# WEEDHOPPER OF UTAH inc. NEWS

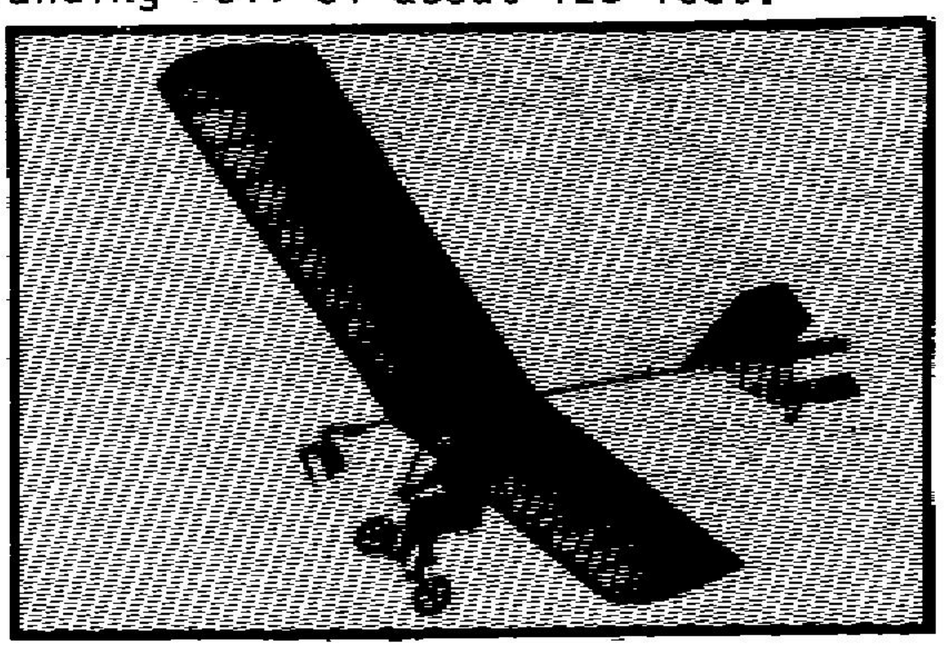
SEPTEMBER - OCTOBER 1981 STEVE PHILLIPS - EDITOR


## YES MARTHA, THERE IS A WOODHOPPER

July 3rd marked the first flight of the Popular Mechanics Woodhopper, Number 33 in the long line of flying machines designed, built and flown by John Chotia. After a brainstorming session with editors of Popular Mechanics Magazine while at the 1980 EAA Oshkosh show, John set out to design and build a low cost airplane using readily available material and simple but proven construction techniques.

The result was a delightful blend of the modern and the traditional -- a nostalgic all wood tail dragger sporting a wire-braced 32 foot wing and tail feathers reminiscent of the Wright Brothers era. A tractor-mounted engine, two axis control system and ample dihedral combine to make the Woodhopper a stable yet responsive flyer, the ideal formula for an ultralight homebuilt. Weighing in at a feathery 149 pounds, the Woodhopper is foot launchable and will fall under the FAA's proposed 155 lb. weight restriction for ultralights. Top grade wood spars are teamed with fiber-glass capped styrofoam ribs to form the lightweight but incredibly strong wing and tail surfaces, which are then covered with seconite using the time honored dope and fabric method. The fuselage boom is a hefty spruce spar reinforced with fiber-glass and plywood sheeting.

Affectionately dubbed "Big Bird" by the Weedhopper flight testing team, the all yellow airplane was rolled out of the hangar on a silken July evening for the first of a series of flight tests. After a skittish high speed taxi test down the strip (it's a typical tail dragger), test pilot John Chotia poured the coal to the 460C powered craft and rolled a scant 75 feet before lifting off into a perfect sky. After a few preliminary solo passes for the camera, the Wood-hopper was joined by a pair of Weed-hoppers for some formation flying. The new airplane demonstrated an excellent climb rate, so good in fact that the Weedhoppers were hard pressed to keep up! After 45 minutes of effortless, hands-off flying, John eased the Big Bird into an approach glide at 25 mph indicated airspeed and greased her on in a near perfect three point and a landing roll of about 125 feet.



