

Commenting on Richard C. du Pont's Paper "American Soaring Technique Today"

By AUGUST RASPET

Although the above paper was written some time ago, the wealth of material it contains and the developments in gliding it predicted makes it unusually important.

Richard du Pont makes a plea for the consolidation and analysis of all experimental data gathered through the years of soaring in this country. This the Society with the cooperation of our technical members is doing. With the cessation of gliding we have been devoting our time to the scientific aspects of soaring. Some papers have already been published in recent issues. We will do more along these lines if more of the members would join in the work.

Since this treatise was written, the trend in high performance sailplane design has been toward higher cruising speeds, requiring as a consequence of the limited speed range of all fixed wing aircraft, higher stalling speeds than those given in the paper. Inherent in the author's remarks on the performance requirements of sailplanes is the stipulation that a cross-country sailplane must have a wide speed range. Here is a research problem: to derive an exact mathematical definition of speed range in terms of the wing loading, aspect ratio and parasitic drag.

To the many questions raised by Richard C. du Pont, some answers have appeared in recent issues of SOARING. To wit—cloud sheet structure (Woodcock, Nov.-Dec., 1942), slope winds (Raspet, Sept.-Oct., 1942), the fundamental theory underlying soaring flight (March-April, 1943), soaring instruments (Raspet, Dec., 1939, Kantrowitz, Jan.-Feb., 1943). Many more will be answered in the near future as a result of the investigations now going on.

We thoroughly agree with Richard du Pont's conclusions. It is the Soaring Society's aim to make America self-sufficient in developing its soaring technique as a science rather than an art, but much research still remains to be undertaken and completed. Soaring is really the science of extracting energy from the atmospheric discontinuities by means of an aircraft and its instruments. As such the science of soaring is governed by basic physical laws and merely needs the devotion of soaring enthusiasts to further its development.

Richard C. du Pont is to be complimented on the thoroughness of his analysis of soaring. He not only described contemporary soaring but also predicted future trends. It would be a welcome treat to SOARING for other soaring experts to write their critiques on American soaring.



CAPTAIN BARNABY

United States Navy

Ralph S. Barnaby has received further recognition of his abilities; he has been promoted from the rank of Commander to Captain, United States Navy, and is now also Chief Engineer of the Naval Aircraft Factory at Philadelphia.

To the motorless flight fraternity, Captain Barnaby's achievements are well known. He holds Number 1 "C" Certificate in this country, he helped found the Soaring Society of America and was president several times. In between times he has served and is still serving as director.

Captain Barnaby has always maintained a firm belief in gliding as a valuable means of training airmen. He was largely responsible for the experimental glider training program of the Navy at Pensacola in 1933.

His engineering ability was largely responsible for the outstanding training and transport gliders developed for the Navy Glider Program.

His enthusiasm for motorless flight is indicated by 34 years of active flying of gliders and he is still flying them. This enthusiasm he is willing to share with others for he is always ready to talk, discuss, and lecture on gliding and soaring.