

AFGROW Training Syllabus

Day 1

Introduction

Fundamentals of Linear Elastic Fracture Mechanics

AFGROW Layout and Flow

Basic Features

Main Modules

Spectrum

Spectrum Filters

Stress Intensity/Beta Factors (Geometry)

Classic Cases (User Defined, Application Defined, Weight Functions)

Beta Correction

Beta Modification (Tension & Compression Factors)

Growth Rate Models

Example Using Tabular Rate Data (Class Participation)

Day 2

Main Modules, Continued

Stress State and Failure Criteria

Retardation Models

Residual Stresses

Preferences

Units

I/O Files

Examples (Class Participation)

Additional Capabilities

Advanced Models

Composite Patch Repair

Crack Initiation

Environmental Data

Day 3

AFGROW Tips and Tricks

Using superposition to model complex geometries

Getting more out of the Advanced Modeling Capability

Using AFGROW to generate crack growth reports

Advanced Options

COM (Class Participation)

Plug-Ins

Closing Statements / Q&A Session