

```

1: unit Init;
2:
3: {$mode objfpc}{$H+}
4:
5: //=====
6: //
7: //  Init.pas
8: //
9: //  Calls:  AGCommand : SetVHF_AGValue
10: //           SetVHF_AGValue
11: //           AppConstants
12: //           BCCCommand : DisplayBCStatus
13: //           BUFCCommand : SetBuffer
14: //           BYCommand : GetUHF_BYStatus
15: //           GetVHF_BYStatus
16: //           ColourSchemse : SetColourScheme
17: //           COMPort : SendCommand
18: //           HUutils : InfoMessageDlgOk
19: //           INIStuff : ReadINIFile
20: //           Variables
21: //           LCDDisplay : LCDOn
22: //           LCDOff
23: //           DisplayBCStatus
24: //           DisplayVHFDataSource
25: //           DisplayUHFDataSource
26: //           Main
27: //           NagScreen
28: //           PSCommand : TogglePowerOnOff
29: //           SMCommand : GetVHF_SMValue
30: //           GetUHF_SMValue
31: //           SQCommand : SetVHF_SQValue
32: //           SetUHF_SQValue
33: //           StatusBar : DisplayTMVFileStatus
34: //           TMVFiles : OpenTMVFile
35: //           NewTMVFile
36: //           Variables
37: //
38: //  Called By: Main : TfrmMain.FormShow
39: //
40: //  Ver: 1.0.0
41: //
42: //  Date: 15 Sep 2013
43: //
44: //=====
45:
46: interface
47:
48: uses
49:   Classes, Forms, SysUtils, Dialogs, HUutils,
50:   // Application units
51:   AGCommand, AppConstants, AppVariables, BUFCCommand, BYCommand, ColourSchemes, COMPort,
52:   DataEntry, INIStuff, LCDDisplay, NagScreen, SerialStuff, SMCommand, SQCommand,
53:   StatusBar, TMVFiles;
54:
55: function Initialize : boolean;
56: procedure TMV7_Init;
57:
58: implementation
59:

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60: uses
61:   Main;
62:
63: //=====
64: //           INITIALIZE THE TONE FREQUENCY ARRAY
65: //=====
66:
67: Procedure InitToneFrequencyArray;
68: Begin
69:   gvstrToneArray[0] := '67.0';
70:   gvstrToneArray[1] := '71.9';
71:   gvstrToneArray[2] := '74.4';
72:   gvstrToneArray[3] := '77.0';
73:   gvstrToneArray[4] := '79.7';
74:   gvstrToneArray[5] := '82.5';
75:   gvstrToneArray[6] := '85.4';
76:   gvstrToneArray[7] := '88.5';
77:   gvstrToneArray[8] := '91.5';
78:   gvstrToneArray[9] := '94.8';
79:   gvstrToneArray[10] := '97.4';
80:   gvstrToneArray[11] := '100.0';
81:   gvstrToneArray[12] := '103.5';
82:   gvstrToneArray[13] := '107.2';
83:   gvstrToneArray[14] := '110.9';
84:   gvstrToneArray[15] := '114.8';
85:   gvstrToneArray[16] := '118.8';
86:   gvstrToneArray[17] := '123.0';
87:   gvstrToneArray[18] := '127.3';
88:   gvstrToneArray[19] := '131.8';
89:   gvstrToneArray[20] := '136.5';
90:   gvstrToneArray[21] := '141.3';
91:   gvstrToneArray[22] := '146.2';
92:   gvstrToneArray[23] := '151.4';
93:   gvstrToneArray[24] := '156.7';
94:   gvstrToneArray[25] := '162.2';
95:   gvstrToneArray[26] := '167.9';
96:   gvstrToneArray[27] := '173.8';
97:   gvstrToneArray[28] := '179.9';
98:   gvstrToneArray[29] := '186.2';
99:   gvstrToneArray[30] := '192.8';
100:   gvstrToneArray[31] := '203.5';
101:   gvstrToneArray[32] := '210.7';
102:   gvstrToneArray[33] := '218.1';
103:   gvstrToneArray[34] := '225.7';
104:   gvstrToneArray[35] := '233.6';
105:   gvstrToneArray[36] := '241.8';
106:   gvstrToneArray[37] := '250.3';
107: End; // InitToneFrequencyArray
108:
109: //=====
110: //           INITIALIZE STEP VALUE ARRAY
111: //=====
112:
113: Procedure InitStepArray;
114: Begin
115:   gvstrStepArray[0] := '5';
116:   gvstrStepArray[1] := '6.25';
117:   gvstrStepArray[2] := '10';
118:   gvstrStepArray[3] := '12.5';

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119:   gvstrStepArray[4] := '15';
120:   gvstrStepArray[5] := '20';
121:   gvstrStepArray[6] := '25';
122:   gvstrStepArray[7] := '30';
123:   gvstrStepArray[8] := '50';
124:   gvstrStepArray[8] := '100';
125: End;// InitStepArray
126:
127: //=====
128: //          INITIALIZE
129: //=====
130: function Initialize : boolean;
131:
132: var
133:   vbytTemp : Byte;
134:   Info : TSearchRec;
135:
136: begin
137:
138:   // Get and save the Application Path
139:   GetDir(0, gvstrAppPath);
140:   gvstrAppPath := gvstrAppPath + '\';
141:
142:   // Check to see if the TMV7Files directory exists. If it doesn't, we create it
143:   if not DirectoryExists (gcstrTMV7FileDir) then
144:   begin
145:     // The directory does not exist so we assume that this is the initial program
146:     // installation so we display an information message and attempt to create it.
147:     // If it cannot be created, we display an error message, stop the Initialization
148:     // process and return False;
149:     InfoMessageDlg('Initial Installation', 'Creating TMV File Folder');
150:     if not CreateDir (gcstrTMV7FileDir)then
151:     begin
152:       MessageDlg('TMVFiles Directory creation failed.', mtError, [mbOk], 0 );
153:       Result := False;
154:       Exit;
155:     end;//if not CreateDir (gcstrTMV7FileDir
156:
157:   end;//if not DirectoryExists (gcstrTMV7FileDir)
158:
159:   // Load the INI data variables
160:   ReadINIFile;
161:
162:   // Init Tones
163:   InitToneFrequencyArray;
164:
165:   // Init Steps
166:   InitStepArray;
167:
168:   // Load the Tone Combobox items
169:   for vbytTemp := 0 to gcbytMaxToneIndex do
170:     frmDataEntry.cbxTones.Items.Add(gvstrToneArray[vbytTemp]);
171:
172:   // Read the TMV File. If a previous .tmv file was open, then we simply reopen it.
173:   // If no .tmv7 file was open and a .tmv file exists, then we are prompted to open it.
174:   // If there is no existing .tmv file we create and open a default file.
175:   if FileExists(gvstrTMVFileName) then
176:   begin
177:     // A .tmv file was open so we simply open and read it

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178:     OpenTMVFile(gvstrTMVFileName);
179: end
180: else
181: begin
182:     // No file was open so we first check to see if one exists
183:     if FindFirst(gvstrAppPath + '\\' + gcstrTMV7FileDir + '*.*' +
184:         gcstrTMV7FileExt, faAnyFile, info) = 0 then
185:     begin
186:         ShowMessage('Select a .tmv file.');
```