*POPULAR MECHANICS Woodhopper soars gracefully over head during maiden flight July 3, 1981*

Further flight tests have proved the Wood-hopper to be an outstanding performer, with a rate of climb exceeding 400 fpm (that's at 4500 feet above sea level!) and extremely stable control response. Although the prototype Woodhopper is powered by the 460 engine, the airplane will fly nicely on as little as 15 horse-power, especially at lower elevations. The budget conscious builder/mechanic should be able to scrounge an engine for the Woodhopper for $20 and a pat on the back at the local junkyard!

The Woodhopper was displayed at Oshkosh '81 and is slated for the front cover and a feature story in the November issue of Popular Mechanics. Plans for the plane will be available through Weedhopper of Utah, Inc. for $50 beginning November 15th. With an estimated cost and construction time of under $500 and 250 hours respec-tively, the Woodhopper promises to be a welcome ultralight/homebuilt hybrid for a market now overpopulated with ultra-expen-sive airplanes.

## "C" MODEL WEEDHOPPERS FLYING

Production of the "C" Model Weedhopper is well underway, and local dealers will soon be flying and stocking the new planes. The completely pre-fabricated "package" (no longer a kit-built airplane) is amazingly easy to assemble. The first production line "C" Model was built by a customer in 8 hours with no instructions! Bob Bell, of nearby Randolph, Utah, built his plane on Saturday, broke-in the engine Sunday morning and flew Sunday afternoon. We do provide instructions, incidentally, but Bob was in a hurry.

This latest edition of the Weedhopper has remained true to it's performance specs. during flight testing, with improved control response, increased rate of climb and faster roll rate than the popular "B" Model. In the ultralight business since 1978, Weedhopper is getting older - - and better.

*Pilot John Chotia shown landing at "The Weedpatch" in his own "C" model Weedhopper.*

## MIKUNI CARBURETORS NOW STANDARD EQUIPMENT

Mikuni carburetors will soon be standard equipment on all "C" Model Weedhoppers. After months of negotiation, we have contracted with a supplier for these teriffic carburetors. The Mikunis, standard equipment on most Japanese motorcyles, provide the Chotia 460 engine with smoother throttle response throughout the power band, especially at lower settings and idle. In flight, the fixed jet, slide valve carbs yield steady power and a cleaner exhaust from sea level to 10,000 feet.

## WEEDHOPPER CONTEST WINNER ANNOUNCED

The Weedhopper Flight Training Center has been officially christened "The Weedpatch." The name was selected from among dozens submitted in the "Name the Field" contest announced in the June newsletter. Scott Gardner, a Weedhopper owner from San Jose, California, sent in the winning entry. Scott recently purchased a used "A" Model Weedhopper bearing serial #0008, the very first complete Weedhopper kit ever shipped back in 1978. Quite a coincidence! For his effort, Scott will receive a brand new "C" Model Weedhopper in the box, ready for assembly. An award presentation will be held at "The Weedpatch" soon. Congratulations, to Scott, and thanks to all those who submitted names in the contest.

## THE MARKETPLACE By George Strother Vice President in charge of Marketing

The biggest news from the Weedhopper Marketing Department this summer, apart from the new "C" Model of course, is the opening of our Dealer Training Center at the flight center in Plain City, Utah.

All Weedhopper dealers are required to attend our one week, 60 hour dealer seminar. In addition to the expected classes in marketing, maintenance, engine rebuilding, etc., the major emphasis is on flight training and the operation of a flight training center.

Not only will your local Weedhopper dealer come home flying better than he has ever flown before, he will also return with all of the information he needs to establish a low cost flight training program in your area.

Soon, at modest cost, you will be able to enroll in a basic ground school including classroom instruction in basic aerodynamics, FAR requirements for ultralights, readying of sectional charts and micrometeorology. You'll also receive "Hands on" training in the new Weedhopper flight simulator followed by instruction in a fully operational Weedhopper aircraft at a dealer near you. Watch for your local dealer's ads on this exciting new course!

