This report serves as a user’s manual for the generalized forward-backward code GFB version 2.0. The GFB method is a rigorous integral equation solution for computing the radar scattering from very long rough surfaces which may have an arbitrary 2D scattering geometry on or above the surface. The code is accelerated with the spectral acceleration method, which gives the code an O(N) computational scaling cost. The report includes a chapter on the GFB theory and formulation, a chapter on the input and output files, and a chapter with worked numerical examples.