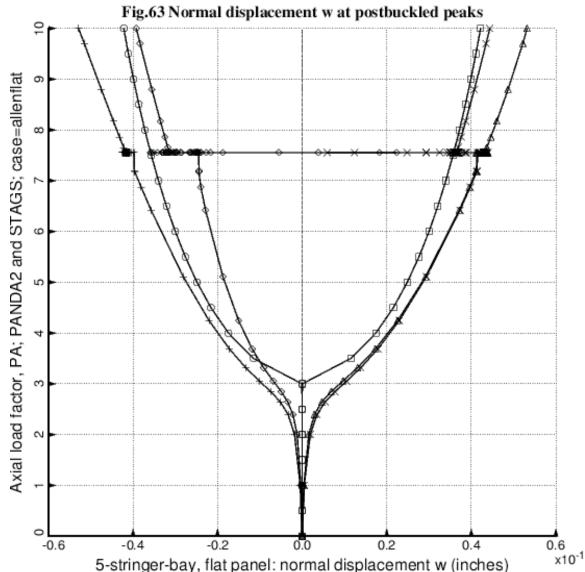Fig.63 Normal displacement w at postbuckled peaks

Fig. 63 STAGS and PANDA2 predictions of the amplitudes of the inward and outward buckles in the flat panel. The PANDA2 curves are the same as those for the flat panel in the previous figure. The effect of the mode jump in the middle bay at PA = 7.555, when the deformation pattern changes dyamically from five axial half waves (Fig. 47) to six axial half waves (Figs. 49 and 50) to seven axial half waves (Fig. 51) is evident in this figure. PANDA2 exhibits smooth behavior over the entire load range because the PANDA2 local post-buckling theory, being based on a model in which the effect of the two x-boundaries is not present [3,22], cannot predict abrupt, dynamic mode jumping. In the PANDA2 model the change in the number of axial half waves with increasing axial compression is smooth, as depicted in Fig. 20.