

# SOARING

JUNE 1976

ONE DOLLAR



# DAWN FLIGHT

by **LAWRENCE M. LANSBURGH**

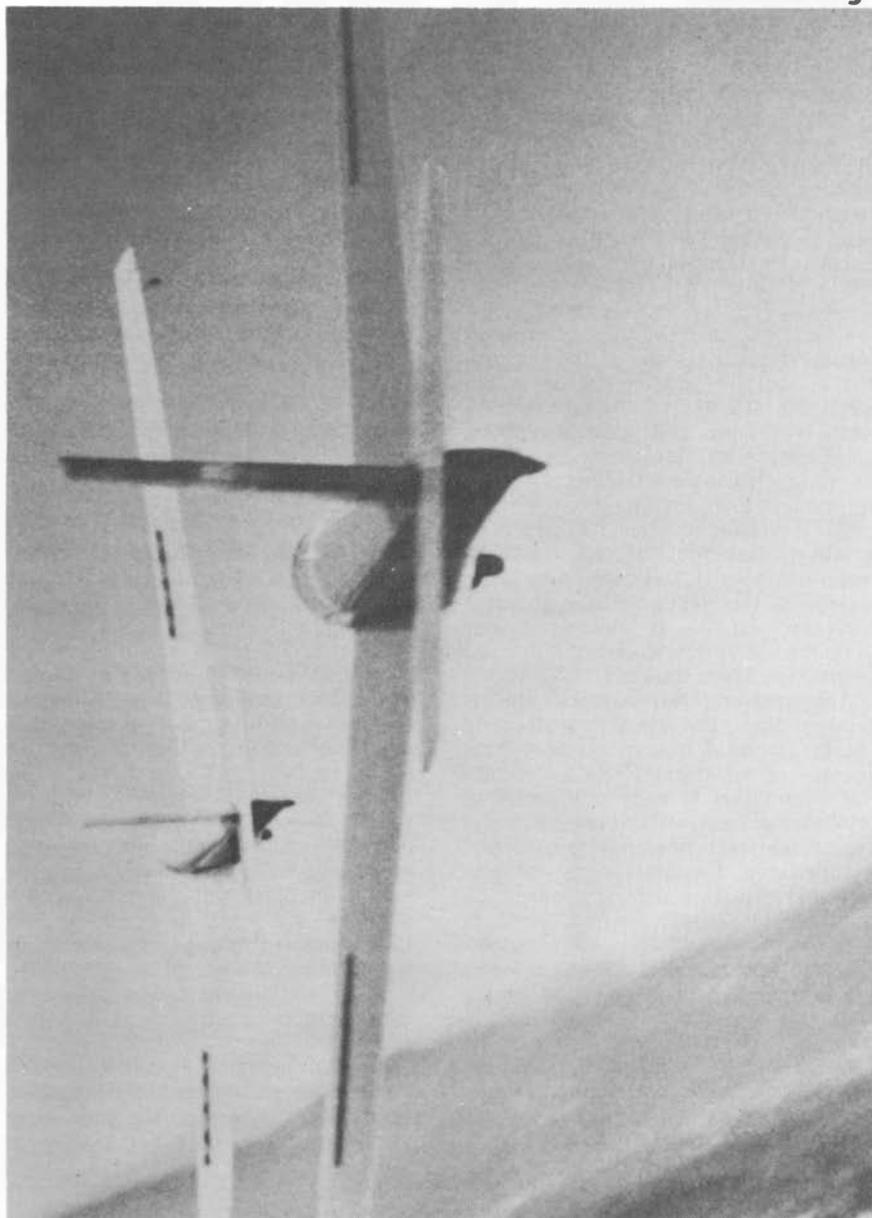
Lights blazed, battalions of technicians manned their television cameras, and the crowd strained to see the celebrities. Every time a movie star appeared the onlookers went wild. My Associate Producer, Claire Wiles, and I stepped out of the long black limousine and sauntered past the lights, cameras, cops, cables, and hordes of people to the relative calm of the lobby of the Los Angeles Music Center. There hundreds of famous faces were in the milling throng awaiting the start of a very special evening: We were attending the 48th Annual Academy Awards Presentation—and sailplanes had put us there. Our film “Dawn Flight” had won an Academy Award nomination.

