

THE BLOSSOM WINCH

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The Blossom Winch was designed by Howard Blossom and built in 1940 in Fred Semple's shop in St. Louis. During its early days it provided power for about fifteen hundred tows for the St. Louis Soaring Association's two place "Cinema" and Blossom's "Wolf," and later was used by the Laister-Kauffman Aircraft Corporation for towing LK-10As.

For CAA type certification the LK's had to be towed at an airspeed of 72 MPH, and on occasion they indicated airspeeds of over 80 MPH with this winch in winds of less than 10 MPH.



Fred Friedewald, kneeling, and Rany Bell, both members of the Greater St. Louis Soaring Association, with the rejuvenated and more powerful Blossom winch of which they are so proud.

After the war the winch was left sitting in a low field near a creek and had been submerged a few times before Dick Galbierz picked it up early in 1955. Although it was in pretty bad shape at least the design and basic parts were usable.

The original 120 HP straight eight Pierce Arrow engine was replaced with a 1951 Buick engine for a start, but more than a new engine went into the winch. A lot of sound engineering also went into it. A good example of this is the dynamic balance obtained on the drum.

As the brake drum is integral with the wire drum and flanges it would not fit into the lathes available. This was solved by taking the cross slide and compound off a nine-inch lathe, clamping this to the winch bed with the drum in its own bearings, then driving the drum by a V belt while

the necessary cuts were taken. The 2½-inch travel of the compound feed was just sufficient for the job.

The drum has a length of 3 ft. between flanges, is 10" in diameter with flanges 20" in diameter welded on. The drum was designed to level-wind wire or rope by a single change of chain on the sprockets which drive the level winder screw from the main shaft. The drum is directly driven from the back end of the transmission, usually operating in second gear. The drive is through a flange coupling with some flexibility provided by rubber bushings around the pins

and bolts that tie the two flanges together.

The typical tow bar for a four-wheel trailer gave trouble due to fore and aft surging. This was eliminated by connecting a tow bar with a standard ball hitch at each end, from frame of the winch to frame of the car, then shackling the first tow bar around the new one so that it would steer the front wheels, but without any push or pull. The principle here is to eliminate any change of distance however slight between the mass of the car and that of the trailer.

Since it is a four-wheel trailer another problem arose on backing the trailer. This was solved very simply by mounting an extra hitch on the front bumper of the car and pushing the trailer into tight spots instead of backing it in.

We now have an excellent winch which is giving wonderful service.

PAN-AMERICAN SOARING CHAMPIONSHIPS

To provide incentive for the many visiting pilots at our U. S. Nationals from the Americas and to encourage them to participate in even greater numbers, a Pan-American contest is slated to be conducted at Grand Prairie, July 31 through August 9.

Announcements have been mailed and replies indicating great interest are being received. Countries favorably replying to date are Canada, Ecuador, Brazil and Argentina. Indications are that pilots of some of these and other countries will have assistance from their governments or aero clubs enabling them to bring their own ships as well as crewmen. Some will bring native designs, ships that many of us in North America have only read about. Some will come in the hope that they will be fortunate enough to borrow ships with which to contest. While the latter is not encouraged, the organizers hope it will be possible, through the generosity of some of our ship owners, to accommodate a few of them.

Planning to date has not included formulation of contest rules or conditions but it is expected that our National Contest rules will prevail and that Pan-American Champions of various categories will be selected under those rules as far as they are appropriate. It is not expected that any official status with FAI will be sought for this first Pan-American but it is hoped that it will be the first of an annual or bi-annual competition that will eventually enjoy FAI sanction and World status.

It is also hoped by the organizers that through this event gliding and soaring can contribute to the effort to continually improve relations between the peoples of the Western Hemisphere while enjoying the many new acquaintances and lasting friendships that always result from soaring meetings of this kind.

Canadian and Latin American pilots wishing information should contact the Texas Soaring Association, 3619 Dorothy St., Dallas, Texas, USA, and their National Aero Club and the recreational or sports department of their government.