## OSHKOSH '81

Weedhopper factory representatives recently returned from the annual EAA fly-in at Oshkosh, Wisconsin. The ultralight contingent at the show has grown steadily in the last few years, and a number of new ultralights were on hand at this year's show. Both the "C" Model Weedhopper and the new Woodhopper were on display at the big event. John Chotia, founder and president of Weedhopper, did not attend this year's fly-in, choosing instead to remain at our Utah factory and work on a new aircraft scheduled for introduction soon.

## WEEDHOPPER FLY-IN CANCELLED

A premier fly-in scheduled for the new Weedhopper flight center in Plain City, Utah September 28 through October 4 has been cancelled. Lack of interest and support from the Ultralight manufacturers community prompt the cancellation. Apparently, the long hot summer on the airshow circuit has cooled the enthusiasm of our competitors -- understandably. We'll re-group and see if we can set up a Weedhopper fly-in at a later date.

## WEEDHOPPER FATALITY

The summer was marred by the tragic death of John Barnard, the intermountain distributor for Weedhopper of Utah, Inc. The accident occurred at the flight center in Plain City, Utah. Barnard's family will continue to operate the Weedhopper distributorship through Transpair Inc., headquartered in Fowler, Colorado. The following accident report, based on interviews with eyewitnesses to the crash, was released to the press:

"The pilot did a voluntary stall and dove vertical 150 to 200 feet under full power. Estimated speed was 80-90 M.P.H., quoted maximun red line speed for the Weedhopper is 50 M.P.H. The pilot then entered an abrupt pullout and overstressed the wing. The right wing trailing edge buckled under load, severely distorting the right wing.

The plane was approximately 30° nose down when the wing bent. The plane then entered a flat right turn about 1/2 to 3/4 rotation, while the nose dropped and then it dove approximately 100-150 feet into a spiral dive. The plane was nearly vertical on impact.

This is clearly a case of pilot error. Speed was purposely allowed to build to 160% to 180% of the factory limit. This allowed excess stress to be placed on the wings."

## FAA PROPOSES NEW REGULATIONS

By: George Strother

As you may know, the FAA has released their long awaited Notice of Proposed Rule Making (NPRM) for operating requirements for ultralight aircraft. Unfortunately, this proposal was written long ago and the suggested weight limit is now out of date. The basic premise behind the 155 lb. (70 kg.) weight limit (as stated by the FAA in the Federal Register, Monday, July 27, 1981) was to bring U.S. rules into agreement with prevailing international rules and to establish a weight that would not make an impact on U.S. manufacturers.

At the time the rule was written this information was essentially correct; however, in the interim the weight of almost all ultralights has increased above this limit to 220 lbs. (100 kg.).

