



"12 Dodgson Designs planes flew in the 1988 Western States Soaring Championship in Modesto, CA and 6 of those shown here trophied. Left-to-Right: Steve Callup, Brad Clasen, Shawn Lenci, Bob Dodgson, Steve Clasen and Dave Banks who won 2nd place." (image: Bob Dodgson)

The Implementation of a Dream

"In 1970, Sandy and I quit our jobs, rented out our houseboat on Lake Union in Seattle..."



Bob Dodgson

Follow

Jun 13 · 10 min read

This is the second part of a three part series. To get the whole story, you'll want to read [the first part](#) (if you haven't already) and then this article. Once again, we're featuring author and reader photos of Dodgson Designs aircraft and we thank all of them for the opportunity to present them here. — Ed.

In 1970, Sandy and I quit our jobs, rented out our houseboat on Lake Union in Seattle, piled our six-month-old daughter Heather (Todi) into our VW camper, and headed out for a six-month tour of the United States, on a very limited budget. I had sold my first four-channel plane to Larry Nuss before I left, and I had designed a new glider to take with me. The new glider had the same control system but two sets of wings. The long set had a span of about 120 inches and an NACA 4412 airfoil. The short set of wings (100 inches) had a semi-symmetrical airfoil. They were interchangeable on the fuselage as it had no fillet and was flat at the point the wing root contacted the fuselage sides, as on the later Todi and Maestro gliders. The flaps and ailerons were mixed with the forerunner of the Dodgson Coupler, which was devised, in part, by an innovative Seattle flyer and mechanical engineer Sandy McAusland from my own sliding bell crank platform. The Dodgson Coupler was to become the first two control mixer available to the model airplane industry.





"Walt Volhard launching Dodgson Saber at 60 Acres Park, 1991" (image: Waid Reynolds)

Our trip was plagued by radio problems. However, I did get some good flying at Torrey Pines, California, where I met some notables like Fritz Bien and Kelly Pike. After six months of being cooped up in our camper with a young child, Sandy and I were hardly speaking to each other on our return to Seattle. Needless to say, I had no desire to resume work as an architectural draftsman, so I put in for unemployment compensation while I cogitated on the alternatives. I discovered that while my planes were as good in light slope lift as any before my trip, that upon my return the Monterey had been introduced and it was superb as a light-life slope machine. I also discovered that Larry Nuss, who was now flying my original four-channel glider with the Eppler 387 airfoil, was out-flying my new gliders and he was getting performance from the ship that had eluded me. His secret, come to find out, was that he lost the lead nose ballast I had in it and was inadvertently flying with a much further aft CG.

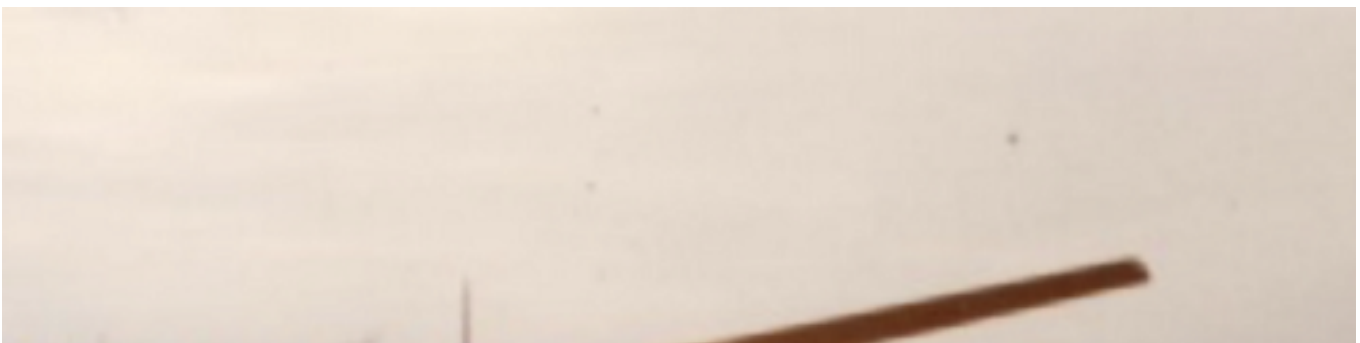




"Megan Dodgson with the First Windsong ever built that I flew to second place at the 1983 Nationals." (image: Bob Dodgson)

