

of the various devices. Numerous references to the literature are given to provide design information.

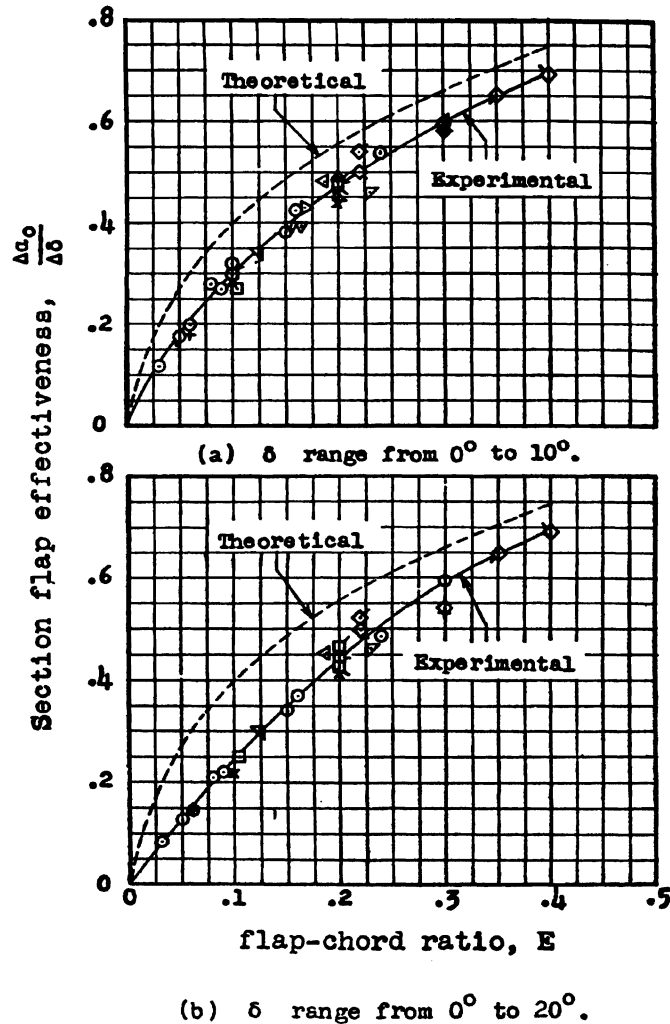


FIG. 96. Variation of section flap effectiveness with flap chord ratio for true-airfoil-contour flaps without exposed overhang balance on a number of airfoil sections; gaps sealed;  $c_l = 0$ .

**8.3. Plain Flaps.** Plain trailing-edge flaps are formed by hinging the rearmost part of the wing section about a point within the contour. Downward deflections of the trailing edge are called "positive-flap deflections." Deflection of a plain flap with no gap effectively changes the camber of the wing section, and some of the resulting changes of the aerodynamic charac-