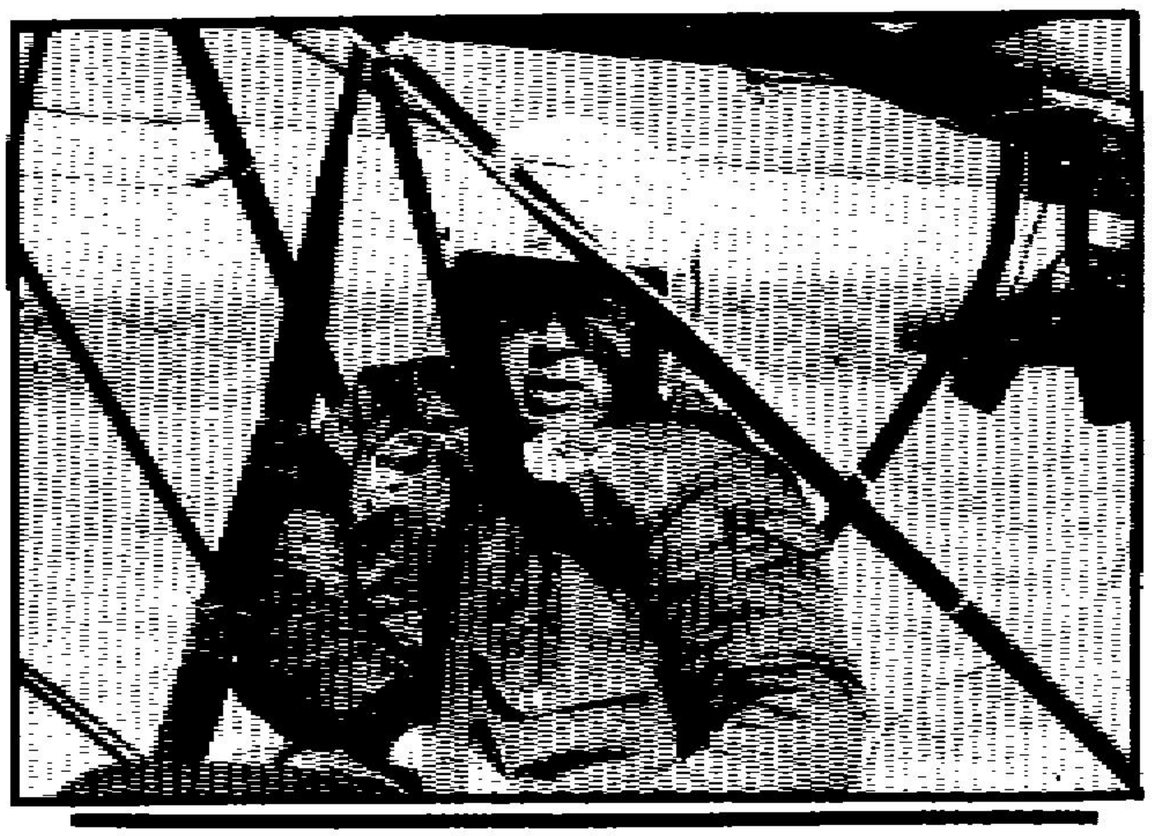
A limit of 155 lbs. would require a major re-design for the majority of ultralights currently in production. While Weedhopper could easily meet this new design requirement, many ultralight manufacturers could not afford to re-design and re-tool. This would create a major financial hardship on nearly all ultralight companies and force many to close their doors. Further, companies who attempt to comply may be forced to compromise the structural integrity of their aircraft in the interest of lighter weight. The reductions in weight from current designs would also force manufacturers to build to two weight limits in order to