

# AFGROW Round Robin Questionnaire

**Name:** Robert Pilarczyk

**Contact Information:** rtpilarczyk@hill-engineering.com

**What Stress Intensity Solution was used for the predictions** (Classic, Advanced, Other – please describe)?

Centered hole cases - advanced solutions

Offset hole cases - classic solutions

**Please provide any other details related to the K-solutions used for each crack length.**

a/c not constant; crack closure factor selected for all runs

**Did you use a load interaction model to account for any effect of the marker cycles** (please provide any details that you think are significant)?

Load interaction was not used for the predictions. Without additional data at other stress ratios, the calculated rates, based on Reffective, will not be correct. A quick sensitivity study indicated retardation impacts for the supplied load spectrum was minimal.

**Did you have any difficulty using AFGROW to make your blind predictions? Any comments/suggestions about how AFGROW could be improved based on your experience in this effort?**

I'll be interested to see the aspect ratio trends relative to the actual test data. There's a notable trend difference between the classic and advanced solutions, however, the crack closure factor did not impact aspect ratio trends. This continues to be an area where I think we can improve our solutions/predictions in AFGROW.