Don Burt, who had been brought to the United States from Scotland by Boeing as an aerodynamics engineer, played a prominent part in my life at this time. He also had designed several gliders with multi-channel control. The Boss T had polyhedral wings, but it had flaps and it had ailerons that were coupled to the flaps so that they moved about half as far as the flaps moved. Don Burt's T2 had two-channel control and polyhedral, but it had flaps coupled to elevator and ailerons coupled to rudder, so it got a lot of mileage out of those two channels.

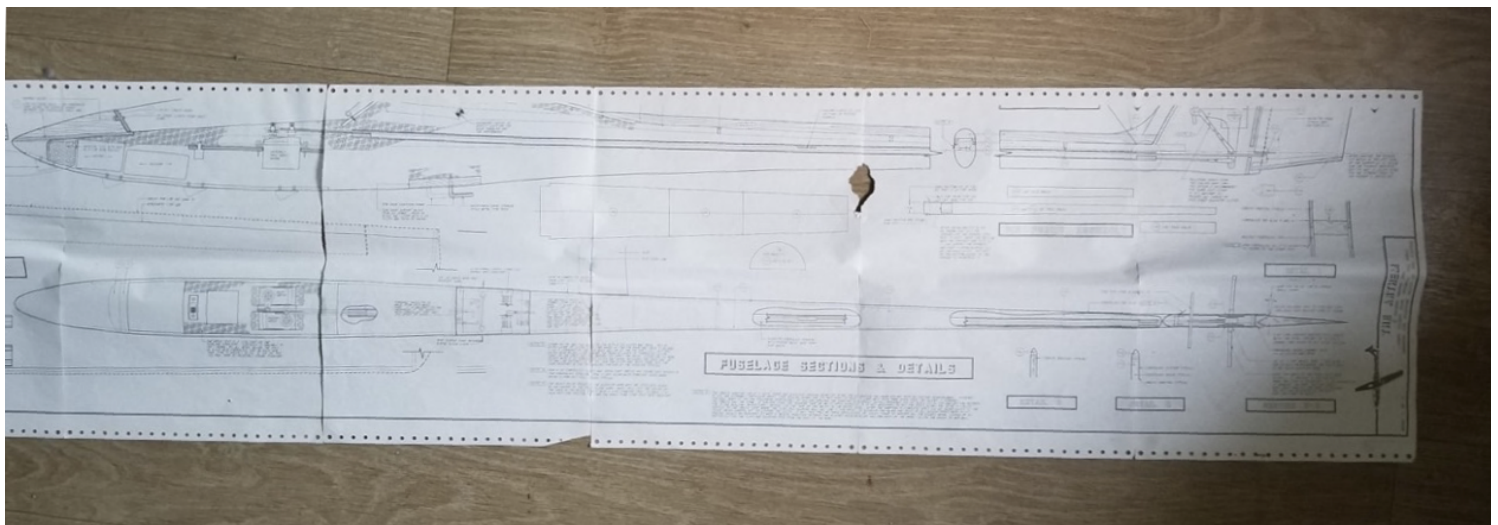
Don had all the design books by Horner, etc., and had been a well-known Free Flight competitor in Scotland. We spent many hours discussing the merits of different design concepts, wing tips, control systems, etc. In the end, we had several basic differences of opinion as to the configuration of the best high-performance glider.





