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flight with either power on or power off. Lateral and directional controls show positive stability at all trim speeds from the stall V_{so} to dive speed V_g . No data on the roll parameter $pb/2V$ has been attempted due to the lack of suitable instrumentation. Only recently has a small artificial horizon instrument appeared that would be satisfactory for sailplane installation. This is a project that needs more research in that no design roll values in terms of the parameter just mentioned have ever been established for sailplanes.

Spin characteristics have been found to be normal with no special or unusual recovery techniques required.

This completed Hummingbird gives the appearance of being a really high performance sailplane.



Glide path control with spoilers appears to be adequate with no undue buffeting or loss in control.

Landing approach control, either power-on or power-off, is adequate within the center of gravity limits. Landing roll produces no undue tendency to ground loop or pitch.

The critical flutter speed appears to be well beyond the maximum design speed in that no tendency toward this phenomena has been observed.

Conclusion

There are at the present time six all metal "HUMMINGBIRDS" under construction and they are to be used in an exploratory sales program to evaluate the potential of this type of aircraft. The prototype of the present configuration has been flying since early 1950, and has accumulated a wealth of flying experiences. The design has demonstrated a practical solution to the problems of soaring flight, and it is hoped will encourage the building of more designs of this type in the near future.

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SOARING CALENDAR

July 2-14

TWENTY-SECOND NATIONAL SOARING CONTEST and TWENTY-FIFTH ANNIVERSARY OF THE FIRST NATIONAL GLIDER MEET

Harris Hill, Elmira, New York

July 3rd

Annual Meeting of the SSA Directors
Harris Hill, Elmira, New York

July 16-24

Annual Open House of the Philadelphia Glider Council
Philadelphia Gliderport, Hilltown, Pennsylvania

July 23-August 1

British National Gliding Championships
Lasham Aerodrome, Alton, Hants, England

August 1-6

Canadian National Soaring Meet (Eastern Section)
Brantford, Ontario

August 7-13

Canadian National Soaring Meet (Western Section)
Regina, Saskatchewan

September 3-5

New England Soaring Association Labor Weekend Meet
Hiller Airport, Barre, Massachusetts

Sept. 3-5

Fifth Annual Soaring Contest
Chicagoland Gliding Council
Elgin Airport (35 Miles West of Chicago)

Sept. 3-5

First 1-26 Regatta Sailplane Competition
Harris Hill, Elmira, New York

WRIGHT MEMORIAL MEET

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Polarad Paper straffing—Larry Gehrlein (5.0 sec.).

Junior Division Winners: Republic Trophy—Bob Urban, Erie, Penn.

Northrop Trophy—Ohio State University, Columbus, Ohio.

Allied Bomb Drop—H. R. Jost, Toledo, Ohio (19'3").

Hyland Spot Landing—Robert Bauer, Toledo, Ohio (2").

Northrop Distance—Bob Urban, Erie, Penn. (80 miles).

Soaring Society Altitude gained—John Boone, Champagne, Ill. (2200').

Polarad paper straffing—Wm. McElwee, Ellerton, New Jersey (4.75 sec.).

Three new Silver C's were made at this meet and they are: Bob Urban, John Boone, Howard Trampenan.

One Golden C also was made by: Dave McNey.