# Out of Specification – Notify Operator via Email

Are you running parts without an operator present and need to have someone notified when a part is Out of Specification or Control? There are two ways to email an operator from QC-CALC Real-Time when a part is Out of Specification; through Automatic Report or *through Trend Analysis. The step-by-step directions for setting up both of these methods are discussed here so you can choose the method that works the best for you.*

Automatic Reporting

Automatic Reporting can be setup to email an operator when an Out of Specification or Control point has been received. This setup will only work if the Automatic Reporting is not already being used. If the Automatic Reporting is already being used, then the Trend Analysis method discussed in the next section should be used instead.

1. First verify that the automatic reporting settings are enabled. Choose **Report > Automatic Reporting** to enable this feature. A checkmark in the front of the menu signifies that it is enabled.
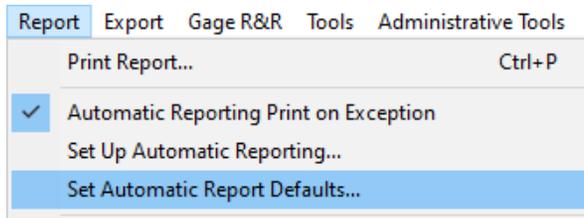
2. Choose **Report > Set Automatic Reporting Defaults**.
3. On the **Report Type** screen:
   a. Choose to print any report. "First Article" is quick and might be helpful to the user to identify the bad part.
   b. Set the **Range of Records**. "Newest Records in File" and "1" are recommend for the First Article mentioned above.
   c. Change **Print To** to "File".

d. In the **File Type** area choose the **File Type** (ADOBE PDF Format seems to be the most popular), the location where you want the file to be created, and enter the **File Name**.
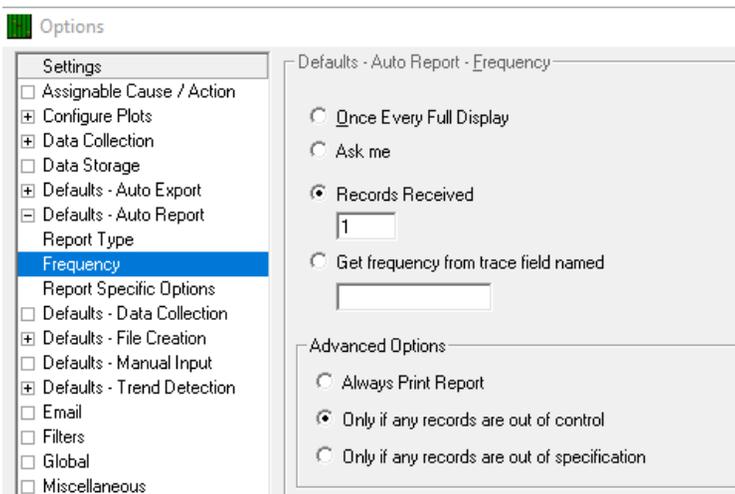e. You can use the **Custom** button to create a name that can be unique each time the report runs too.
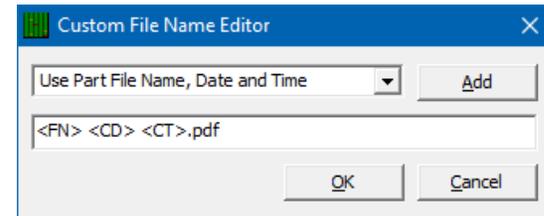
f. Check the **Send in Email** option and fill out the email settings in the **Email Properties** screen that appears (you can click the **Configure** button to view that screen if needed).
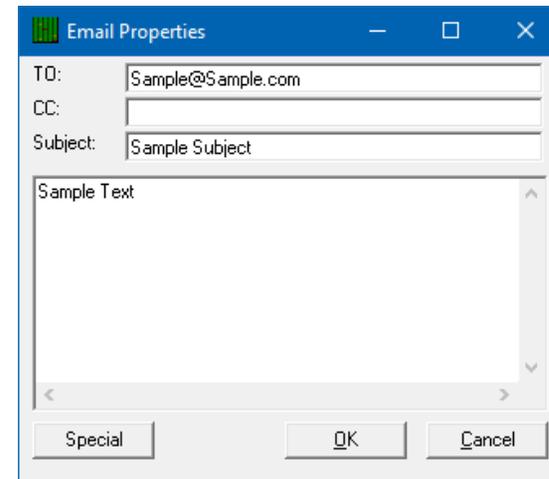
4. Next, use the **Frequency** screen to:
   a. Set the **Frequency** to **Records Received** and enter a "1" in the box.

   b. In the **Advanced Options** box, choose the **Only if any records are out of control** or **specification** option, based on what you prefer.
5. Click **OK** to save these settings and the next time an Out of Specification/Control point is received the user will receive an email notification.

