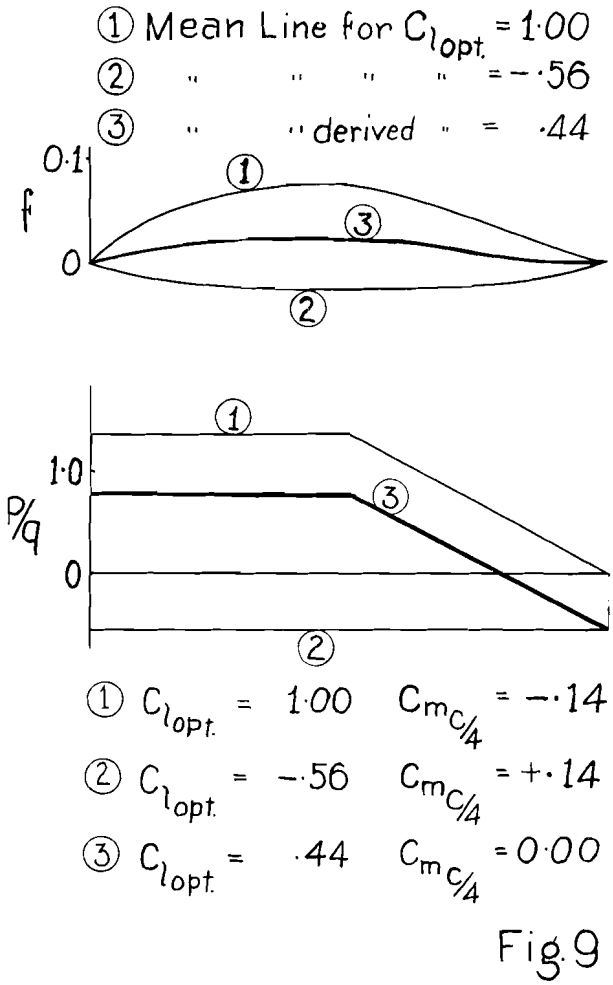

Fig. 9

flex produces a reversed loading (8f) which reduces the pitching moment to zero.

The possible combinations are limited only by the imagination of the designer. Two mean lines are combined by simple addition as an example in Fig. 9. One is the constant pressure type of Fig. 8C at a design lift coefficient of —0.56. The second has an optimum lift coefficient of 1.0 and a constant loading to 0.5C from which point it tapers to zero at the trailing edge. Ordinates for these shapes may be obtained from NACA—ACR—No. L5C05, 1945. The method is indicated in Fig. 9, the net optimum section lift coefficient is 0.44 and the calculated pitching moment is zero. We shall discuss some refinements later but meanwhile note that these calculated values are sufficiently accurate for most practical purposes because normal manufacturing tolerances will introduce errors of a magnitude comparable with any discrepancies between the elementary theory and test flight results.

Table I

Designation	Zero Lift Angle	Optimum Angle (Degrees)	Pitching Moment Coefficient	Reference Fig. 7 and 8
NACA 6300	—7.1	2.0	—0.168	a
NACA 6500	—9.1	0.0	—0.25	b
Constant Loading to TE	—9.1	0.0	—0.25	c
Constant Loading to 0-8C	—7.7	1.4	—0.22	d
NACA 23012	—3.7	5.5	—0.046	e
Horten	6.2	3.0	0.00	f

19th National Goes to Texas

The Contest and Rules Committee of the Soaring Society of America, William Coverdale, Chairman announces that the majority vote of the SSA Board of Directors sends the 19th National Contest to Texas under the sponsorship of the Texas Soaring Association.

The three bids submitted for this contest was the largest number in the history of American soaring. Besides the successful bid, others were submitted by the Western Soaring Congress and by Elmira Area Soaring Corp.

The Texas group proposes to organize the contest at the Grand Prairie site, the same place where the 17th National was conducted in 1950 by this same group. However the TSA in the bid reserved the privilege to hold the contest at an alternate site in the Odessa-Midland area in the event that the Grand Prairie should not be available due to reactivation by the U.S. Navy.

The Western Soaring Congress (Announcement of its organization is made elsewhere in this issue) proposed to hold the contest at El Mirage Field, Adelanto, California, site of the Briegleb Soaring School. This site is famous for its consistently good soaring conditions and will undoubtedly some day be the scene of the National. The Southern California Soaring Association is planning permanent headquarters and facilities there on land donated by William Briegleb, owner.

The Elmira bid was not a formal request for the contest, but was made only to assure the continuation of the event as an annual affair. EASC has expressed a wish to hold the contest at Elmira on alternate years.

The fact that this is the greatest number of bids for a National Soaring Contest, heretofore submitted in a single year, is indicative of the growth of soaring in this country. This also is proof positive of the rapidly developing strength of the various soaring groups throughout the nation. The sponsorship of a National Contest is strictly a group endeavor and requires group organization of the sternest sort.