

NEWS NOTES

CONVECTION In-flight weather modification is one aspect of soaring flight, and a potentially promising one, that has hardly been scratched. One person who has done some experimentation is **Paul B. MacCready** of Meteorology Research Incorporated. Paul claims that it is within the power of the soaring pilot to effect significant changes in the cumulus he encounters along his flight path. By proper seeding the temperature of a selected cloud can be increased by as much as one or two degrees C. This heating is enough to approximately double the buoyancy of the cloud: in other words, by turning on the after-burner, a cloud producing a normal rate-of-climb of 1000 ft/min. can be induced to provide about 2000 ft/min. This alone would be worth the price of admission, but two special bonuses follow. The first of these is the reduction of icing; the second the fact that, about fifteen minutes after it gets all excited, the cloud begins discharging rain—possibly wetting down a competitor or two.

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MORE ZAP AT CAP During the initial CAP training program at Harris Hill last year 28 cadets received flight instruction. (*Soaring*, October, 1965) The results of this first encampment were so gratifying, according to CAP National Commander **Joe Mason**, that the program will be substantially expanded this year. The 1966 schedule calls for training 124 cadets, both boys and girls, for which an expenditure of \$56,710 (up from \$20,000) has been allocated. The cadets participating in the glider course will receive a minimum of 30 aerotow flights and nine hours of glider flight time. All, presumably, should end the course holding a C badge. The three locations selected for training during 1966 are Elmira, N.Y.; Chester, S.C.; and Lawton, Ohio.

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THE OPTIMUM CIRCLING POLAR The most attractive performance figure for any sailplane is that for max L/D. Yet, as has been pointed out time and time again, the maximum glide figure is of less significance than the performance of the glider in the very low and very high-speed ranges. The high-speed end is adequately expressed by the drag polar (provided it's honest, and the ship clean), but the low-speed end is more complicated, being subject as it is to such factors as thermal strength, circling radii and the increased sink rate in turning flight. **Mr. Tony Fitchett**, writing in *Gliding Kiwi* (Official Journal of the New Zealand Gliding Association) has attacked the problem of performance at thermalling speeds by means of what he calls an **OPTIMUM CIRCLING POLAR**. He provides, along with his thoughts on the matter, a handy nomograph with which an **OPTIMUM CIRCLING POLAR** can be calculated. One conclusion he draws is that the OCP can show marked differences in the potential thermalling ability of gliders which, on first glance, seem roughly equivalent. His researches also bear out the contention that, for best climb, one thermal as close to stall speed as possible.

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Klaus Hill and Bruno Haufe of Coalville, Utah, began their glider building careers a couple of years ago with a Coward D-8. Currently they are working on a utility and high-performance glider simultaneously. Plans are to be made available to homebuilders.

NEWS FROM ABROAD France's offer to organize the 1967 World Gliding Championships, according to AVIASPORT, is contingent on two conditions: One is that the Ministry of the Army put a military airfield at the disposal of the organizers (as was done at South Cerney) and the other that appropriate authorities be willing, for the occasion, to permit blind flying in areas corresponding to the routes of each task. No indication of a course of action, should these conditions not be met, has been given.

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SSA CROSS SECTION Some years ago a confidential poll of the SSA membership was made. Partial results of this poll, given below, were culled from 254 questionnaires (about a 13.5% return) received at headquarters prior to March 20, 1959. The sampling is large enough to provide figures of interest, yet small enough to warrant being taken (like L/D figures) with a grain of salt.

The average age of respondents was 34.4 years, the youngest being 17, the oldest 62; 69% were married, 31% single. The average home value was given as \$17,400 and average insurance coverage was \$29,200. There proved to be 1.59 cars per family among which were Ford (26.2%) and foreign (15.9%) listed. The smoking statistics were surprising: 58.7% were non-smokers while 25.0% said they smoked cigarettes, 10.6% cigars and 13.9% a pipe. A whopping 60.9% of those who replied were in aviation, scientific, technical and engineering fields. The average stated salary was \$9,750 per year with the individual having been 6.9 years at his job. The information specifically related to flying showed that 36.6% held private and 39.0% commercial pilot licenses, 50.4% owned an airplane or a share of one and 88.3% owned a sailplane or part. Of the sailplanes 62.3% were acquired from manufacturers, 24.6% were built from kits, 8.2% were made from plans and 1.6% were home designed and built. The average age of the sailplane proved to be 6.9 years, the maximum 22 years. There proved to be an almost even split between those who kept their ships at home on the trailer (47.5%) and those who kept their sailplanes at the airport (49.1%).

We hope to inaugurate another, and more thorough investigation into the life and loves of the American soaring pilot one day soon. Please fill in all the blanks when it comes.