

Within the tiny airship subculture—there are fewer blimp pilots than there are astronauts—working for Goodyear remains the most

THE LIGHT STUFF

Learning to fly the Goodyear blimp.

BY DAVID SAMUELS

“Starting one, clear one!” Jon Conrad scalled out. As the port-side propeller of the Spirit of America, the Goodyear Tire and Rubber Company’s newest blimp, whirred to life, Conrad sat up straight in his high-backed pilot’s chair. His goal this afternoon, he said, was to “wear the airship”—which meant handling the blimp in a particularly unhurried, laid-back fashion. Conrad, who had recently been named Goodyear’s only pilot-in-training, sat to the left of his instructor, John Crayton. After Crayton gave him a nod, the young pilot looked through the cabin windshield and signalled to the ground crew, who stood alert on the wide, grassy airfield. He held up two fingers and made a rotary motion, then started the second prop. After pausing for several seconds, he spread one palm wide and punched the air with his other hand, communicating his readiness for takeoff. The Spirit of America rolled across the airfield, bounced once, then sailed serenely up into the fading blue sky above Carson, California.

Conrad was dressed in a white short-sleeved pilot’s shirt and a Stars and Stripes tie. His right hand rested on a large wooden wheel, which he moved gently back and forth to adjust the altitude of the ship. He inched the blimp right or left by using two foot pedals, which he worked as if he were a church organist, minutely flexing toes, heels, and calves to counter the shifting air currents.

The metal cabin of the Spirit of America, which seats six and resembles a ski gondola, offered spectacular, two-hundred-and-seventy-degree views of suburban Los Angeles. As the blimp glided upward, the student chatted amiably with his teacher. A thirty-three-year-old native of Scottsbluff, Nebraska, Conrad is an even-tempered, pleasant fellow whose conversation is punctuated by exclamations like “I’m as

chipper as a blue jay.” Well over six feet tall, he has 20/400 eyesight (a debility that would disqualify him from becoming a pilot in the Air Force). He resembles a grownup version of the cheerful lad in overalls who appears on cans of Dutch Boy paint. In the three months since accepting Goodyear’s offer and moving to Hermosa Beach, California, he had yet to ask a woman out on a date. Instead, he spent his evenings between Wednesday and Sunday—blimp pilots have Monday and Tuesday off—floating a thousand feet above the freeways between Los Angeles and San Diego.

Blimp pilots prefer to think of themselves as captains of airships; indeed, blimp flight has an oddly nautical feel. The ship rises upward like a balloon, yet it feels supported underneath, too, as if it were floating on water. Equipped with motorized propellers and a set of steering controls, blimps are easier to navigate than hot-air balloons, which lack thrust. The two hundred thousand cubic feet of helium trapped inside a Goodyear blimp can lift about twelve thousand pounds. The aircraft’s two side engines provide aerodynamic control, allowing a pilot to fly precise figure eights or box patterns over a sports stadium.

The derivation of the word “blimp” is unclear. One common explanation is that it was coined in 1915 by Lieutenant A. D. Cunningham, of the British Navy. During an inspection at a landing strip in Capel, England, legend has it, the lieutenant playfully poked one airship’s balloon with his thumb; an amusing sound was produced when the bag’s fabric snapped back into shape, and Cunningham responded with a verbal imitation: “Blimp!”

The spongy exterior of a Goodyear airship, Conrad explained, is made of polyester fabric coated with rubber. The envelope contains a central helium balloon, along with fore and aft air bags, or ballonets, which help control the ship’s



coveted job on the planet.

pitch. He pointed to two white toggles mounted on the ceiling above his chair; by pulling them, he could adjust the inflation level of the ballonets. Since air is heavier than helium, pumping air into the fore ballonet caused the nose of the blimp to dip; air in the aft ballonet caused the nose to rise. A red toggle allowed for the emergency dumping of fuel. Blue and yellow toggles operated the blimp's helium vents, which were situated on either side of the airship, inside the letter "Y" in "GOODYEAR." Helium could be vented in an emergency, Conrad said—if, for instance, the blimp soared dangerously above its ten-thousand-foot flight ceiling.

There are three Goodyear blimps currently operating in the United States: one is based in Carson, California; one in Pompano Beach, Florida; and the third at the company's headquarters, in Akron, Ohio. Each blimp has four pilots. Conrad's mentor, John Crayton, is known as the P.I.C. of the Spirit of America; those initials stand for "pilot in charge." He is a courtly, old-school gentleman with a walrus mustache and an easy manner, whose twin mantras are "Get lower" and "Get slower." As Conrad curved the blimp northward, Crayton said, "I have a basic theory of blimp pilots. It's all about getting used to where the buttons are, and learning patience."

After takeoff, Conrad settled into the normal cruising pace of thirty-five miles an hour; at that speed, even the lightest single-engine airplane would fall out of the sky. Blimps are so placid that they are the only aircraft certified for flight without seat belts. Cartoonish and otherworldly in flight, blimps are also quite noisy, especially when both propellers are running at full throttle. Every Goodyear pilot I met except Conrad is partially deaf.

