1. GMarkerBoundAvg.cs
   1. CHANGE LOCATION:  
      ExtLibs/GMap.NET.Drawing/GMap.NET.WindowsForms/Markers/GMarkerBoundAvg.cs
   2. CHANGE DETAILS:  
      Created a new marker class for plotting the average boundary marker in fire plotting the average location of previous fire files for a given direction in radial manner
2. GMarkerBoundOut.cs
   1. CHANGE LOCATION:  
      ExtLibs/GMap.NET.Drawing/GMap.NET.WindowsForms/Markers/GMarkerBoundOut.cs
   2. CHANGE DETAILS:  
      Created a new marker class for plotting the inside and outside limits of boundaries of fire shape for given direction in radial manner
3. GMarkerPoint.cs
   1. CHANGE LOCATION:

ExtLibs/GMap.NET.Drawing/GMap.NET.WindowsForms/Markers/GMarkerPoint.cs

* 1. CHANGE DETAILS:  
     Created a new marker class for displaying the fire location data in a semi-transparent box shape.

1. FireWP.cs
   1. CHANGE LOCATION:  
      ExtLibs/Utilities/FireWP.cs
   2. CHANGE DETAILS:  
      Created a new structure for hosting fire waypoint parameters
2. FlightPlanner.Designer.cs
   1. CHANGE LOCATION:  
      GCSViews/FlightPlanner.Designer.cs
   2. CHANGE DETAILS:  
      This class is a designer file and is used to modify the UI from the Mission planner software on the planner tab. Various changes are made but it is best to view and modify this page through designer format.
3. FlightPlanner.cs
   1. FILE LOCATION:  
      GCSViews/FlightPlanner.cs
   2. CHANGES LISTED w/ Line Numbers and Details (ARRANGED BY METHOD/CLASS):
      1. Parameters
         1. Line Location [136]
         2. Details: Create parameters necessary for implementing the changes to Flightplanner software for various functions
      2. Init
         1. Line Location [337]
         2. Details: Create empty instances of various parameters
      3. DiscretizeFire
         1. Line Location [7740]
         2. Details: Discretize fire takes in a list of PointLatLng and the file index representing the fire file. It takes the calculated fire center and uses that as a reference for determining a grid to place down and assigning all latitude and longitude points into the Boolean grid of fireArray.
      4. PlotBound
         1. Line Location [7842]
         2. Details: This plots the boundary of the fire with the angular granularity of 360 (code defined) and plots the minimum, maximum, and average distance calculated from the last 5 points in that direction recorded from different files.
      5. fireUpdated
         1. Line Location [7921]
         2. Details: Checks if the current running folder has up to date information. If the information is not up to date, it will load additional fire files
      6. BUT\_loadFire\_Click
         1. Line Location [7938]
         2. Details: This function runs when the button to load a fire folder direction is selected. The user will load the first fire file to be read and it will start an asynchronous thread to begin discretizing and plotting the fire data
      7. getFireCenterPreLim
         1. Line Location [7990]
         2. Details: This function will pull all the files and analyze the fire data in the directory. It will then calculate the average fire center position and apply it to the parameters.
      8. FireFiltering
         1. Line Location [8057]
         2. Details: This code filters the fire data based upon differences calculated from average latitude and longitude. If the files are sequentially numbered, it will remove files that have a large jump in recorded fire data. This is to account for shifts in the data that occur through excessive noise from when the UAV is taking pictures and a fire shape drifts too far from its true position
      9. plotOldreColor
         1. Line Location [8108]
         2. Details: This code will plot the fire shape data and update the data to represent location data that has not been visited in a certain amount of time. This is a configurable parameter on the UI (last visit), which is measured in seconds
      10. PlotFireNew
          1. Line Location [8138]
          2. Details: This code is utilized to plot the markers of the fire shape data. It refers to the arrays created by the discretize fire method.
      11. RemoveDiscretizeFire
          1. Line Location [8213]
          2. Details: This code is used to remove fire data that exists outside of the specified window range as indicated by the parameters on the UI.
      12. threadFire
          1. Line Location [8240]
          2. Details: Creates an asynchronous thread to read fire files and display fire data in a step manner simulating a “live step display”
      13. drawFireBoundGrid
          1. Line Location [8414]
          2. Details: This method creates a red box grid around the center of the fire based upon the size specified in UI parameters
      14. TXT\_lastVisit\_TextChanged
          1. Line Location [8446]
          2. Details: Updates the last visit parameter
      15. TXT\_gridSize\_TextChanged
          1. Line Location [8457]
          2. Details: Updates the gridSize parameter and creates new arrays for tracking the fire data and shape
      16. BUT\_clearFire\_Click
          1. Line Location [8475]
          2. Details: Clears the fire data on the map and reinitializes the arrays used for calculations.
      17. TXT\_fireFilter\_TextChanged
          1. Line Location [8505]
          2. Details: Updates the fire filter parameters
      18. TXT\_fireUpdate\_TextChanged
          1. Line Location [8519]
          2. Details: Updates the fire window size parameter
      19. BUT\_toggleGrid\_Click
          1. Line Location [8527]
          2. Details: Button click for displaying the fire boundary grid