// A .tmv file exists so we prompt to open it. If the Open dialog is cancelled, we create a default file.

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189:         frmMain.OpenDialog1.Title := 'Open TMV File';
190:         frmMain.OpenDialog1.InitialDir := gvstrAppPath + gcstrTMV7FileDir;
191:         frmMain.OpenDialog1.Filter := 'TMVFiles|*.tmv';
192:         frmMain.OpenDialog1.DefaultExt := 'tmv';
193:
194:         if frmMain.OpenDialog1.Execute then
195:         begin
196:             OpenTMVFile(frmMain.OpenDialog1.FileName);
197:         end
198:         else
199:         begin
200:             if FileExists(gvstrAppPath + gcstrTMV7FileDir + '\Default.' + gcstrTMV7FileExt) then
201:             begin
202:                 ShowMessage('Selection cancelled. Using Default.tmv.');
```

gvstrTMVFileName := gvstrAppPath + gcstrTMV7FileDir + '\Default.' + gcstrTMV7FileExt;

```

204:             end
205:             else
206:             begin
207:                 ShowMessage('Selection cancelled. Creating a default .tmv file.');
```

gvstrTMVFileName := gvstrAppPath + gcstrTMV7FileDir + '\Default.' + gcstrTMV7FileExt;

```

209:                 NewTMVFile;
210:             end; // if FileExists(gvstrAppPath +
211:             end; // if OpenDialog1.Execute
212:         end
213:         else
214:         begin
215:             // No .tmv file exists so we create a default one.
216:             ShowMessage('Creating a default .tmv file.');
```

gvstrTMVFileName := gvstrAppPath + gcstrTMV7FileDir + '\Default.' + gcstrTMV7FileExt;

```

218:             NewTMVFile;
219:         end; // if FindFirst(gvstrAppPath
220:
221:         FindClose(Info);
222:         DisplayTMVFileStatus;
223:
224:     end; // if FileExists(gvstrTMVFileName)
225:
226:     // Default the application to Radio Off
227:     LCDOff;
228:
229:     // Try to open the COM port
230:     if not OpenPort then
231:     begin
232:         Result := True;
233:         Exit;
234:     end; // if not OpenPort
235:
236:     TMV7_Init;
```

```
237:   Result := True;
238:
239: end; // function Initialize
240:
241:
242: //=====
243: //          INIT THE TRANSCEIVER
244: //=====
245: procedure TMV7_Init;
246:
247: var
248:   Info : TSearchRec;
249:
250: begin
251:
252:   // Turn AI off
253:   SendCommand ('AI', '0');
254:
255:   // Set the Buffers to the INI file data
256:   SetBuffer(gcstrVHF);
257:   SetBuffer(gcstrUHF);
258:
259:   // Set up the LCD Display
260:   SetColourScheme (gvstrCurrentColourScheme);
261:
262:   // Get Busy Status
263:   GetUHFBYStatus;
264:   GetVHFBYStatus;
265:
266:   // Get PTT Band Status
267:   DisplayBCStatus;
268:
269:   // Get S Meter values
270:   GetVHF_SMValue;
271:   GetUHF_SMValue;
272:
273:   // Display Data Source
274:   DisplayVHFDataSource;
275:   DisplayUHFDDataSource;
276:
277:   // Set Volume Levels
278:   SetVHF_AGValue(gvstrVHFAudioLevel);
279:   SetUHF_AGValue(gvstrUHFAudioLevel);
280:
281:   // Set Squelch Settings
282:   SetVHF_SQValue(gvstrVHFSquelchLevel);
283:   SetUHF_SQValue(gvstrUHFSquelchLevel);
284:
285:   // Turn off Mute
286:
287:   // Turn AI On
288:   SendCommand ('AI', '1');
289:
290:   // Default TX Status
291:   gvblnTXStatus := False;
292:
293: end; // procedure TMV7_Init;
294:
295: //=====
```

```
296: end.// unit Init
297:
```