**The Search for a Fresh Approach**

Almost three years earlier, I had come to realize that a sailplane in flight is an incredible thing. My brother Brian and I had filmed some television spots for Bud Murphy’s Sky-sailing Airport in Fremont, California. We satisfied the TV station’s requirements, and I was pleased with our aerial photography. But I knew that soaring could provide a visual treasure whose potential we had barely glimpsed. The question was how to get a key to the treasure chest, how to open up the potential.

Every film I had ever seen on soaring left me very unsatisfied. Some were documentaries with a narrator patiently explaining that a thermal is hot air going uphill, and then solemnly and poetically saying that flying is beautiful. We can *see* that. We don’t have to be told. Other films were attempts to capture the beauty of flight, but they ended up as loose confederations of pretty shots, or tricky shots without a strong theme to tie them together.

I wanted to take a fresh approach in a soaring film, to use motorless flight not as an end in itself but as a means to express something that was on my mind. I’m not a preacher; I knew that the film had to entertain, to reach out to the earthbound as well as



In the air . . .



. . . or on the ground . . .

to the soaring pilot. I had to come up with an idea.

One morning, with the help of coffee so strong it hardly needed a cup, the idea came. Claire and I kicked it around, shaped it, developed it, despaired over it, and finally ended up with what we wanted. Then I wrote a detailed shooting script. Now all we had to do was get backing for the project, line up some ships, and get the greatest pilots in the country to fly them. We also had to find an actor.

#### The Search for "The Flier"

"Dawn Flight" is about a man and his obsession with soaring. Since the character is fictional, our approach is dramatic rather than documentary. The role of The Flier demanded a good actor. But should we get a pilot and teach him to act, or an actor and teach him to fly? Considering time and budget, both would be impossible. We solved the problem in Ashland, Oregon, home of the Oregon Shakespeare Festival.

Denis Arndt is a superb actor. Shakespeare, Shaw, Ibsen, O'Neill—he handles them all with power and finesse. And he knows how to give a convincing performance for the camera. He signed on for "Dawn Flight" and immediately began to develop and explore the character of The Flier. But could he fly a sailplane? Before Denis stood on a stage, he had spent some time sitting in the cockpit—five hundred hours in fixed-wing aircraft and six thousand hours as a military and commercial helicopter pilot. Just before we started shooting, we provided him with some sailplane instruction. Soon he was doing formation aerobatics. He could fly a sailplane.

#### The Search for the Pilots

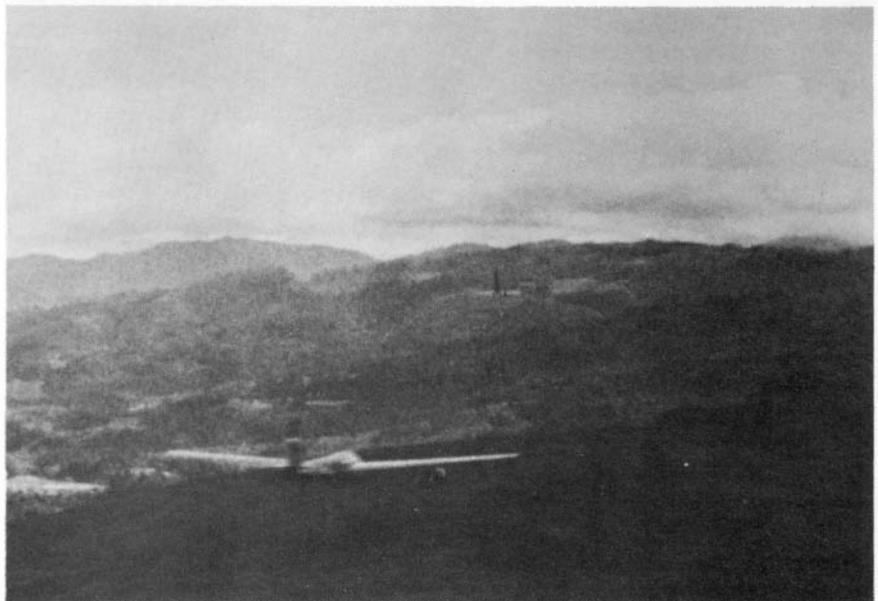
Formation aerobatics lie close to the heart of "Dawn Flight." The film opens with a chase. The Flier (played by Denis, of course) is being pursued by another sailplane. No matter what The Flier does, no matter what violent maneuvers he goes through, he cannot shake the mysterious red ship flying close behind his elevator.