compete in international markets. For the above reasons, Weedhopper supports a weight limit of 220 lbs. which would be consistent with the basic premise as stated in the FAA notice. The ultimate ruling by the FAA will be significantly influenced by public comment from the ultralight aviation community -- that's you! We urge you to send a letter to the FAA stating your position on the NPRM. Please send your comments in duplicate to:

FEDERAL AVIATION ADMINISTRATION
OFFICE OF CHIEF COUNSEL
800 INDEPENDENCE AVENUE SW
WASHINGTON, D.C. 20591

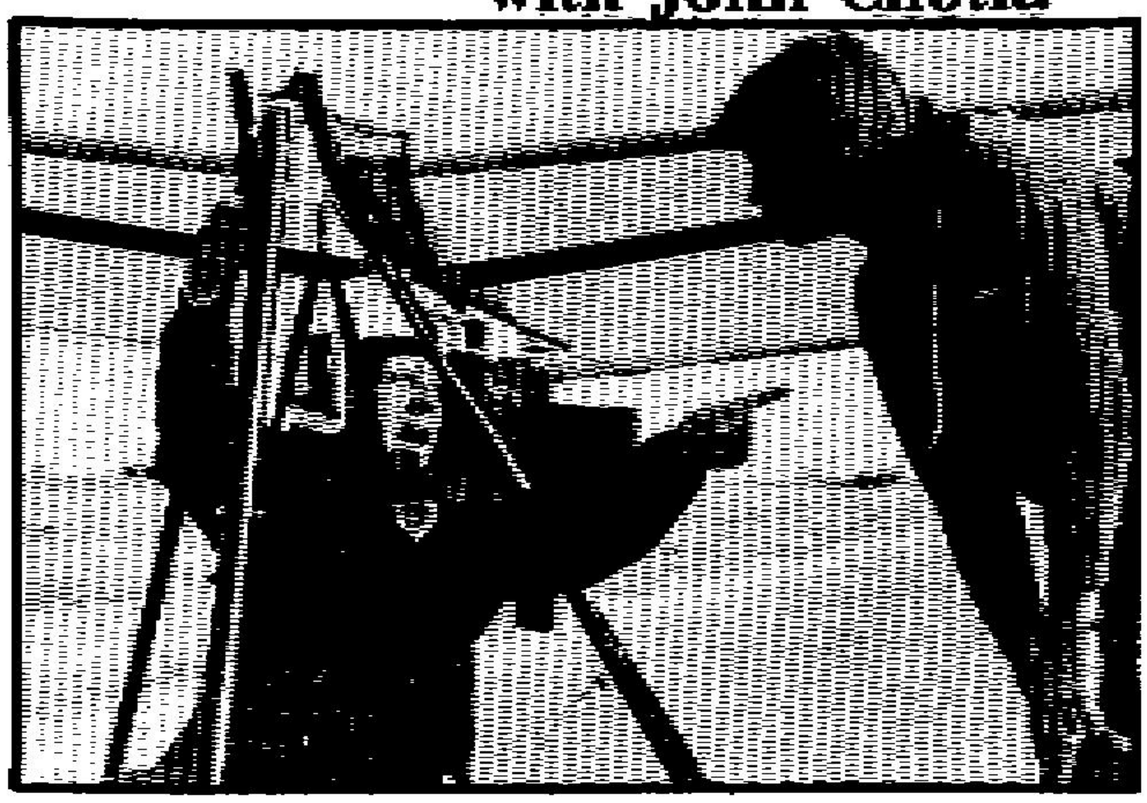
All coments must be received before November 25, 1981, and must be sent in duplicate.

