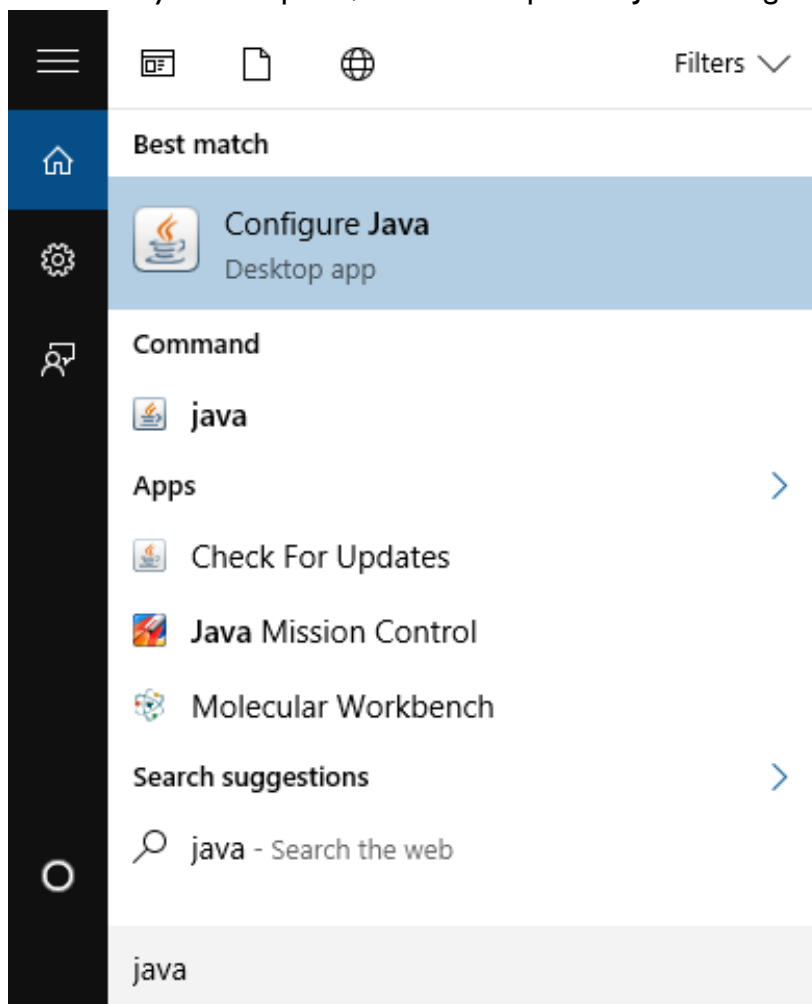


## Installation Guide for FoilSim III

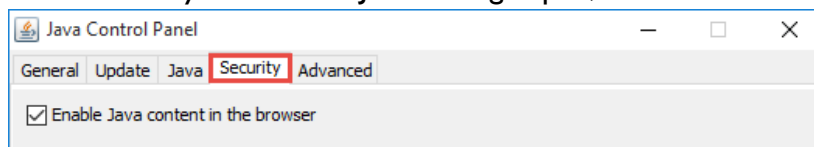
Updated: 2/27/2018

### Procedure

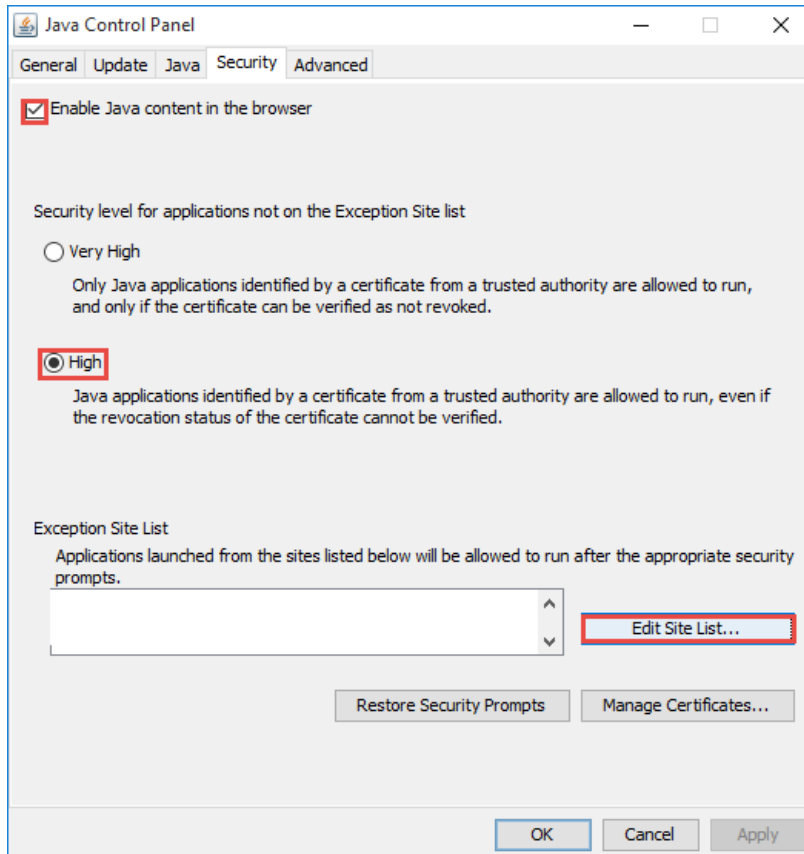
- I. Before running the simulator, you will need to modify the Java settings on your machine.
  - a. On your computer, locate and open the Java settings.