This kind of flying is just plain dangerous. And it is suicidal for the weekend pilot. We needed professionals, superb pilots who would not exceed their capabilities no matter how difficult the flying got.

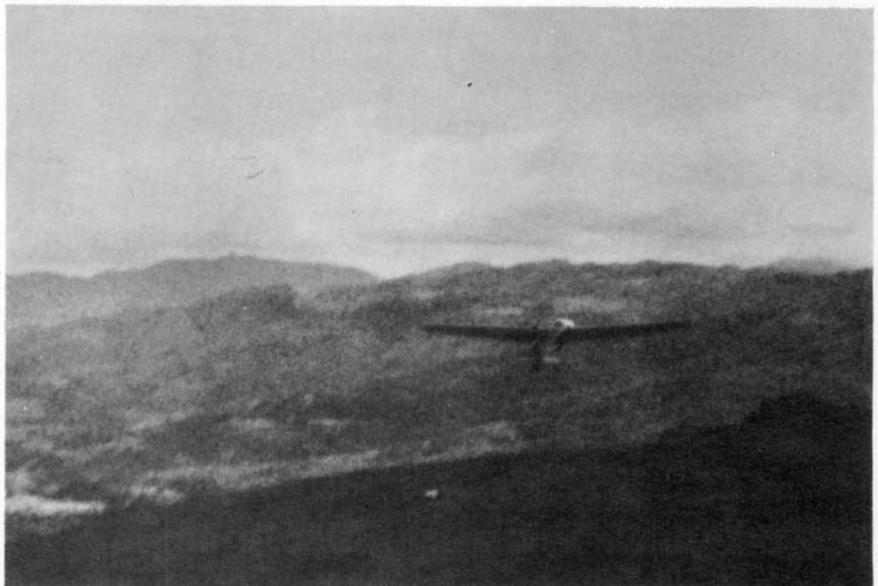
It was Bud Murphy who started us filming sailplanes, and it was Bud



... the flier is pursued...



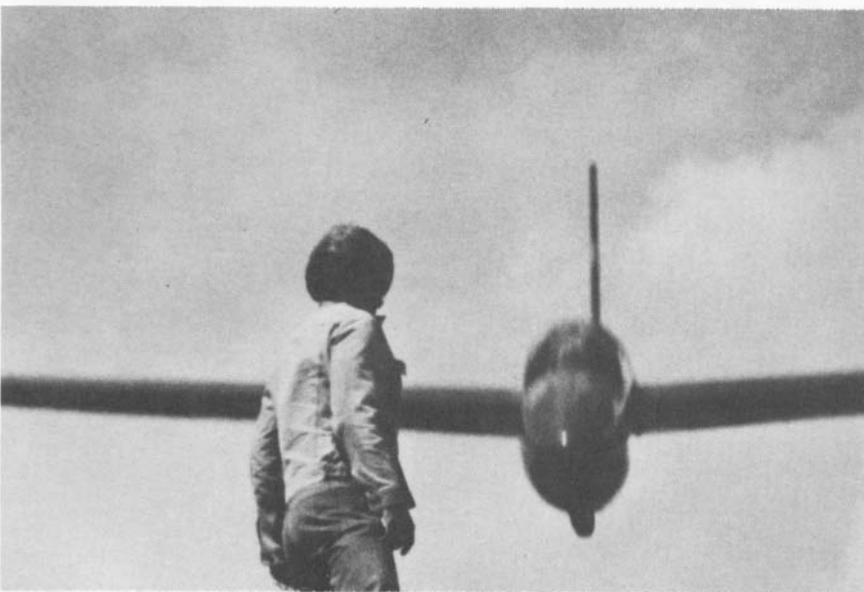
... by his red tormentor...