Conrad radioed the control tower, which is in Torrance. "I'd like to climb to twenty-five hundred feet, because of some clouds up here," he said. Rolling the wheel backward on its axis, he caused the elevator flaps at the rear of the airship to tilt upward. The blimp ascended smoothly. To the west, the sun hung on the edge of the Pacific Ocean.

At 4:55 P.M., the sun set, and the sky along the coastline turned pink. Dark clouds hung low on the horizon.

"The sunset's really loaded up with reds, golds, and pinks," Crayton said. The two pilots stopped talking for several minutes and gazed out at the subtly shifting skyscape. The clouds developed a mellow tinge; the sky darkened, and the sandy-orange underside of nearby clouds became firelight bronze. Watching the sun set over the Pacific while floating in a Goodyear blimp is like being suspended inside the world's biggest lava lamp.

As Conrad calmly navigated the skies, his goal of securing a seat in the clouds felt tantalizingly within reach. Two weeks from now, on January 15th, Don Ploskunak, Goodyear's chief pilot, would arrive from Akron to check out Conrad's skills. If he failed the written or the oral portion of the daylong exam, or made a serious mistake during the three-hour flight test, he would be out of a job. If Conrad passed, he could look forward to a trip to San Diego, where he would help cover the Super Bowl, Goodyear's biggest television event of the year.

"This airship is bigger and more stable than the ships I used to fly," Conrad said admiringly. "You have more power behind you. It's more like flying a truck—a big semi." For four years, he had piloted Snoopy One and Snoopy Two, a pair of hundred-and-thirty-foot-long blimps sponsored by MetLife, the insurance company. The Spirit of America is a hundred and ninety-two feet long, and its sides feature large electronic panels that broadcast public-service announcements and animated tire ads.

For decades, Goodyear's large silver blimps (which are now painted an odd combination of silver, navy, and yellow) ruled the skies unchallenged. Since the nineties, though, the company has had to compete for television exposure with the Lightship Group, which owns and operates the MetLife blimps and has contracts with several other companies, including Sanyo and Saturn. Lightship has put an end to Goodyear's dominance of big-time sporting events like



the World Series and the Super Bowl. Even so, within the tiny airship subculture—there are fewer blimp pilots than there are astronauts—flying for Goodyear remains the most coveted job on the planet. It's been so long since Goodyear hired a new pilot in California, in fact, that the tailor who made Jon Conrad's uniforms left him alone in the fitting room for an hour while he tried to confirm that the new pilot wasn't an impostor.

Conrad eased the blimp higher into the twilight sky, then turned eastward, in the general direction of the Orange County Auto Show. "I'm learning from the masters," he said, gesturing toward Crayton, who is fifty-seven. He explained that he had also been tutored by two expert pilots, Tom Matus, who is sixty-five, and Charlie Russell, who is fifty-six. Between them, these men had ninety-one years of experience flying for Goodyear. Conrad noted that the pilots had different styles: Matus flew tail-heavy; Russell excelled at landings; and Crayton liked a little extra weight in the nose.

"It's a thinking man's craft," Conrad said. "You can make a wrong calculation about how heavy or light you want to land, and it will burn ya." The weight of a blimp, Conrad explained, is in constant flux. Starting in the early morning, the craft gains "superheat"—the difference in temperature between the helium inside and the external air. (Helium heats up faster than air.) With every additional degree of superheat, the blimp becomes twenty-five pounds lighter. When the sun goes down, the aircraft loses superheat. Since it was now evening, Conrad said, the Spirit of America had probably become hundreds of pounds heavier than it was during takeoff, when the blimp had been "fifty pounds lighter than E.Q." A blimp is at E.Q., or equilibrium, when the craft hovers steadily in the air.

Conrad radioed the ground crew. "Can you give me the surface temperature?" he asked.

"Seventy-three," came the response.

Conrad was thinking ahead to the landing. The air had cooled off, he reported, but not too much. The blimp's weight gain was probably not excessive, which meant that he wouldn't need to burn off extra fuel. A hundred pounds,

Conrad said, was a preferred weight for landing; the ship would sink, but not too fast. More than eight hundred pounds would be dangerous for the ship, and for the thirteen-man ground crew, who had to “catch” the airship during landing.

“We’re going to descend back down to fifteen hundred,” Conrad radioed in. It took about four minutes to arrive at the lower altitude. Having grown accustomed to slowness, blimp men are the least athletic of pilots. In his short time on the job, Conrad had already developed a paunch. Crayton had an even bigger one. “That Key lime pie, it’s good stuff,” he said, happily patting his belly.

Conrad meandered for another two hours. “You get there when you get there,” Crayton said. “A trip may take you two hours, or it might take you five.” With time to kill, Crayton reminisced at length about how Southern California had changed since he was a kid. “It was all dairy out to the ocean,” he said. “Now it’s all housing.”

