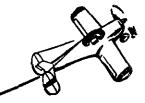
ERCOUPE SERVICE MEMORANDUM

No. 62



SUBJECT: "Ditching" of Ercoupes



March 15, 1952

We have just received a report from an Ercoupe owner, Mr. F. L. DuBois, now on active duty in the U.S. Navy. We quote from his letter, which is both interesting and instructive, for the information of any pilots who may find themselves in a similar situation.

"In 1948, I planned a trip involving considerable overwater flying and wrote to the manufacturers of ERCOUPE requesting information. They were unable to give me any, and I was not able to find anyone who had ditched or who knew of anyone who had done so. For the benefit of ERCOUPE owners and any others who are interested in the subject, I am in a position now to give first hand information on a successful ditching of an ERCOUPE.

"I flew my ERCOUPE from Newport, Rhode Island down the east coast, across to Cuba, Haiti, Puerto Rico and the Windward and Leeward Islands to Trinidad with no difficulty. A year later I flew from Trinidad along the north coast of South America to Panama and while there for a year and a half made several overwater flights to nearby islands. My longest overwater flights was from Cartegena, Columbia direct to Panama about 220 miles overwater. I always carried a fair amount of emergency equipment and had given considerable thought to ditching procedures in case it was necessary.

"Last October while flying back from the Perlas Islands in the Gulf of Panama with a passenger, I had an engine failure and ditched my plane about one mile off the coast. The engine stopped completely with very little warning apparently as a result of piston seizure although oil pressure and temperature were normal right up until the engine stopped. I put the plane in a normal glide at about 70 miles an hour and leveled off at about 6 feet above the water. The wind was from the north at about 5-10 miles per hour and the nearest land also lay directly to the north. The sea was quite smooth with a slight swell. As the air speed dropped off, I kept pulling back on the stick until a full stall occurred. The plane dropped into the water in an almost flat attitude and rocked forward to an angle of 70 or 80 degrees returning immediately to an angle of about 45 degrees. Prior to ditching, my passenger and I put on our inflated life jackets and pulled the rubber raft out of its case, holding it across our laps. I braced my body with my left arm curved out and pushed on the top of the instrument panel, and had my passenger do the same thing with his right arm while he held the rubber raft with his left.

"I turned off the master switch, just in case, and opened the canopy all the way down on both sides. In my previous thinking on the subject I had always anticipated that there would be considerable shock when the plane hit the water and my principal concern was that the nose wheel would have a tripping effect and cause the plane to flip over on its back. I am convinced that this probably would have happened if a full stall landing were not made. The shock of hitting the water was negligible and neither of us noticed much pressure on the arm with which we were bracing ourselves.

"The plane settled at a 45 degree angle. We put the rubber raft over the side while still sitting in the plane and I pumped it up with a hand pump, while my passenger got all the emergency gear he could find out of the luggage compartment. Water began entering the cockpit through all the small holes in the firewall and within about three minutes the angle of the nose had increased to about 70 degrees and we got out of the plane directly through the top and pulled ourselves into the life raft. It was very crowded and uncomfortable with two men in a one man raft. Both of us lay in a sitting position with myself more or less sitting in my passenger's lap. It took us about 45 minutes to paddle about one mile to the shore which we reached a few minutes after sunset. The tail and the trailing edge of the wings of the plane were still visible, the tail sticking straight up in the air. It soon became quite dark and I do not know how long it stayed afloat.

"It took us about six hours after landing on the beach, working our way across swamps and streams with the assistance of a Panamanian fisherman before we reached the Tocumen Highway and got back to Panama.

"If I ever own an ERCOUPE or similar plane again in which I do much overwater flying, I certainly intend to give a lot of thought to a few minor details which I believe would make the plane capable of staying affoat indefinitely. The wing fabric apparently was not damaged and I believe that by possibly filling all openings to the wing while at the same time providing proper ventilation through a separate internal tube a watertight wing could be developed with very little difficulty. In like manner by a little attention to the holes in the firewall it could be made watertight to at least keep out water for a reasonable period of time. The inflated life jackets were entirely satisfactory, but a one-man raft for two people would have become almost unbearably uncomfortable for a longer time. I carried a canteen of water, shark repellent, dye marker, flash light, malted milk tablets, concentrated emergency rations and what I consider to be highly important, at least six day and night flares.

"In the case of a water landing in very rough seas there would normally also be a fairly strong wind which would reduce the true speed at which the plane hit the water and unless you were unfortunate enough to hit the top of a wave while you still had considerable air speed, I do not believe the problem of landing would be any more difficult than in smooth water."

Any additional information which other owners may have on "ditching" operations would be greatly appreciated by us.