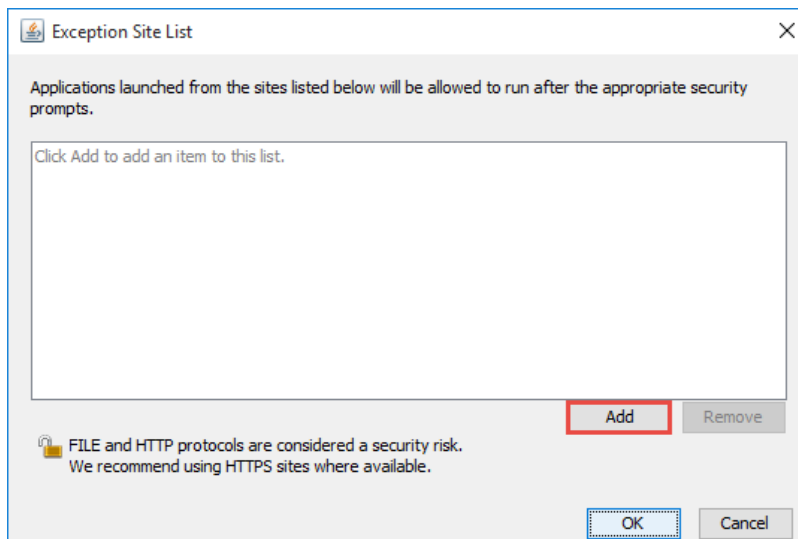
- b. Once you have the Java settings open, select the **security** tab on the top.



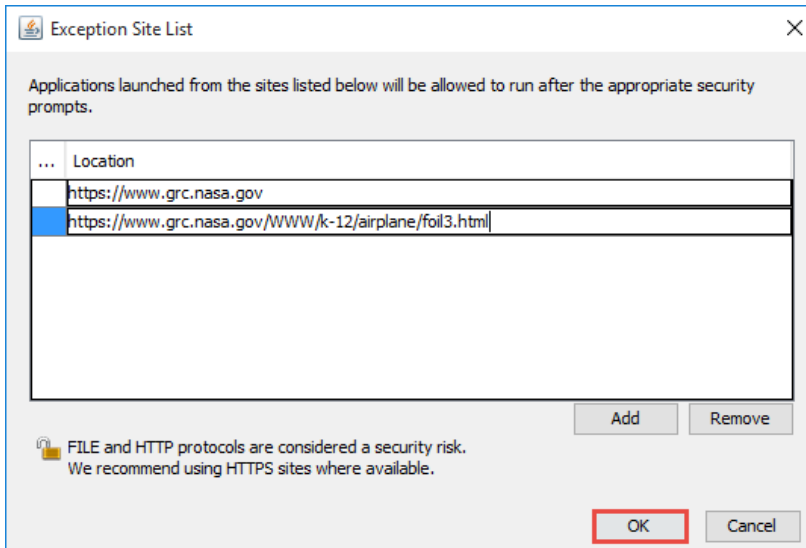
- c. On the Java **security** tab, you will then need to check the **Enable Java Content in the browser** checkbox, select **High** for the security level and select the **Edit Site List** button under Exception Site List.



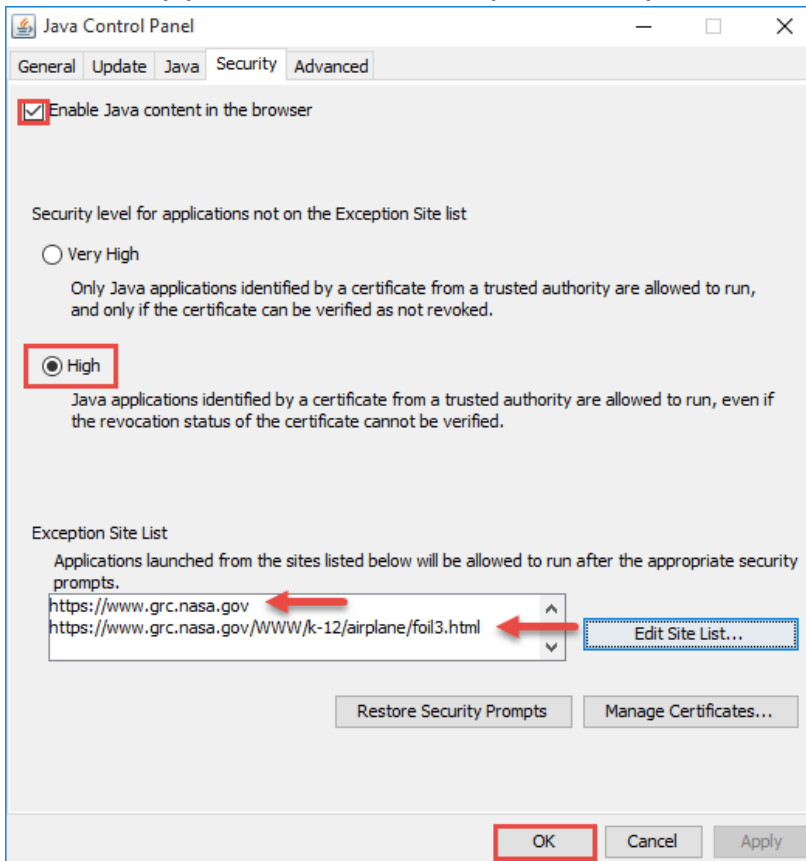
- d. On the Exception Site List box that opens, Select **Add**.