"My yellow Windsong." (image: Craig Christensen)

Don decided that he would kit his T2 and Boss T in a small kit run. The idea seemed totally outlandish to me, but I started thinking that if Don Burt could do it, why couldn't I? My latest design after the six-month sojourn was a winner. It could hold with the Montereys in light slope lift and yet it could move out, was fully aerobatic, and had two sets of wings with flaperons. It was to become the Todi. The original fuselage was of shaped balsa, covered with Monokote. (I still have it.) I had no fiberglass experience but wanted to make the pod of fiberglass. I wanted to make the tail boom of balsa but couldn't figure out a good way to do so. Ralph White, who now owned Flight Glass Models, generously and kindly instructed me on how to make molds and fiberglass fuselage shells. Don Burt gave me the basic idea of rolling the balsa tail boom, but it took many frustrating experiences before I developed the hardware to do the job.



Dodgson Anthem plans apparently printed on a dot matrix printer. (image: Tim Egersheim)

It took several weeks of work, but I finally got my first Todi kit together, plans and all. I placed a tiny 1/12-page ad in Radio Control Modeler (RCM) magazine, for about \$50 and started getting catalog requests. Soon, orders started to trickle in. From early 1972 to the end of 1972, we made our kits where we lived — on a 400-square-foot houseboat on Lake Union. The fiber glassing and the sawing were done on the covered portion of the deck while the materials were stored inside. All parts and the kit assembly were done inside the tiny houseboat. The first Todi had been ordered by John Davis, one of my slope-flying friends. He constructed it and when the great day for the test-flight arrived, he called me and we went to the slope.



"From top-to-bottom: Todi, Maestro, Lovesong, Saber, Camano, Camano-shell, V-gilante, Pivot." (image: Kristopher Harig)