... until he flinches.



The flier awaits a second attack . . .



. . . and doesn't cower when it comes.



"This time I'll get on your tail . . ."

Murphy whose solutions to a long string of problems were to bring "Dawn Flight" to the screen. Three of the four sailplane pilots who were capable of doing what we needed worked at Skysailing Airport. Bud believed in what we were doing, and he gave them time off to work on the picture.

George Bernstein, Barry Jacobsen, and Ken Couche are commercial pilots, fine instructors, and they can safely fly close to each other in strange and exotic attitudes. Now, if I could just get them some sailplanes to fly . . .

Finding sailplanes just about stopped the whole project cold in its tracks. Bud Murphy's sailplanes are his bread and butter. Since our main location was Pope Valley, California, not Fremont, taking Bud's ships away would deprive him of a lot of business. It was going to be tough enough for him with Skysailing's chief mechanic and two instructors off to the north performing for the cameras.

#### The Search for Sailplanes

I started to look for sailplanes. We needed two, one for The Flier and one for his nemesis, the mystery pilot. We needed aerobatic ships of the same type so flight characteristics would be equivalent. And the two ships had to be different colors. If they were both white, how could the audience tell them apart in closeups? I decided to search for 1-26's, since they are the most common. It seemed that I talked to thousands of people. I offered to arrange complete insurance coverage. I offered to pay a fair rental (no freebies on this show). I offered the chance to participate in a motion picture which was going to enter the Academy Awards competition.

No takers.

People did not want to part with their ships (can't say that I blame them), and club committees would take forever to reach a decision.

Defeated, the producer of a flying picture with no airplanes, I went back to Bud.

"Oh, well," he said, "I can part with a couple of 1-26's if you're in a bind. We'll work something out. Business isn't that good this time of year anyway." (What I didn't know then was that March was the best time of year for soaring. There is a lot of action under the cumulus clouds. And when the north wind comes into Fremont and bounces off Mission ridge, a

student pilot with twenty minutes in his log book could stay up all day in a Ford truck. Business was good.)

So I said to Bud, "Well, since business isn't that good, could you also part with a 2-33? We need a camera ship."

Bud gazed at the base of a developing cumulus and said, "Sure. No problem."

We were ready to fly. The cameras could roll.

### Mounting the Cameras

We had to study The Flier and watch him struggle with his problems in his natural habitat—a little pod of aluminum and plexiglass far above the earth. That meant a three-way marriage between acting, flying, and photography.

For some air-to-air shots, either my brother or I got in the front seat of the 2-33 with a camera, made sure there was a pilot in the back seat, took the canopy off, and flew—a winged airscoop doesn't have the greatest L/D, but the cameraman sure has flexibility. It was beautiful shooting out in the open like that. I always came down with bug spots on my teeth. I even got a leather flying helmet and goggles for the job. (It's great to own a leather flying helmet and actually have a reason to use it.)

The 2-33 was good for air-to-air long shots, but we also had to move in close to our actor. With Denny's flying skills, there was no way we were going to sit him in the cockpit on the ground and fake it. He could fly and act at the same time.

So we attached remote-controlled cameras to the 1-26's. The cameras' batteries and off/on switches were in the cockpits. We put our small World War II gun cameras on the wingtips and the tail. On to the nose went a 16mm Arriflex, a professional motion picture camera which we also used on the ground with a tripod under it. We only flew with one remote camera at a time; it had no effect on the ship's flight characteristics.

