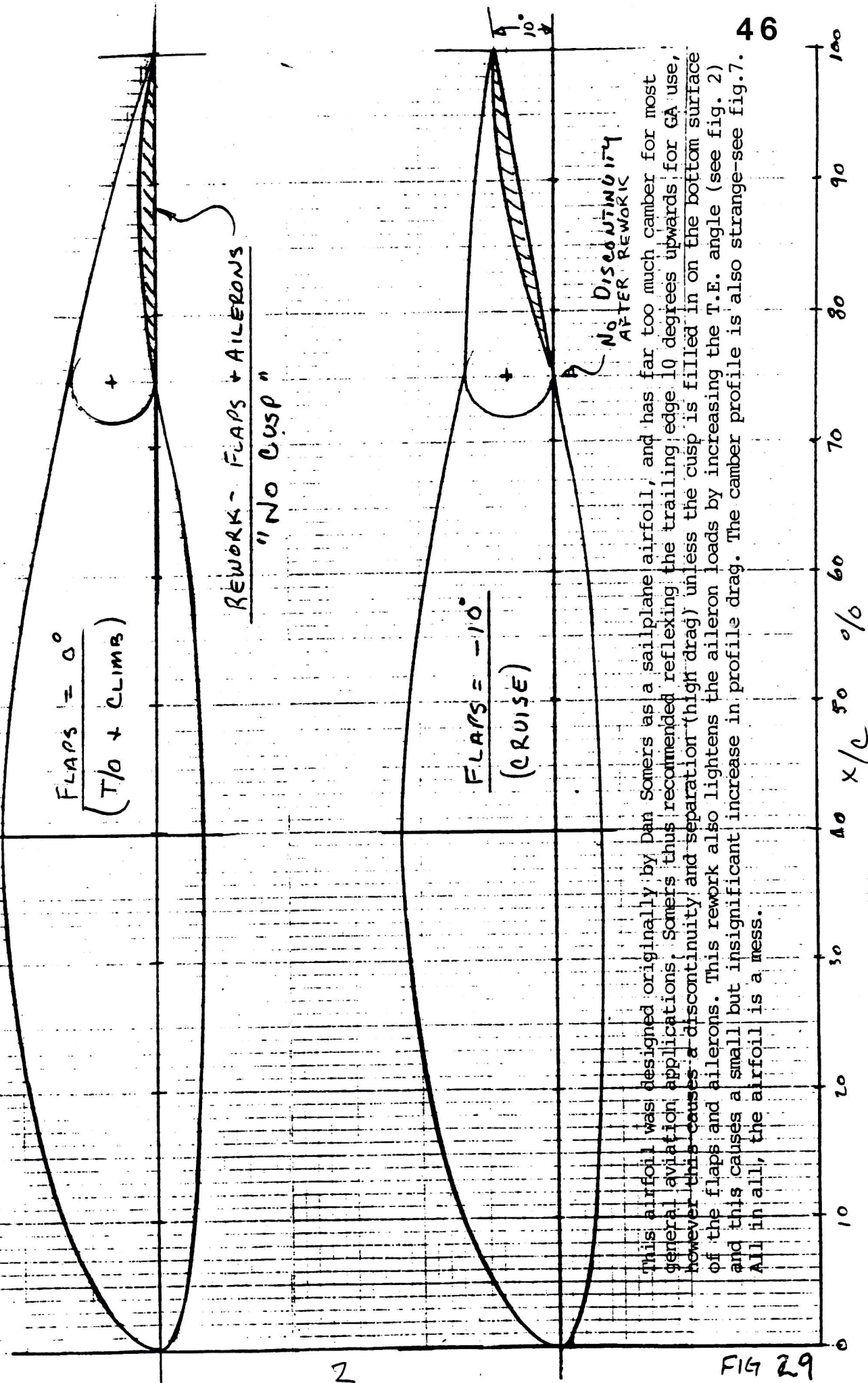


NASA WLF(1)-0215(F) AIRFOIL

SEE NASA TP # 1865, JUNE 1981

Used on Prescott Pusher, Poliwagen, Wheeler Express, Lancair (extensive rework), and others.



This airfoil was designed originally by Dan Somers as a sailplane airfoil, and has far too much camber for most general aviation applications. Somers thus recommended reflexing the trailing edge 10 degrees upwards for GA use, however this causes a discontinuity and separation (high drag) unless the cusp is filled in on the bottom surface of the flaps and ailerons. This rework also lightens the aileron loads by increasing the T.E. angle (see fig. 2) and this causes a small but insignificant increase in profile drag. The camber profile is also strange-see fig. 7. All in all, the airfoil is a mess.