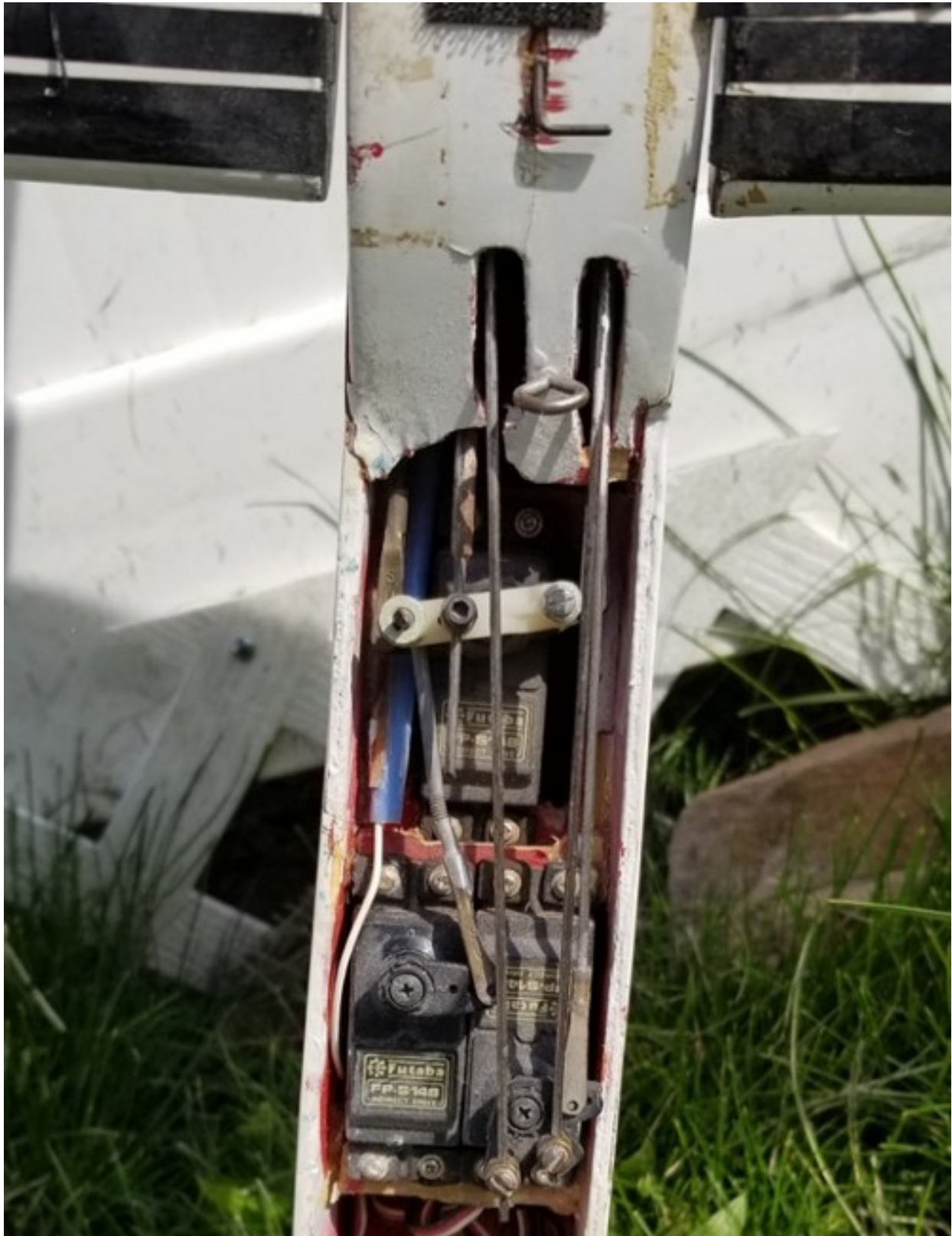
This was the moment for which my ego had been waiting — the day when I would see my creation, built and flown by someone else, soar to glory! John threw it out over the slope with a steady hand. It was a success. But wait. Suddenly the glider went into a series of gyrations and crashed. John said it was the squirliest glider he'd ever seen. After several similar attempts, John gave the glider to me in disgust. I was totally crestfallen. This was 1972. I took John's Todi home, put my radio in it and flew the glider. It flew great. I told John, and he didn't believe it. I had to conjure up several witnesses. Finally, John took the Todi back and somehow discovered that his antenna wire in his transmitter had broken. The problem resolved John's Todi flew fine. In fact, at the 1983 model show in Puyallup, Washington, I heard from John Davis that he was still flying the №1 Todi kit from 1972.



"This picture was taken at the 1983 National Soaring Society 'Soar In'. Me holding the white WIndsong won 1st place." (image: Mike Hansow)

The Todi was born on the slope but it had all the necessary ingredients to be a thermal champion. I now wanted to put the Todi to the test in serious thermal competition, but I had had little experience with winch tows and no contest experience. My early winch

tow memories still give me nightmares! The concept of the turn-a-round had not yet been born, so the winch box was placed at the far end of the field with a highly trusted person left there to operate it. You hooked your plane on the line, waved to the winch operator, watched the line tighten and then off the plane would go full bore to the top of the line, if you were lucky.