Now all that the Skysailing pilots, Tim O'Neill from Calistoga, and Denis Arndt had to do was release from the towrope, turn on the camera, and fly.

### Air-to-Air Framing

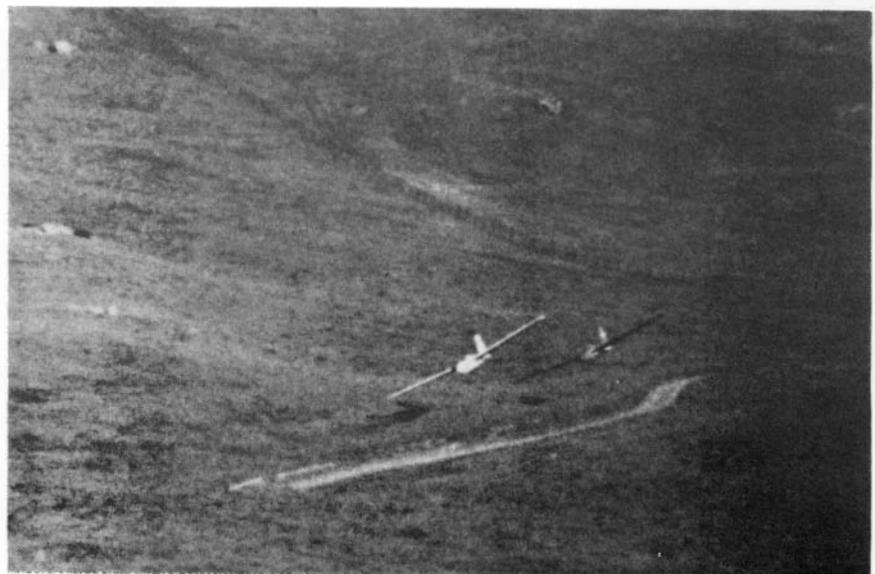
In the story, The Flier uses every conceivable maneuver to try to shake his mysterious red tormentor. We did some very extensive planning so that our pilots would not rub airplanes together.



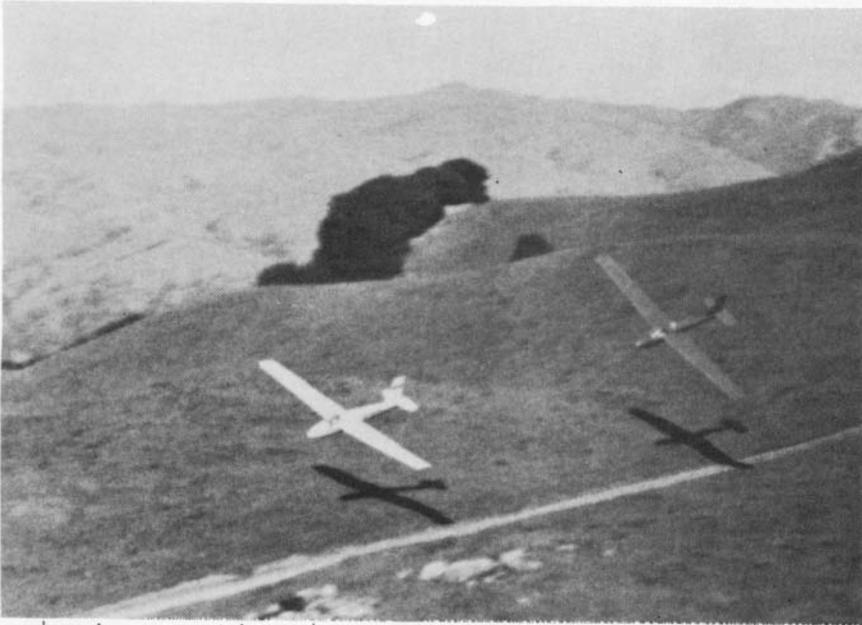
But the attacker appears mysteriously from behind . . .



. . . he tries to scrape him off on a steep hill . . .



