

Fig. 67 STAGS prediction of linear buckling of a flat panel with two stringer bays. Stiffeners that run along the edges are included in the model. The edge stiffeners have half the stiffness of the interior stiffener. The purpose of this two-stringer-bay STAGS model and those that follow is to determine the appropriateness of testing stiffened specimens that are very small compared to the size of the complete shell that these small specimens represent a part of. In this and all the results remaining in this report there is no overall axial bending (IBCX0XL = 1 in the *.STG file that, via execution of the PANDA2 processor, STAGSUNIT, generates the *.bin and *.inp input files for STAGS), and in-plane warping of the panel skin along the four edges of the STAGS model is prevented. The linear buckling mode displayed here is used as an initial imperfection shape with amplitude, Wimp = 0.001 inch, in the nonlinear static (INDIC=3) STAGS run to follow. Compare this figure with Fig. 46.