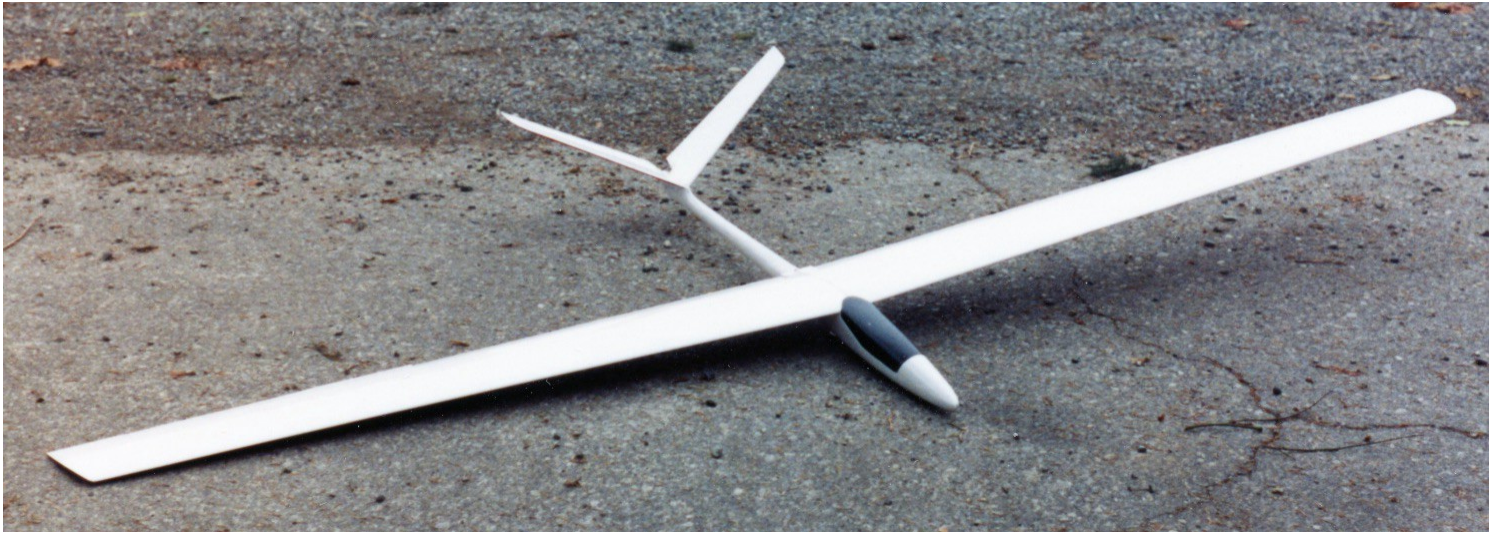


"What is this wizardry?" (image: Tim Egersheim)

Steve and Larry Nuss were the first boys in the Seattle area with one of these marvelous winches. It was only their constant enthusiasm that enticed me out, Todi in hand, to observe winch launching first hand. Larry had a Dandy two-meter glider with which he was going to show me how easy and safe this launching technique really was. Steve was running the winch. Finally, the moment came when Larry signaled the winch man that he was ready. With a surge of power, the Dandy sprung to life. It catapulted about 20 feet into the air and then did a snap roll on tow. Unshaken, Larry calmly continued on up the line to get a reasonable tow. "There, see how easy it is!" said Larry looking over at a quivering mass of humanity, holding a Todi that immediately went, unflown, back into my car.

At the annual slope flying bash, the second for me, on Badger Mountain (near Wenatchee), I heard that there was to be a thermal contest in Spokane as a part of the Spokane Internationals, a well-known power contest at that time. This, I thought, would be the golden opportunity to showcase my new Todi. I would simply breeze in with my wonderful multi-channel bird, win a decisive victory, impress the heck out of everyone

and get great material for my advertising. Sandy, my supportive wife and I, drove for six hours and got to Spokane only to find that no one knew anything about the contest. Finally, we found out that we were two weeks too early. As luck would have it, the Spokane Barons were holding a glider contest that weekend anyway to sharpen their flying skills in preparation for the big contest.



"This is my 100" V-gilante." (image: Bob Dodgson)

We decided to stay and fly in this local contest, since we were already there and had nothing else going at the time. At the field, on the morning of the contest, I was chuckling to myself upon seeing the sorry assortment of gliders represented. Some flyers were even entering converted power planes, with the engines removed. There were a few Cirruses around though and they were good planes. Also, the first Airtronics kits were represented. They were the original Olympic 88 and 99. Harley Michaelis was there with one of his beautiful, published designs.





Among many other sterling performances through the years, Tom Neilson not only won the 1987 Nats, flying his Windsong in open class, he won the Hi-Johnson trophy for the highest score and he won the Dan Pruss trophy for being on the winning team.