. . . wingtips almost touch their shadows . . .



... hugging a mountain road ...



... crossing a pond ...



... hurdling an embankment ...

The most beautiful, and the most dangerous, maneuver was the formation loop. The Flier, in a yellow 1-26, pulls up and goes all the way over the top with the red ship right on his tail. George Bernstein flew the trail position. The first time he tried it, he was too far behind the yellow ship for the ground cameras to get both in the frame. Then, as the sailplanes pulled up into the loop, the distance narrowed too rapidly and George had to rudder himself out of the loop and away from the yellow ship's chunk of sky.

Back to the ground for more planning and discussion.

As with all our pilots' maneuvers, the solution lay in timing and relative position. The two sailplanes started the loop with a dive, of course. An imaginary horizontal line drawn back from the lead ship's nose would just intersect the trail ship's nose. So, although the ships were at the same altitude during their dive, the relative position of the trail aircraft was below the lead and much closer than before. Then, as they pulled up, their longitudinal axes just about lined up. After the top of the loop, coming past the inverted position, the lead ship put out full spoilers so his gathering speed would not put him too far ahead of the following ship, whose airspeed was very low at the top of *his* loop.

Barry and Ken flew lead for our ground cameras and for our air-to-air camera in the 2-33. Flying lead required smooth, precise movements. It was also the more dangerous position. A nudge in the elevator would have been a disaster. But the formation loops were elegant. Naturally, for closeups Denny flew lead. We mounted the Arriflex on the nose of Denny's yellow ship, put a wide-angle lens on the camera, and pointed it back toward the canopy. On the screen the audience clearly sees Denny's face, part of his wings, and his empennage. Right behind his glider, we see the red glider zeroed in on him like an angry red wasp. Behind the two aircraft, the horizon does everything but stay level as the chase goes on.

#### **Planning for Panning**

One shot in "Dawn Flight" might be a first in aerial photography. A camera out on the wing actually moves. Some people swear that we had a phantom camera operator up there.

I wanted to put a camera about halfway out on Denny's right wing. Then in one shot with no cuts I wanted to see his whole glider. The only lens wide enough to cover the whole aircraft would be a fisheye, but that would distort the picture. I wanted to use a normal lens.

So Brian built a panning device, a machine to move the camera from left to right.

We strapped the panning machine and the camera to the top of Denny's right wing near the leading edge. We installed all the necessary wires and switches. Denny and George got a double tow and we waited.

The camera on Denny's wing was pointing back at the empennage. Once off tow, George got behind Denny and clicked his mike button to signal that he was in position. Then Denny hit a switch and the camera rolled. On the screen we see Denny's yellow vertical stabilizer and the red glider's nose snuggled up to it, just a few feet on the other side. With the flip of another switch, the camera panned smoothly toward the cockpit and came to a preset stop with the canopy perfectly composed in the frame.

So that the camera would not catch Denny casting furtive glances at it to check its position, there was a micro-switch on the panning machine. When the panning action came to a stop, the switch lit a red light on the instrument panel. That was the signal to the actor/pilot for "Action." At this point in the scene, The Flier looks back, sees the red glider, and throws his yellow ship into a dive.

This shot required complicated timing. But everyone had done his homework. The first take was perfect.