# A Day in the Life of a Test Pilot

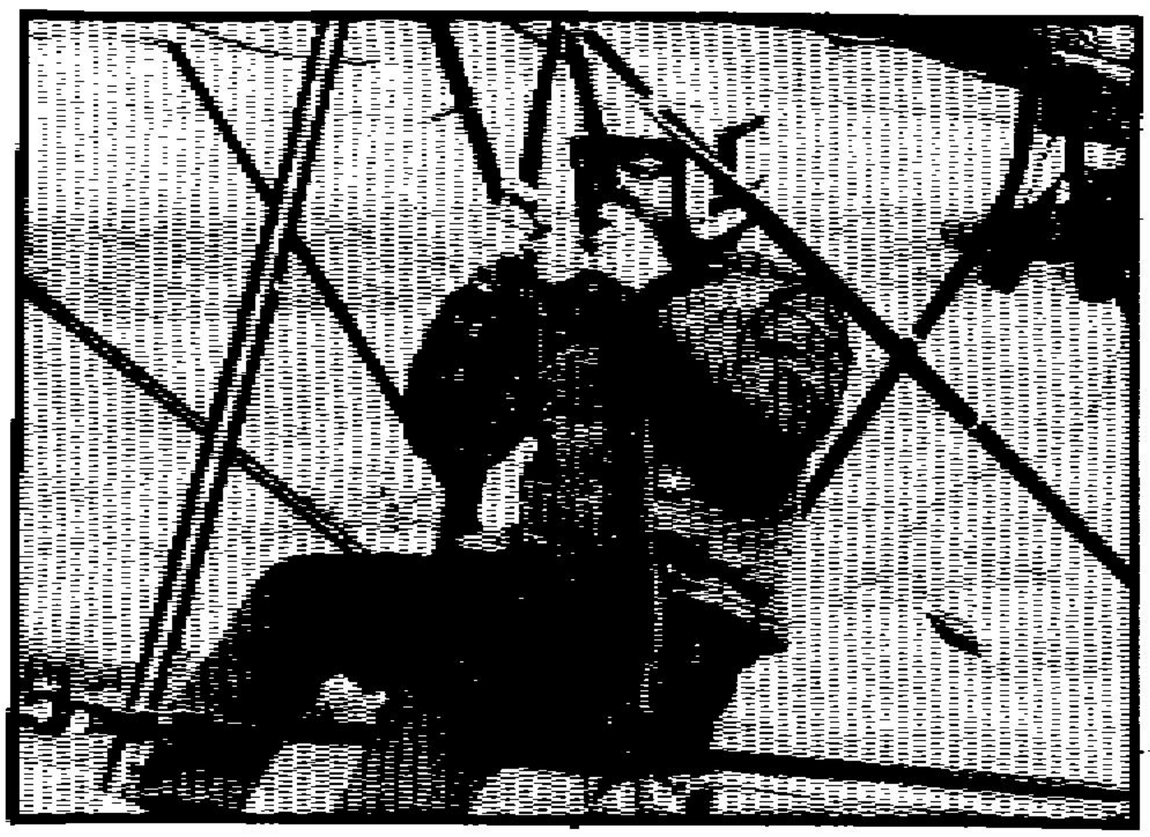
**with John Chotia**



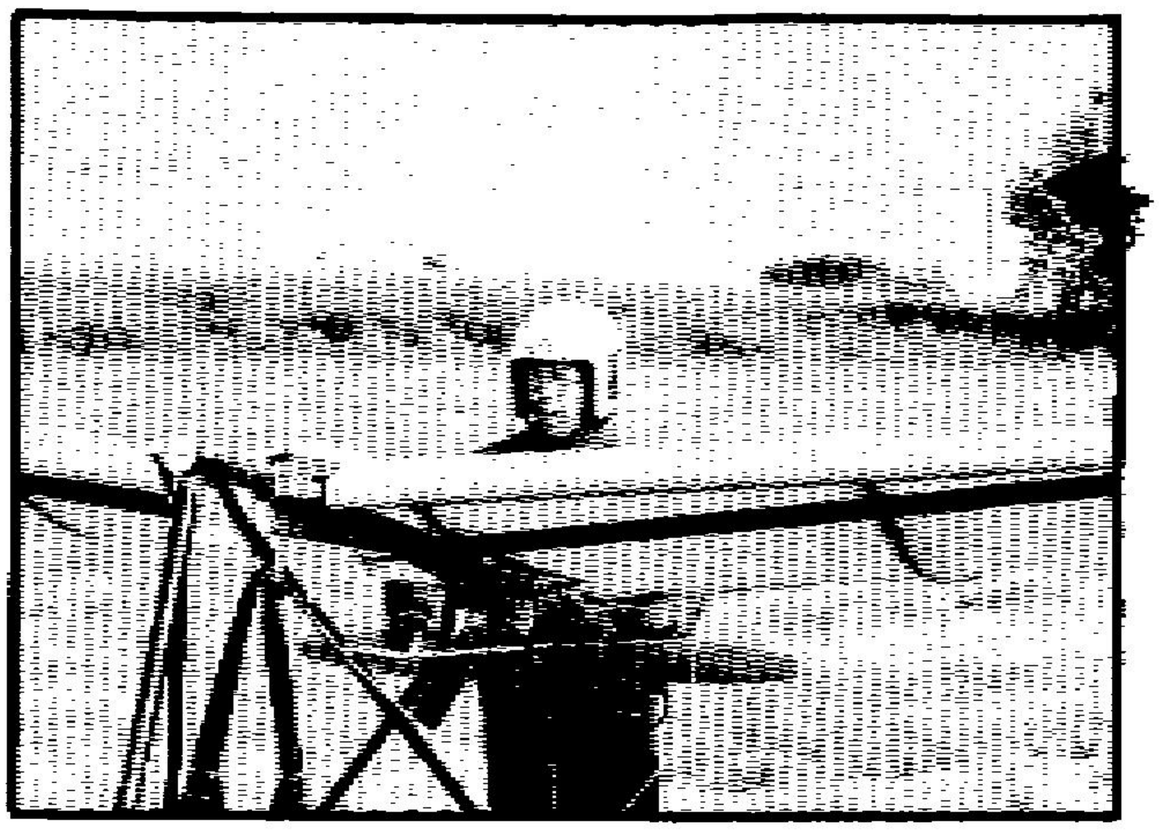
"You want me to do what?!"



"I don't care whose they are, get those cattle off the runway!"



"Hail Mary, full of grace".



"I don't pay myself enough to do this."

---- Details about this airplane in the next issue --


WEEDHOPPER™ OF UTAH INC.

P. O. Box 2253
1148 Century Drive
Ogden, Utah 84404