Const PERIOD = 40  'Scan interval number  
Const P_UNITS = 1  'Scan interval units (mSecs)  
Const INTERVAL3 = 10  'Table 3 interval number  
Const UNITS3 = 3  'Table 3 interval units (Mns)  
Dim bStartTrigger As Boolean

VOLTAGE CONSTANTS ///////////////

Const VRNG1 = 0  'Block1 measurement range (5000 mV)  
Const VREP1 = 1  'Block1 repetitions  
Const VSETL1 = 200  'Block1 settling time (usecs)  
Const VI NT1 = 250  'Block1 integration time (usecs)  
Const VMULT1 = 0.00141  'Block1 unit conversion multiplier  
Const VOSET1 = 0  'Block1 default offset  
Dim vBlk1(VREP1)  'Block1 dimensioned source  
Units vBlk1 = g  'Block1 default units (g)

Const VRNG2 = 0  'Block2 measurement range (5000 mV)  
Const VREP2 = 1  'Block2 repetitions  
Const VSETL2 = 200  'Block2 settling time (usecs)  
Const VI NT2 = 250  'Block2 integration time (usecs)  
Const VMULT2 = 0.01  'Block2 unit conversion multiplier  
Const VOSET2 = 0  'Block2 default offset  
Dim vBlk2(VREP2)  'Block2 dimensioned source  
Units vBlk2 = Volts  'Block2 default units (Volts)

ALIASES & OTHER VARIABLES /////////////////

Alias vBlk1(1) = Accmter  'Assign alias name "Accmter" to vBlk1(1)  
Alias vBlk2(1) = BattVolt  'Assign alias name "BattVolt" to vBlk2(1)  
Public Flag(8)  'General Purpose Flags

Dim Excite1  'Declare Excitation variable

EMAIL VARIABLES /////////////////

Const ServerAddr="smtp.gmail.com:587"  'This address will send text messages  
Const ToAddr1="PHONENUMBER@messaging.sprintpcs.com"  
Const ToAddr2="EMAIL@gmail.com"  
Const FromAddr1="EMAIL@gmail.com"  
Const FromAddr2="EMAIL@gmail.com"  
Const Subject1=""  
Const Subject2="Virginia Ave Bridge: Notification of Possible Impact"
Const Attach=
Const UserName="USERNAME@gmail.com"
Const Password="PASSWORD"
Const CRLF = CHR(13)+CHR(10)  'Carriage Return (13) + Line Feed (10)
Public Result As String * 50
Public Al armTrigger As Boolean
Public Message1 As String * 250
Public Message2 As String * 250
Public EmailSuccess As Boolean
Public Counter1=0
Public Counter2=0

\\\\\\\\\\\\\\ OUTPUT SECTION \\\\\\\\\\\\\\\

---------------------------- Table 1----------------------------
DataTable(LIVE,True,-1)                                          'Trigger, size auto   DataInterval(0,0,0,100)            ...                     '1 Reps,Source,ResEndTable                                                         'End of table LIVE

---------------------------- Table 2----------------------------
DataTable(TRIGGER,True,-1)                                         'Trigger, auto size   DataInterval(0,0,0,100)            ...                  '1 Reps,Source,ResEndTable                                                         'End of table TRIGGER

---------------------------- Table 3----------------------------
DataTable(MAX_MIN,True,-1)                                         'Trigger, auto size   DataInterval(0,0,0,100)            ...                  '1 Reps,Source,ResEndTable                                                         'End of table MAX_MIN

Sub TriggerCallTRIGGER
  bStartTrigger = (Accmeter > 0.40)
End Sub

\\\\\\\\\\\\\\ PROGRAM \\\\\\\\\\\\\\\

BeginProg                                                        'Program begins here
  MainSequence   Scan(PERIOD,P_UNITS,0,0)                                      'Scan every 40 mSecs            ...      VoltDiff(VBlk2(),VREP2,VRNG2,2,False,VSETL2,VINT2,VMULT2,VOSET2)
' _________________ Excitation Control _______________________
If Acctype >= 0.40 Then
  Excite1 = 5000
ElseIf Acctype < 0.40 Then
  Excite1 = 0
End If
' Set value
ExciteCAO(CAO1, Excite1, True) ' Set excitation channel
' _________________ Output Table Control _______________________
If Flag(1) Then Call Table LIVE
Call TriggerCallTRIGGER
Call Table TRIGGER
Call Table MAX_M
' ________________________ Counter Resets _______________________
' RESET COUNTER FOR NORMAL VIBRATIONS
If Acctype < 0.40 Then
  Counter2 = 0
End If
If Acctype >= 0.40 Then
  If Counter2 = 0 Then
    Counter2 = Counter2 + 1
    Message1 = "Possible impact at Virginia Ave Bridge. Acceleration was "+ Acctype +" g."
    Message2 = "Warning! " + CRLF + CRLF
    Message2 = Message2 + "An alarm condition for impact has been identified."
    Message2 = Message2 + "The measured acceleration was "+ Acctype +" g."
    Message2 = Message2 + "The video will be available here shortly:");" + CRLF
    Message2 = Message2 + "Data logger time was ":" + Status.Timestamp
    EmailSuccess = EmailSend (ServerAddr, ToAddr1, FromAddr1, Subject1, Message1, Attach, UserName, Password, Result)
    EmailSuccess = EmailSend (ServerAddr, ToAddr2, FromAddr2, Subject2, Message2, Attach, UserName, Password, Result)
  End If
End If
Next Scan ' Loop up for the next scan
EndProg ' Program ends here

' ***** Program End *****