### Three-in-Line, the Ultimate Problem

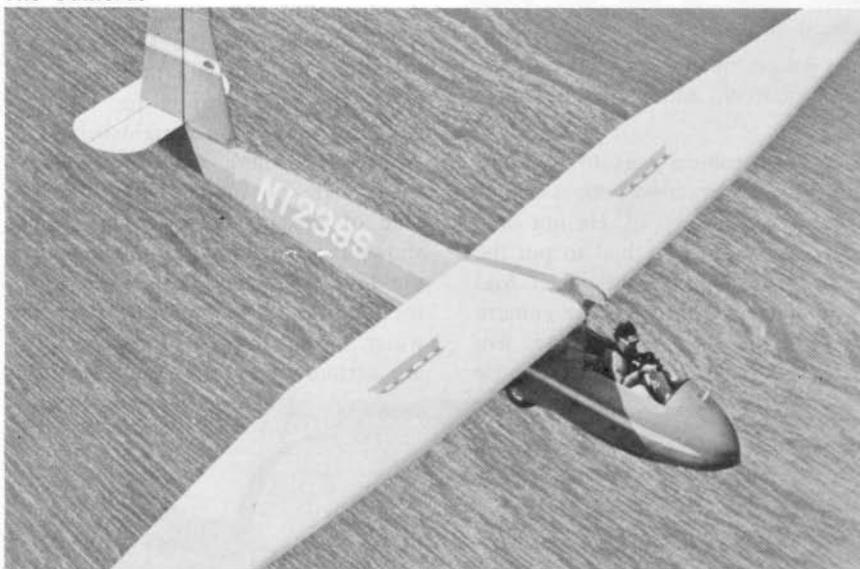
One of the techniques of making a good film is to use different points of view. We shot from the ground, from the 2-33 camera ship, and from the 1-26's themselves with remote cameras. Now we wanted to put a camera right behind the red ship. *No matter what the maneuver, the camera had to stay in position behind red, and red had to stay behind yellow.*

We immediately ruled out a cameraman in the front seat of the 2-33. This combination worked fine for other shots. But in something like a loop, *g*-forces would have bad effects on the cameraman's steadiness, not to men-



... banking to miss a tree.

### The Cameras



Lawrence M. Lansburgh gets ready for an aerial shot. The hidden pilot is Ken Couche. Removing the canopy insured better pictures and a very fast rate of descent.



Actor/pilot Denis Arndt sizes up the panning machine which moves the camera in flight.

tion overstressing the ship.

The answer lay with the Arriflex and a third 1-26. Bolted rigidly to the nose as before, the camera would now be pointed not back at the cockpit, but straight ahead. The third sailplane would be nothing more than a camera platform.

It had been impossible to find two 1-26's in all of Northern California except one place. I got on the phone again.

"Listen, Bud, we've come up with this fantastic idea . . ."

And once again Bud Murphy saved the day. By this time, just about the only parts of Skysailing remaining in Fremont were the hangar, Bud Murphy, one line boy, and a bewildered bookkeeper.

We bolted the camera onto our new camera platform and handed it over to George.

George's problem was to fly third in an in-trail formation with a couple of new twists thrown in. He not only had to fly the ship, he had to put the picture frame in the right place. And he could not see through the camera because it was out on the nose, five feet away from his eye. Now suppose

George was a little too far back and had to catch up. Easy, right? Just ease the nose down and slide right up. But when you put the nose down, your subject aircraft goes right through the top of the camera's frame and vanishes. All you see is the ground. Positioning and a dash of spoilers on the two ships made things come out right.

Suppose the two lead ships are snaking all over the sky in a quick series of steep turns. Just follow them, right? Well, in this follow-the-leader formation, they were far beyond the side of the frame during a turn. George had to skid through his turns. He nailed the two lead ships made things come out right.

#### An Incredible Sequence

On the screen, the shots are incredible. Out in front, the yellow ship is twisting and turning for all it is worth. The red ship is right behind it. And the camera faithfully follows them both, no matter what they do. One of the most spectacular scenes shows the gliders skimming low over the hills, following the terrain down to a pond. As they arrow over the water, at an altitude of five feet, we are certain that this is going to be a

very wet landing. But they miss the water and thread their way through a couple of trees.

The filming of "Dawn Flight" continued. Spins, low altitude chases, formation rolls, dogfighting, even a little straight-and-level flight—our pilots did it all, then did it again because they were even more obsessed with perfection than the producers. Cameras rolled in the air. Cameras rolled on the ground. Week after week we followed The Flier through his adventures and problems.

