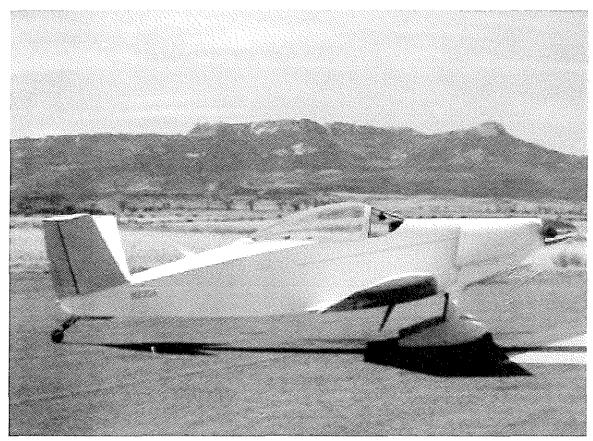
# A BRIEF HISTORY OF THE AIRCRAFT KNOWN AS GREENAPPLES (N23GA)

First, to avoid confusion, this aircraft has no relationship to another Green Apples, a Mustang Two, which some may have seen at Oshkosh. The christening of Greenapples N23GA predates the Mustang II, and has to do with the initials of its designer and builder, Gale Abels. In 1974 Richard gave Gale his first Thorp T18 flight in our 125HP standard model s/n 176. Gale had already begun construction on his project, which evolved into Greenapples.



As a competition sailplane pilot, Gale was keen on reducing drag in every aspect of any aircraft he ever flew. He also was a talented architect, and a perfectionist. He decided to apply his knowledge of aerodynamics, and his design and drafting skills to the modification of his Thorp project. As each modification ripened in his mind, he created formal drawings which enabled him to consult with John Thorp. These plans, along with correspondence between Gale and John, provide us with an interesting and valuable record of their insights on this aircraft, which came to be known as an AT-19. In 1979 he was awarded the EAA Custom Aircraft Outstanding Workmanship Award in addition to the below mentioned Stan Dzik Award.

The following is quoted from Jane's All the World Aircraft 1980:

Mr. L. Gale Abels, an architect of Boulder, Colorado, has designed and built a two-seat light monoplane known as the Greenapples AT-19. Construction took seven years, the aircraft beginning as a modified Thorp T-18. Constant redesign during construction led to only the landing gear and cockpit canopy of the finished aircraft being of Thorp type. First flight was made on 23 May 1979. It has been reported that the modified wing, of increased span and higher aspect ratio, using thicker skins and fitted with plain flaps, provides a slower landing speed and increased rate of climb compared with the Thorp T-18. The AT-19 received the Stan Dzik Memorial Award for 'Outstanding Design Contribution' at the 1979 EAA Fly-in.

# A BRIEF HISTORY OF THE AIRCRAFT KNOWN AS GREENAPPLES (N23GA), cont.

TYPE: Side-by-side two-seat light aircraft.

POWERPLANT: (180hp Avco Lycoming O-360-A1A flat-four engine. Fuel capacity 33 US gallons.

DIMENSIONS, EXTERNAL

Wing span: 24 ft 4 in

Wing chord (at root): 4 ft. 2 in. (at tip): 2 ft 6 in

Length overall: 21 ft 0 in

WEIGHTS Empty: 1,040 lb.

Max T-O weight: 1700 lb.

**PERFORMANCE** 

Cruising speed: 186 knots (214 mph) Landing speed: 61 knots (70 mph) Max rate of climb at S/L: 2,500 ft/min

Range with max fuel, 30 min reserves: 600 miles

In 1995, Gale lost his battle with cancer. Before his illness he had proved the viability of his design by flying Greenapples over 900 hours. In early 1996, we had the opportunity to acquire this beautiful aircraft from his daughters, and enjoyed it for many hours as we flew around the country. Its speed and feather light controls make it fun to fly, and its one-of-a-kind aspect drew interest wherever we went. The V tail readily identifies Greenapples as something unusual to even the most casual observer, and the long tapered wings are a graceful compliment to the extended Thorp-like fuselage. Gale's craftsmanship was impeccable; he countersunk and filled each rivet to create a glass-smooth surface.

It became apparent that Greenapples required some repairs and retrofit, which we began that summer. The fuse-lage is currently in our home shop, the wing at our hangar at Rapid City Regional Airport. We have reinforced the instrument panel bulkhead, and rewelded the fuel tank, these two essential repairs having led us into this project. Our plans also include a new tail wheel, refurbished interior, and new radio, as well as adjustments to the main gear. Eventually, we would like to update the panel as well, but our intentions are to get Greenapples back into the air, for she is a true joy to fly!

#### RICHARD AND KATHY BRANDIGER

# **Aiation Truisms**

### Basic Flying Rules:

- 1. Try to stay in the middle of the air.
- 2. Do not go near the edges of it.
- 3. The edges of the air can be recognized by the appearance of ground, buildings, sea, trees and interstellar space. It is much more difficult to fly in the edges.

It's better to break ground and head into the wind than to break wind and head into the ground.

It only takes two things to fly: airspeed, and money.