



J. FRED FRAKES at controls of the deluxe "Mallard" chats with George T. Gott, PUC Business Manager, before taking off on the flight last Friday morning.

## Airplane Test Flight Big Success

The test flight of the Grumman "Mallard" airplane at the Angwin Airport last Friday morning was in every way successful, according to J. Fred Frakes, president of Frakes Aviation, Inc.

The same feeling was expressed by Mr. Re'at Cloutier from United Aircraft of Canada, Montreal, who had at 10 p.m., Thursday, completed his necessary inspection; and by Bob Lamson, consulting engineer from Seattle; and J. D. Frakes, engineer here in charge of the conversion of the aircraft to turboprop operation. This included the installation of two new Pratt & Whitney PT6A-27 turboprop engines, each weighing 1,050 lbs. less than the originals they replaced. Work of conversion of the aircraft was begun a little more than a year ago, and has just been completed.

Before 9:00 o'clock Friday morning nearly a hundred college officials, students, flight personnel and other community residents were at the airport to see the big 10-passenger amphibian make its test flight.

At the controls was J. Fred Frakes, president of Frakes Aviation, Inc., who had owned this "Mallard" during his years as a bush pilot in Alaska. He had sold the plane in 1964 when leaving Alaska; and repurchased it in 1968, when he flew it to Angwin where the engine conversion was begun.

With Frakes on the test flight was his nephew, J. D. Frakes, chief engineer at the plant here; and Robert Lamson, Seattle consulting engineer who has worked closely with Frakes on the Mallard conversion. After taxi tests, Mr. Cloutier had left the plane and joined those there to see the "big bird" take off.

"At 9:02 we went down the runway," said J. Fred Frakes, pilot, "and lifted off in a little less than 1000 feet in 15 seconds of time. The aircraft climbed beautifully (it was perfect) to 7500 feet in 3½ minutes."

Then he said he did some gentle turns "to get the feel of the control," and the flight continued perfectly and with flawless performance.

During the 46 minutes in the air they checked the various aspects, controls at various speeds, etc., he said. "While using only 440 hp, we found we were flying a true airspeed of 226 miles an hour," he explained. Then the power was increased to 500 hp, and this made a true airspeed of 250 miles an hour. "This was at least 30 miles an hour faster than we anticipated."

Comparing this with what former engines had done, Frakes said that they could then have been cruising at about 185 miles per hour, while now this has been increased by at least 65 miles per hour. He said he would have been very happy to have accomplished a gain of 50 miles per hour, and added that his "prospective customers" would have felt the same. "All will be most happy with this set-up," he said.

And the conversion of the aircraft, he further explained, "has increased our useful load by approximately a ton and a half (3000 lbs.)"

In all, as Frakes summed

it up, on this test flight the aircraft in handling and performance had done everything asked for and more.

"There is not a single fault to find with it," he said.

The Company now looks forward to FAA certification, which will probably take from 90 to 120 days, about the period needed in which to complete all of the flight testing.

Because of the increased efficiency and economy of operation the new turboprop engines make possible, Frakes has already had 17 "Mallard" owners approach him to discuss the prospects for his converting their aircraft in a similar operation.

A total of 59 of this deluxe type of aircraft, used chiefly by large corporation executives, were built by Grumman between 1946 and 1952. Of these 33 are still known to be operational in the United States and possibly as many as 20 are still being flown overseas.

## Summer Tour Group Reports Enjoyable Time

The PUC 1969 "Around the World" summer tour, conducted by Dr. and Mrs. Elmer Herr, closed on August 26 with all of the members in the group back in the homeland, except PUC Dean John W. Cassell, who was spending extra time in Australia.

This includes those who went from this area, Dr. and Mrs. Herr; Mr. and Mrs. Harry Hein; Mr. and Mrs. Leo Hagan; and Mrs. Viola Kotz. In all there were twenty-three on this world tour. In 64 days, beginning June 22, they visited 25 countries.

Highlights on the tour, they report, were a concert by the Royal Philharmonic Orchestra of London; a session in Del Dehi, India, with the economic adviser stationed at the American Embassy, who also arranged a visit to the National Parliament of India; a visit to the "White House" of the Philippines in Manila; and visits to seven overseas Seventh-day Adventist colleges, besides many Adventist churches, hospitals and publishing houses.

During the thirty days in Europe the group covered places of special interest—historic, scenic and political—Shakespeare country in England; Rhine River boat trip; Switzerland Alps; East-Yest Berlin. They went to Venice, Athens and Istanbul.

Fifteen days were given for the Middle East, to include Cairo, Jerusalem, Teheran, Sea of Galilee; and during the nineteen days in the Orient and Far East they were in Hong Kong, Singapore, Thailand, the Philippines, Japan and Taiwan, returning via Honolulu.

According to reports of members, the trip was highly enjoyable and educational. Each country visited was studied with reference to its distinct personality among the family of nations. All members agreed that personal visits and exchanges of ideas with people beyond our shores result in a greater tolerance toward, and a better understanding of their problems. This leads to more reasoned statements and better international good-will.