You just set up the default values that will be used for all part files, but if you need to change some settings (like a different email address) for specific part files, you will need to use the **Report > Set up Automatic Reporting** area once that specific part file is open.

The screen that appears looks the same as the previous screen you were using, but the option at the very top of the screen is different. You will need to uncheck the **Use default Report settings** option to make the changes you need. At this point you will see that the settings you set in the Default area are shown to you (no longer grayed out) and you can make any changes you want. These changes will ONLY impact the part file you have open at this time.

Trend Analysis

One of the trend tests is for a **Single Point Outside of… > Specification Limits/Control Limits** and this will be the test used to trigger an email to a specified email address. If Trend Analysis is already being used, this will just be another trend checked. The operator will be notified if a regular trend is detected or if a point is Out of Spec/Control. These are the steps to follow to set this up:

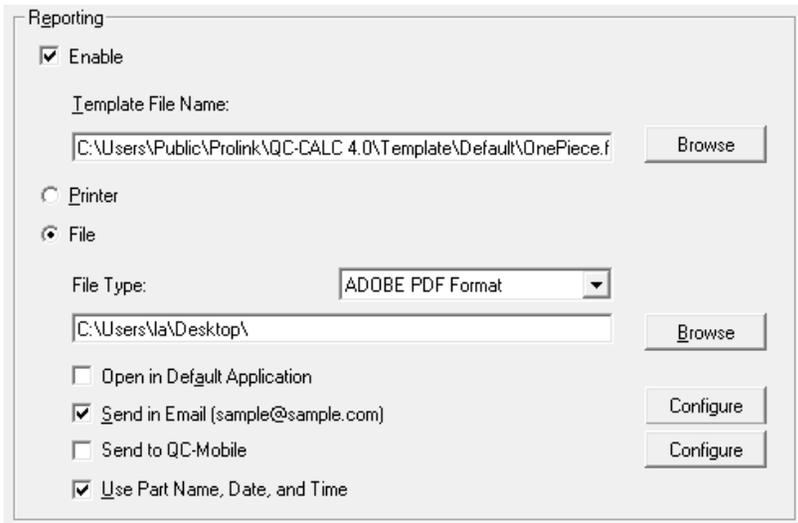1. From the **Tools** menu enable the **Trend Detection** menu.
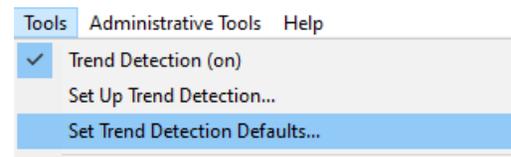
2. Now choose **Tools > Set Trend Detection Defaults** and follow the directions below:
3. From the **Instability, Pp, Ppk** area choose **Single Point > Specification Limits** and/or **Control Limits**.

4. Now choose the **Report and Log** tab.
5. In the **Reporting** area, check the **Enable** box.

6. Choose a report template to use (OnePiece.fst will give you a First Article report) in the **Template File Name** area.
7. Choose the **File** option along with a **File Type** (.pdf seems to be widely accepted) and a file name.
8. Choose the **Send in Email** option and fill in the **Email Properties** screen that appears.
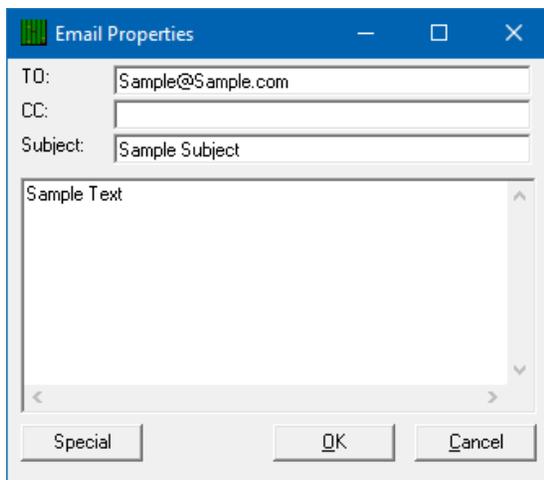
9. Using the **Use Part Name, Date, and Time** option at the bottom of this area will make the file name unique which means it will not overwrite a previous report.
10. Click **OK** to save these settings and the next time an Out of Specification/Control point is received the user will receive an email notification.

Just like with the reporting option that was covered first, you just set up the default values that will be used for all part files. If you need to change some settings (like a different email address) for specific part files, you will need to use the **Tools > Set up Trend Detection** area once that specific part file is open.

The screen that appears looks the same as the previous screen you were using, but the option at the very top of the screen is different. You will need to uncheck the **Use default Trend Detection settings** option to make the changes you need. At this point you will see that the settings you set in the Default area are shown to you (no longer grayed out) and you can make any changes you want. These changes will ONLY impact the part file you have open at this time.