- e. Next, type the following URLs into each line:  
“https://www.grc.nasa.gov/WWW/k-12/airplane/foil3.html” and  
“https://www.grc.nasa.gov” then select **OK**.



- f. Verify your selections were input correctly, and select **OK** to save your changes.



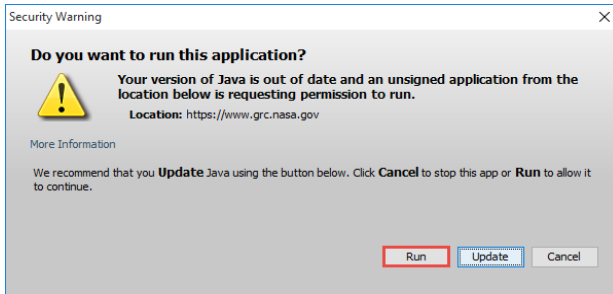
2. Now that your Java settings have been updated, you will be able to run the simulator.

a. Open the simulator by going to the following URL:

<https://www.grc.nasa.gov/WWW/k-12/airplane/foil3.html>


**Note:** This website will not work while using Google Chrome. (Mozilla Firefox and Internet Explorer had the most consistent compatibility during testing)

b. If prompted to allow Java, select **Run**



c. FoilSim will now run in the browser, we recommend bookmarking this page for easier future access.

<https://www.grc.nasa.gov/WWW/k-12/airplane/foil3.html>



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+ Text Only Site  
+ Non-Flash Version  
+ Contact Glenn

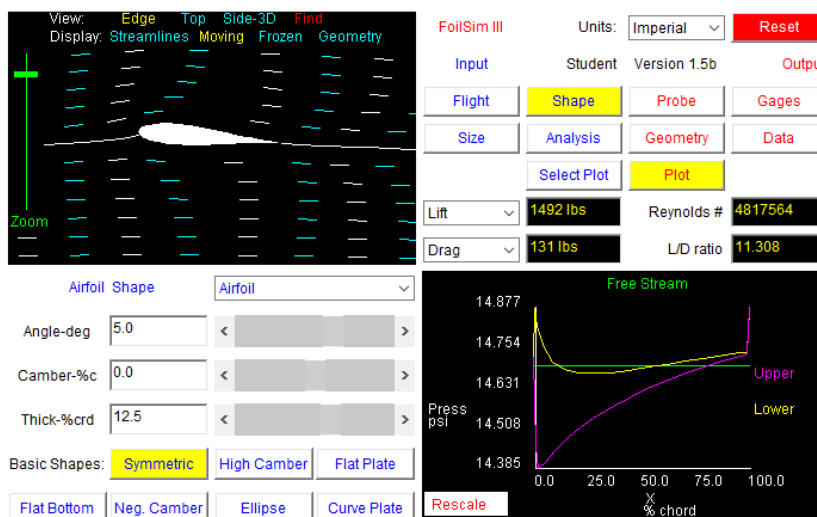
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NASA **FoilSim III Student Version 1.5a** Glenn Research Center

This is a beta 1.5a student version of the **FoilSim III** program, and you are invited to participate in the beta testing. If you find errors in the program or would like to suggest improvements, please send an e-mail to [nancy.r.hall@nasa.gov](mailto:nancy.r.hall@nasa.gov). [FoilSim II](#) is still available if you prefer the older version.

Due to IT security concerns, many users are currently experiencing problems running NASA Glenn educational applets. There are [security settings](#) that you can adjust that may correct this problem.



View: Edge Top Side-3D Find  
Display: Streamlines Moving Frozen Geometry

FoilSim III Units: Imperial Reset

Input Student Version 1.5b Output

Flight Shape Probe Gages  
Size Analysis Geometry Data  
Select Plot Plot

Lift 1492 lbs Reynolds # 4817564  
Drag 131 lbs L/D ratio 11.308

Airfoil Shape Airfoil

Angle-deg 5.0  
Camber-%c 0.0  
Thick-%crd 12.5

Basic Shapes: Symmetric High Camber Flat Plate  
Flat Bottom Neg. Camber Ellipse Curve Plate

Free Stream  
14.877  
14.754  
14.631  
14.508  
14.385  
Press psi  
0.0 25.0 50.0 75.0 100.0  
% chord  
Upper  
Lower  
Rescale

FoilSim III