSSR2 = 0

MotorSSR4 = 0

DO

MastHeadlightled = 1

Beaconled = 1

PAUSE 250

MastHeadlightled = 0

Beaconled = 0

PAUSE 250

LOOP

ELSE

ENDIF

RETURN

'\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

MotorStop:

PULSIN RcChannel6, 1, Ptime

IF (Ptime <= 0) THEN

DO

MotorSSR1 = 0

MotorSSR3 = 0

PAUSE 1

MotorSSR2 = 0

MotorSSR4 = 0

MastHeadlightled = 1

PAUSE 250

MastHeadlightled = 0

PAUSE 250

LOOP

ELSE

ENDIF

RETURN