Dave Johnson and Tom Brightbill completed the winning team and all were flying Dodgson Designs gliders! Oh yes, the Craig Robinson Built Windsong Tom Neilson was flying won in 3 categories in the static judging, too --including best sailplane!

Interestingly, Ed Berton and his Windsong placed 2nd at the 1987 Nats --so Windsongs were 1st and 2nd! Ed also won the big 1988 Tangerine meet!

"Tom Neilson and his Windsong won the Nationals in 1987." (image: Bob Dodgson)

The first flight was a three-minute precision, which I figured would be a snap. I got a terrible launch and it was readily apparent that I was having a radio range problem, which demanded that I not stray very far away. Even so, I had no trouble getting the three minutes. In fact, I did so well that I got about four minutes and couldn't understand why I got zero flight points for this heroic effort. Finally, it sunk in what a precision flight was all about. My first flight was probably my best of the contest. I came off tow a few times, the winches were down at the other end of the field operated as described earlier, and I was having every problem known to a green contest flyer.

To compound my problems, most of the early Spokane Contests required that the launch be Rise- off-the-Ground (ROG) rather than throwing the plane from the hand. This type of launch was fostered by the LSF nationally and was used in their big annual California contests. Many articles were written in the magazines telling how much safer this ROG launch was than the hand-held launch. My own observations were that you were lucky to get three successful launches out of four with the ROG system. It was scary, you couldn't get as high and anything could happen in the first few feet while the plane was getting up to flying speed. Eventually both Spokane and LSF abandoned the ROG launch, much to my relief.



"Dave Banks carries his 'song through a fleet of Dodgson gliders as another 'song is launched. Doug Buchanan behind him. circa early 90s" (image: Waid Reynolds)

At the end of the contest, I had finished 15th out of 16 entrants. Even the converted power planes had beaten me. Either Harley Michaelis or Randy Holzapple won the contest as I recall. I went home a broken man. No one was impressed with either my amazing glider or me. I knew that my design could outperform the other planes at the contest, but no one else could have seen the potential from my dismal showing. Alas this was to be my fate on many more occasions over the next 15 years.



"Our daughter Megan holding the Orbiter-2 that won Handlaunch at the Nationals in 1995 flown and slightly modified by Steve Cameron. The original Orbiter was designed by Eric Jackson and kitted by Dodgson Designs. With the Orbiter-2 shown below we incorporated the fiberglass tail boom like the one with which Steve Cameron won the 1995 Nationals." (image: Bob Dodgson)

I knew that I had to go back and fly in the Spokane Internationals to redeem myself, so two weeks later we returned. There were about 40 entered in the glider portion of the contest. Several flyers were there from the Portland area, and five flyers of note from California.

This contest was a different story. I wasn't having any radio trouble at this field and I knew what a precision flight was. I had also been practicing landings. At the end of the first day, I was in the lead. My glider was a hit; even George Steiner and Greg Allen from California were going to buy kits. By the end of the contest, however, I had managed to drop to third place, the first two places going to the Allen boys from California. So ends the saga of Dodgson Designs . . . the beginning.

©1983, 2002 [Bob Dodgson](#)

The third and final part of this series is coming up in the July issue of RCSD. This article was originally published in the April 1983 Northwest Soaring Society Newsletter edited by Dean Rea. Bob updated and submitted it to the AMA History Project in 2002. RCSD would like to thank both Bob and the AMA History Project for permitting the use of the AMAHP document as a source for this series of articles in RCSD. In particular, we would like to thank Jackie Shalberg, Archivist and Historian for the National Model Aviation Museum, for the assistance in making these arrangements. — Ed.

Read the [next article](#) in this issue, return to the [previous article](#) or go to the [table of contents](#). Downloadable PDFs: just this article or this entire issue.

[About](#) [Help](#) [Legal](#)

Get the Medium app

