

MISSISSIPPI WAVES?

by H. MARSHALL CLAYBOURN

On several occasions, Dave McNay and I have discussed the appearance of lenticular clouds here in Mississippi and their indication of wave conditions which might be utilized for soaring. We recently had an opportunity to conduct a preliminary investigation.

On Sunday, the 16th of March, my son, Hank, and I drove out to the Mississippi State College Airport, which the Aerophysics Department operates, to accomplish some rather routine maintenance on the Carsey-Claybourn-Reeves-Shroeder 1-26 in preparation for the coming soaring season. On our arrival at the airport, we found Dave McNay working on his auto and Dave Raspet and Jess Gregory setting up the Kirby Kite. All of us were taking advantage of

towing and Dave R in the Kirby Kite.

As soon as they were off the ground all hands kindly assisted in assembling the 1-26. When the tow plane landed I was in the cockpit ready for take-off. Dr. Raspet reported cloud base to be 6000 feet above the field, with tops at 7000 feet. He informed me he would tow me over one of the clouds so it would be possible to investigate conditions there, as well as underneath (A thought that hadn't occurred to me). We were off at 1300 and I released at 1323. By that time the lenticulars of any size were generally south of the field.

A later check of the weather map showed that we were in a HIGH pressure region. Winds were from the

I lost altitude by exploring too far and flying out of lift on the north end and was forced to turn on the south end of the cloud by the formation of another and higher cloud on the upwind side, I was able to stay at the 6800-7000 foot level for 15 minutes. Since my turn and bank indicator was suffering from a weak battery and was unreliably sluggish, what seemed most logical was to continue north into a clear area and attempt to find lift on another cloud as 'my' cloud was rapidly becoming part of the upwind cloud. Once clear of my little valley I headed upwind toward another cloud. Just short of the cloud I hit some 600 ft./min. down and confidently continued on right in the base of the cloud and out the other side, waiting for the big boost of up. Although it was zero sink all across underneath, the big up never came. I couldn't locate any lift of consequence, other than what appeared to be thermal lift.

Well, not having been airborne since last Labor Day's contest in Texas, except for a few short auto tows on an overcast day and in the rain, the opportunity to soar was most welcome. The rest of the hour and a half flight was spent at the 3000-5000 foot level, finally getting rid of those 5000 feet with a few lazy 8's, rolls, loops and a spin. Some days it's just good to be alive.

I returned to allow McNay or Dr. Raspet a chance at thermal soaring, landing at 1428. Dave Raspet had already landed and Dave McNay was off on an auto tow in the Kite for an hour and a half flight. Dr. Raspet, who had flown some 8½ hours the day before, took a rain check. So Hank and I, flying the new 1½-26, tried two auto tows, with no luck at catching a thermal.

Dave Raspet reported that he had no luck on the top side of the cloud and had generally the same impression of the lower side as I. Of course, this brief exposure to these conditions by two novice pilots proves nothing except that it appears worthy of additional investigation. I would be especially interested to have reports from any other "flat-landers" of attempts at wave soaring in their area. If you haven't tried it, this might prompt you to roll out the ship and give a try if similar conditions present themselves. We are interested enough to make additional flights if the opportunity arises. This type of investigation would seem to be an ideal place to utilize the Nelson Hummingbird.



Marshall Claybourn looks back from the cockpit of the 1-26 used to explore the wave clouds which are barely discernable overhead.

Photo: David E. McNay

the clear, spring-like weather. McNay immediately asked if we were going to set up the ship, which was all that was required to disolve our firm resolution to clean up ALL maintenance details before we did ANY flying. Our discussion of conditions centered on the appearance of a few lenticular clouds, forming mostly to the west, that appeared to be increasing in size. After a hurried conference between the two Dave's, one, Dave Raspet, drove into town to pick up his father, Dr. Raspet, who agreed via telephone that conditions looked interesting enough to merit investigation and justified an aero tow. Meanwhile, those of us at the airport put the finishing touches on the assembly of the Kite and got the Cub tow plane nearly ready. When the two Raspets returned a few minutes more work was accomplished and off they went, with Dr. R

WNW, about 10-15 knots. The clouds were oriented in a NNE-SSW direction.

Just prior to release we were on a heading of 350°, having passed to the lee of one of the clouds. As we crossed the north end of the cloud I released at 7000 feet. A left turn of some 150° and I was parallel to the cloud and over the upwind edge, more or less even with the top. I lost 200 feet moving into the region where it appeared lift might occur and found zero sink which gradually improved to 100 ft./min. lift. Several passes were made along that region shifting positions with relation to the cloud to find the best lift. It is difficult to judge but I think the area I worked was ¾ mile in length and a couple hundred yards wide. I was never able to get a definite impression of the optimum position to fly in relation to the cloud. Although