

Path of flap nose for various flap deflections. Distances measured from lower edge-lip in per cent airfoil chord  $c$ .

$\delta_f$ , degrees	$x$	$y$	$\delta_f$ , degrees	$x$	$y$
0	8.36	3.91	40	1.35	2.43
10	5.41	3.63	50	0.50	1.63
20	3.83	3.45	60	0.12	1.48
30	2.63	3.37			

Fig. 119. Section aerodynamic characteristics of NACA 23012 airfoil with slotted flap.

used on the total chord  $w$  is fairly constant at  $v$  and varying with flap-chord deflections.

The normal-force coefficient  $C_n$  for the flap of reference 153) are shown in Fig. 120. The pitch angle of the flap, and the

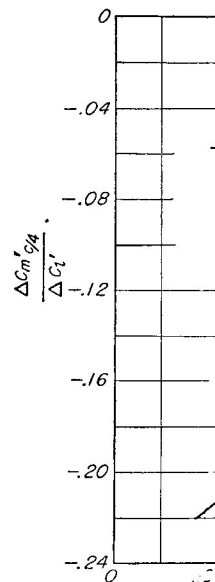


Fig. 120. Variation of ratio of flap lift coefficient with flap deflection angle.

distance from the leading edge to the loads on the flap are given in Table 1. The normal force coefficients  $C_n$  for the flap are given in Table 1. External-airfoil flap characteristics are given in Table 1. The maximum lift coefficient for the single-slotted flap is 1.56 for a flap chord of 0.12. The maximum lift coefficient for the flap of the same section is 1.22. These maximum values are for the wing and flap. The