

A LEAF FROM A PILOT'S DIARY.

Picking up a Pilot's Book belonging to one of the Air Service officers stationed in Washington, we find therein quite a number of interesting incidents recorded, chief among which being a description of a cross country flight from Kelly Field to Dallas, Texas, which culminated in his landing in darkness, and the observations he makes as a result of this flight. Fortunately, he suffered no injury through this landing and his plane was only slightly damaged.

Leaving Kelly Field at 4:05 p.m., he passed Austin at 4:55, Bosque at 6:05 and Hillsboro at 6:15 p.m. Due either to the compass sticking or the fact that he mistook the N for an E on the compass, he lost his way and arrived at a little town, probably Ennis, at the time he should have reached Dallas. Climbing to an altitude of from 12,000 to 14,000 feet he picked up Dallas and Fort Worth at a distance slightly west of north from where he then was. Upon approaching Dallas he headed down under power at a speed of about 120 miles, in order to be on time for a dinner engagement. Just southeast of viaduct he ran out of gas and tried to turn on the emergency tank, which failed to function. He then turned back on the main tank and found that he had drained a little gas out of the main tank and the motor picked up for a short while.

He decided that he would reach Love Field all right, and did not land at McGraw's field as he intended to do when the gas first ran out. This last power continued but a short time. When about over the river the propeller stopped in the air and there was no possible chance of starting it. He thought at the time that he might possibly reach the flying field, but upon reaching a point about two miles from the field he had only about 1,000 feet altitude, and so picked what appeared to be the best landing field ahead of him, being afraid to try to turn and make the field he had already passed over.

Stalling in over some trees and dropping the plane from a height of about six feet, he bounced and rolled through a fence, which he had not seen from the air, and stopped in the next field. The plane did not nose over, but the entering edge of the lower right wing, just outside of the aileron pulley, was broken, this due to striking a small bush in the fence. The spreader board was broken on striking a fence post, also the trailing edge of the lower left aileron, and the propeller was scratched when it caught the upper strand of the barb wire fence.

The following day he put an emergency patch on the broken part of the lower right wing, cleaned out the gas line thoroughly and flew to Love Field, the plane handling well in the air. Upon investigation it was found that only about one gallon of gas was in the emergency tank, this in spite of the fact that the pilot had seen gas coming out, a few drops at a time, from the overflow pipe just before taking off. The above was probably due to the air in the top tank becoming warm after the plane was rolled out of the hangar. These few drops probably condensed in the overflow pipe.

COMMENTS ON THE FLIGHT.

1st. I forgot my map and thought I knew the country well enough without one, but find that one should never travel without a map.

2nd. Was very careless about being sure of my direction. A pilot should never become careless on cross-country flying about maintaining his dead reckoning. The hardest time of the day to find one's way about is the period just after sunset, when the sky is still bright but the earth is in darkness.

3rd. When a pilot thinks that it may be possible that he will be in the Air after nightfall, he should carry a small pocket flash light to assist him in reading his instrument board, in case same is necessary, and for the purpose of reading his map.

4th. The visibility below 2,000 feet was very poor. To get away from the force of a head wind to gain time was flying at an altitude of about 200 feet and could see nothing of the country.

By the time the sun disappears below the horizon, pilot should fly at an altitude where the visibility is best. Would say at least 5,000 feet, though in Texas on clear nights ten or twelve thousand feet are not too much.

At night a large city is visible, due to the illumination, at a much greater distance than it is in the daytime. It appears from 25 to 50 miles away, depending on the clearness of the atmosphere, as a dimly illuminated area. A small town is not visible at such a great distance and when seen will shortly thereafter appear as a brightly illuminated area and will a little later show individual lights. A large town will, for a period of ten or fifteen minutes while approaching it, closely resemble a section of the Milky Way.

Pilot should check very accurately the time of passing each town, and a variation of 2 or 3 minutes from the expected time should arouse his suspicion; also an apparent change in the wind direction should be cause for uneasiness.

At night when a pilot has decided that he is lost, he should circle over some object while he is attempting to locate himself; continuing to fly in what is known to be the wrong direction really makes matters worse. A good plan, after it is found that it is impossible to locate the original destination is to fly low and pick out what appears to be a good field, flying over it several times at a low altitude to be sure that there are no obstructions. If the light from the exhaust in any way hinders vision, place the plane in a proper location for landing and cut switch. Pilot should be sure to allow sufficient distance before striking ground, to be sure that his eyes have become accustomed to the darkness. Distance can be more accurately judged and small objects on the ground can be more easily distinguished than when the lights from the exhaust interfere with the pilot's vision. The foregoing is based on the assumption that the plane is not equipped with wingtip flare.