Posthaste

ne afternoon in February 1936, hundreds of spectators gathered on frozen Greenwood Lake, an hour northwest of New York City. Police kept them at a distance from a handful of figures standing farther out on the ice. At the center of the privileged group was a large sloping ramp about 10 feet high. At the bottom of the ramp was a miniature airplane. Suddenly the others backed away, and science writer Willy Ley, dressed in white and holding a torch, hurried to the ramp. A rocket-mail flight was about to be launched.

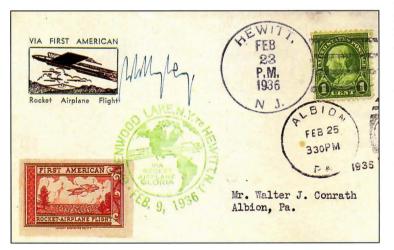
Two years previously, New York City stamp dealer Frido Kessler had visited Germany and had been fascinated by the stamps that had been used on mail carried by recent pioneer rocket flights in Europe and India. In 1931, Austrian engineer Freidrich Schmeidl's V-7 rocket had carried 102 pieces of mail from Mount Schoeckel toward the village of Radegund. In Great Britain in 1934, Gerhard Zucker of Germany demonstrated that

a solid-fuel mail rocket could be recovered and reused, and the following year he attempted the first rocket-mail flights from Belgium across the English Channel. Neither rocket reached the coast of England but both were recovered by ships.

When Kessler returned home he produced a catalogue of stamps from these flights, and finding a healthy market among collectors for rocket-flown mail, he decided to sponsor a U.S. flight.

Learning that Kessler was seeking a launch site, J.G. Schleich, an avid stamp





collector and Greenwood Lake official, suggested his village, which sits on the New Jersey border. Kessler could fire the rocket, stuffed with cards and envelopes purchased by collectors, from New York to New Jersey, where the Hewitt post office would postmark and process the cargo.

Overseas experimenters had used conventional rockets with gunpowder packed in a long tube with a cone-shaped nose and stabilizing tail fins. Kessler's craft was markedly different: it was an aircraft rather than a rocket, and used

liquid fuel. The duralumin high-wing glider had rectangular wings attached midway down its 12-foot body, providing a 15-foot span. A squared-off vertical stabilizer jutted from the top aft fuselage and mated to a rectangular horizontal stabilizer. Except for the graceful curve of the lower fuselage, the craft had not the slightest suggestion of streamlining. It resembled a giant version of a crude freeflight model airplane.

The wings were solidly built," says Dave MacMillan, a trustee of the New Jersey Aviation Hall of Fame, "but they used hardware store materials like simple sheet metal screws to attach them." The rocket plane's builders also used hardware store materials for the propulsion system, which provided some 60 pounds of thrust when liquid oxygen and gasoline were pressure-fed into the combustion chambers by gaseous nitrogen. Pulled from its socket, a long metal rod activated a spring-loaded trigger that opened a valve, releasing the nitrogen and

allowing the fuels to flow, mix, and build up pressure. Ignition required holding a torch to the stream of gases shooting from the exhaust pipe, and launch required releasing the counterweight, a barrel of sand, from the top of the ramp. The barrel yanked a cable that slung the airplane up the ramp and into the air.

Kessler commissioned three rocket planes, designed by Alexander Klemin, an aerodynamicist at New York University's Guggenheim School of Aeronautics, and all named "Gloria" in honor of Schleich's daughter, who would christen them on launch day. Kessler's newly formed Rocket Airplane Corporation distributed flyers announcing the "first interstate rocket mail delivery." Collectors could order either a 75-cent envelope or a 50-cent postcard, many of which were autographed by Kessler and Ley.

Aviation was a hot topic in 1936, and the media loved the novelty of a rocket-powered airplane, particularly since rocket enthusiasts foresaw 29-minute flights from New York to Paris. Sunday supplement stories sacrificed accuracy for hype. "People discussed how the rocket would travel at 500 mph and land on the roof of the Hewitt post office," says Wilbur Christmann, a former Greenwood Lake mayor.

On February 9, spectators, photographers, and reporters turned up at the lakeshore community. It was bitterly cold—cold enough to freeze the champagne Kessler had brought to christen the Glorias and cold enough to seal Greenwood Lake with a foot of ice. "They brought this thing out, tried to light it, and nothing happened," says Christmann, who was on hand that day. "Finally, around four, when they were losing daylight, they announced they would try again the following week."

Two weeks later it was still cold, but 200 people trooped onto the ice. Newsreel photographers set their clumsy cameras on tripods, police shooed spectators back, and newsman Robert Trout prepared to do a live radio report.

The crew pulled the safety, the fuels began to mix, gases raced from the exhaust, and Ley, in an asbestos safety suit, applied the torch. The first Gloria raced up the ramp and crashed to the ice. With its motor roaring and blue flame shooting from the exhaust, it slid across the lake until it became airborne. Fifty feet in the air, it headed for the newsreel photographers, who "grabbed their cameras and ran like crazy," says Christmann. Then the Gloria's wings suddenly folded and it dropped to the ice.

Undaunted, the rocketeers brought out the second Gloria. This time they launched directly off the ice, perhaps, as Dave MacMillan suggests, for expediency's sake. The rocket plane raced along the frozen lake and clawed its way into the air. It was gaining altitude when its wings crumpled and it too dropped to the ice. According to MacMillan, although the designers had braced the rocket planes' wings to prevent them from collapsing downward, they had

not anticipated that in-flight stress would cause them to fold up.

Did the second Gloria cross the state line? That depends on which newspaper you believe. One account asserts that someone kicked the craft across the border before opening it and handing the mail sacks, stuffed with some 6,000 cards and envelopes, over to the Hewitt postmaster. (Today, cards autographed by Ley command up to \$75.)

Pat Reilly, executive director of the New Jersey Aviation Hall of Fame, points to the May 1936 issue of Popular Mechanix, which features a rocket plane on its cover. The accompanying article states that despite the short distance traveled, the two Glorias proved that a rocket motor could lift and propel an aircraft many times its own weight and maintain stability. (The third, which never flew, will soon be exhibited at the New Jersey Aviation Hall of Fame.) As late as 1952, the assistant postmaster general speculated that mail-carrying missiles were "just around the corner." Although Kessler gave up on his rocket-mail experiments, he did achieve a minor place in history for himself and an otherwise inconspicuous lakeside village.

-Stan Solomon

