

soaring contests. At Elmira in 1946 a great job was done in view of the difficulties encountered. In the future with the National Contest site picked six months or more in advance, it should be possible to do much better.

#### *Tow Planes*

One of the skills in soaring is knowing when to take off. Consequently, when a contestant decides it's the right moment he shouldn't have to delay too long. When giving airplane tows to 2,500 feet, it takes roughly twenty minutes per glider. That's three launches per hour for each tow plane. Say you have twenty-five gliders actively participating every day. Five tow planes are required to launch those gliders from a large wide field in one hour and forty minutes. It would be better to have two launching sites available to relieve some of the congestion. Four tow planes would take over two hours to do the job and almost three hours would be consumed if you only had three tow planes operating. Now for every two tow planes you have in use you ought to have one on stand-by as airplanes have a habit of malfunctioning periodically—especially tow planes. Also they have to refuel, the pilots have to eat lunch, barographs have to be replaced, etc.

#### *Tow Cars*

A great deal of money can be saved if, when conditions are right, auto tows can be given. Every contest should have at least one tow car or truck packing a full 85 hp (100 hp would be preferable). A good tow car is also very necessary to give launches for spot landing contests. A winch or two in addition would help a great deal to keep things humming.

#### *Goal Flights*

On special days of light winds good for goal and return flights the contest committee should provide observers at two or three designated locations for the purpose of identifying sailplanes making goal and return flights.

At the start of the contest there should be a large map in the pilots' meeting room with flags on it marking the locations of all cities and airports offering special prizes for goal flights. As the prizes are won this fact should be noted on the flags or better still the flag replaced with one of a different color.

#### *Pre-Contest Flying*

More emphasis should be placed on having launching facilities available for four days before the contest starts. This will be especially true in the case of the 14th Annual National Soaring Contest. Most pilots participating will be flying out of Wichita Falls for the first time and those who arrive early should be given every opportunity to make shakedown flights and acquaint themselves with the local terrain before the meet gets under way. The operations crew needs this period to get launching routines and traffic patterns worked out with actual practice so that things will be operating smoothly by the fourth of July when the meet starts. A CAA Inspector and official timers should be available in order that contestants who need to may license their gliders and qualify for their "C's and "Privates" prior to July fourth.

#### *Pilot Meetings*

Pilots' meetings should be run as in the past. The pilots' meeting on the first day of the contest should

be one or two hours earlier than normal to allow plenty of time for getting things organized before operations start. On days when the contest meteorologist forecasts conditions are going to be good earlier in the morning than usual he should notify the contest manager who in turn should call the pilots' meeting for an early enough hour to take full advantage of the condition expected. A notice to this effect should be posted on the pilots' bulletin board not later than 6:30 p.m. the preceding day. This is absolutely essential if early enough starts are to be made on exceptional days when it is possible to break existing records.

#### *Order of Takeoff*

The takeoff order should first be determined by lot at the pilots' meeting as recommended by Fritz Compton. However, just when the first launch should be made is always a problem. The contest committee doesn't want to waste any airplane tows, but on the other hand to ring up long flights you've got to get started early. The contestant designated first to take off usually desires to play it on the conservative side and is not too eager to get going.

A definite time should be set by the contest committee for the start of daily operations (i.e. the time of the first airplane tow or if airplane tows are not being given the time of the first auto or winch tow). If the pilots present at the pilots' meeting consider this time too late for the conditions expected on any particular day they can change it to an earlier time by majority vote.

When takeoff time rolls around operations may start at any launching area in one of two ways, or they can be postponed by unanimous vote of the contestants present who are ready to fly until such a time as any contestant desires to fly.

#### *Takeoff—System #1:*

Operations will begin if the official starter at the launching area in question believes soaring conditions exist. Contestant #1 may request a guinea pig flight if he so desires or he may take off himself. The guinea pig will be selected on a volunteer basis from the contestants present at the starting point. If there is more than one volunteer the guinea pig will be the pilot with the best standing in the takeoff order flying a high performance sailplane solo. If the first flight fails to show up adequate soaring conditions in the opinion of the official starter, operations will be postponed under this system until such a time as the official starter again believes soaring conditions exist. At that time the above process will be repeated. The guinea pig, if unsuccessful, will not forfeit his original position in the takeoff line up. Contestant #1 cannot himself serve as a guinea pig, and if he elects to fly without benefit of a guinea pig flight, he loses his position in the takeoff line up. If the guinea pig flight is successful takeoffs will start in the order established by lot at the pilots' meeting. "If, for inadvertent reasons satisfactory to the starter (such as not having had sufficient time to fully assemble a glider, barograph trouble, etc.), a contestant is not ready to take off in his turn, he is moved back five numbers." If on the other hand the contestant does not desire to fly, he is placed at the bottom of the takeoff list as it then stands.

#### *Takeoff—System #2:*

Operations will begin at the established takeoff time  
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