#### The Plot

The chase at the beginning of "Dawn Flight" ends with a brush with disaster. The Flier, driven to distraction by the nemesis on his tail and ham-handing the stick all over the cockpit, goes into a spin. Paralyzed, he does not get out of it until the last possible foot of altitude. Later, he walks to the top of a mountain to calm down, collect his thoughts, and watch other sailplanes doing some ridge soaring. Then the red ship appears from out of nowhere and dives straight at him.

The Flier throws himself to the ground and narrowly misses being hit. Furious and tired of being chased, he picks himself up and climbs a rock pinnacle where he stands his ground, arms folded across his chest.

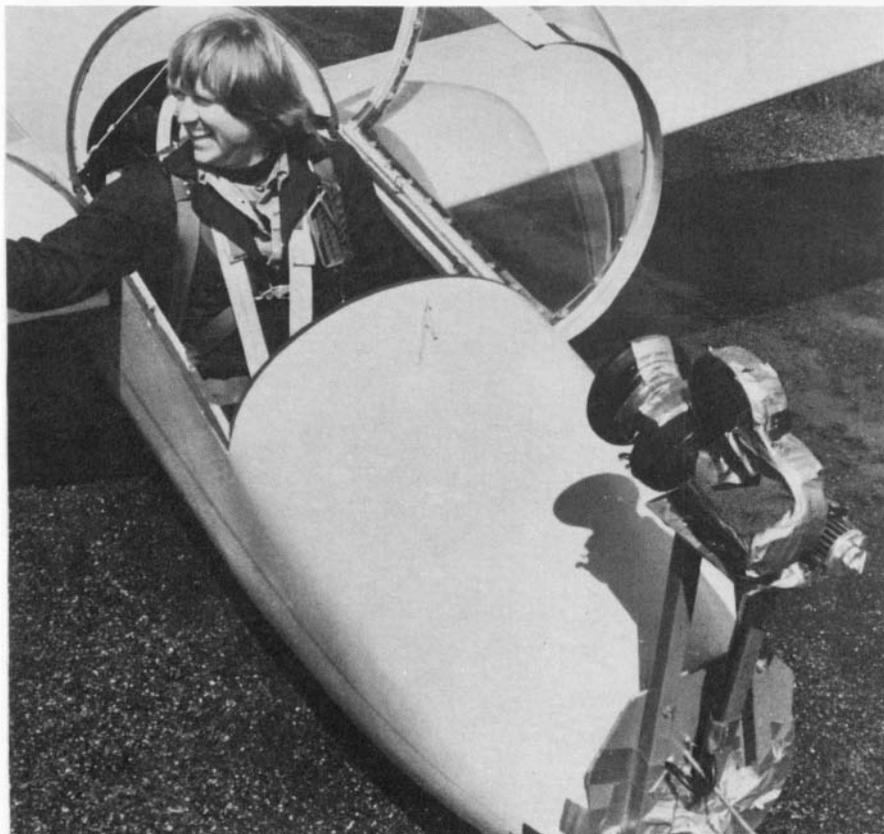
Again the red sailplane dives at him. The Flier does not move, and the ship pulls up in time.

Now The Flier takes to the air to do battle with the mysterious pilot in the red 1-26. Again, the red ship appears behind him, and the dogfight begins.

Finally, The Flier gets behind the red sailplane, then eases his ship alongside. For the first time, The Flier (and the audience) see who the mystery pilot is.

Who is he? If you'd like to find out, I'd suggest you see a 16mm print of "Dawn Flight." Contact Pyramid Films, Box 1048, Santa Monica, California 90406. Or give them a call at (213) 828-7577.

Some people have said that our dogfight is really an aerial ballet. Whatever you call it, the flying is beyond belief. George Bernstein, Barry Jacobsen, Denis Arndt, Ken Couche, and Tim O'Neill create art with the stick and rudder. And the Nomination for the Academy Award belongs to everyone who worked on "Dawn Flight." ↘



The nose camera is ready to shoot Denis Arndt. He will turn it on after release. The snub-nosed 1-26 flew beautifully in straight and level flight as well as aerobatics.