Sometime after the skies had fully blackened, Crayton raised his hand. It was time for the “weigh off,” in which Conrad would perform a maneuver to determine the blimp’s current weight. “Now, you want to take off the aerodynamics and slow it down as much as possible, till it’s standing still, and then see how fast it falls,” Conrad told Crayton. The rule of thumb is that a rate of descent of a hundred feet per minute means that the blimp is a hundred pounds heavier than E.Q. The blimp sank two hundred and fifty feet within the space of a minute, indicating that the ship was close to the ideal weight for landing.

The Spirit of America began its descent into Carson. The brightly lit Arco refinery in Carson was visible to our right. Directly below us, a diamond appeared on the landing field. The top of the diamond was white; the other points were flashing red.

“The object here is for Jon to fly into the diamond,” Crayton explained, as



“The jury has found you guilty. Let’s see how America voted.”

the crewmen waved their lights back and forth below. Conrad cut the motor and glided toward the ground as if he were guiding a boat into a dock. The crewmen grabbed the two ropes that hang from the blimp’s nose like a Fu Manchu mustache and pulled the airship down out of the sky. The vehicle rolled thirty yards, then stopped on its landing wheel.

John Crayton was pleased with his student. “Jon has some good, old-fashioned Midwestern characteristics,” he said later, sitting in a trailerlike office that Goodyear had constructed next to the landing field. “He’s meticulous. He’s thorough.”

Inside the office, Conrad gathered up a stack of flight manuals and prepared to head home. “I’m brushing up on blimp theory, blimp regulations, weather,” he confided. “I feel pretty confident with weather—but you never know.” He was nervous about the differences between the Snoopy blimps and the Goodyear airship. “I was used to one ballonet, and this has two,” he said. Although this flight had gone well, he was still having difficulty keeping the ship in trim, and sometimes suf-

fered from the wobbles during landings. “I hope that doesn’t hurt me,” he added.

Jon Conrad grew up next to a country airport outside Scottsbluff. When he was five years old, he used to stand by the airport fence with his dog, Laddie, and watch the planes take off; later, he would sneak onto the runways, lie on his back, and watch them land. “I always wanted to fly a crop duster, because they looked like they were having fun,” he told me. Too shy to talk to the pilots, Conrad would sit in the airport waiting area and read *Rotor & Wing*. When he was about ten, he went on a summer trip out West with his family. His father took him on a helicopter ride into the Grand Canyon.

“The pilot had a beard, the cool flying shades on, his headset on—every kid wanted to have one of those headsets,” he recalled. “We were flying over the trees, which looked like a lawn, and then my stomach dropped as the land below us disappeared into the Grand Canyon. It was the most amazing thing I’d ever seen.”

When Conrad was nineteen, he en-

rolled at Emery Aviation College, in Greeley, Colorado, to become a certified helicopter pilot. Upon graduating and returning to Scottsbluff, he—like the overwhelming majority of commercial flight-school graduates—was unable to find a job. A wealthy local couple had just bought a helicopter, and they hired him to fly it. When the arrangement ended, four years later, Conrad lost the cabin that he'd been living in, and his girlfriend broke up with him. Of the hundred and fifty résumés that he subsequently sent out, he received only three responses. His first job offer involved working for someone who didn't speak English; another came from a man in South Dakota who needed someone to fuel his airplanes. The third response offered him a job flying the MetLife blimps.

"I knew the blimp had engines, we were going to travel, and these guys were going to pay for my hotel rooms—and also there was free golf, because MetLife covers golf," Conrad said. "That was all I knew about blimps." The pilot who interviewed Conrad was Marty Chandler, who hired him over the phone, and told him to report to Mesa, Arizona, immediately.

Conrad arrived at Falcon Field in

Mesa at 9 A.M. on a Wednesday to see the oblong craft floating on its nose above the mast to which it was tethered—a result of thermal currents in the desert air. "I'm thinking, Oh, my God, what did I get myself into?" Conrad recalled with a chuckle. "I asked whether that happened often, and the guy on watch told me, 'Oh, yeah. Out here it happens all the time.'" He spent his first flight struggling to control the pitch of the ship as it bucked up and down on the heat currents. "To be honest with you, I was a little green, but I didn't puke," he said.

A week into his apprenticeship, Conrad flew from Arizona to California through Banning Pass, up past the Hollywood sign, and then over the Pacific Ocean—a sight comparable, he said, to the view of the Grand Canyon from a helicopter. After he had been on the job for two years, a MetLife cameraman requested him for a golfing event, the first time he had been singled out for his blimping skills. Around this time, Conrad said, he began to believe that he had found his vocation—and he decided that he wanted to fly the Goodyear blimp.

"I felt like we were Shasta and they were Coca-Cola," he said. "If we wanted

to know something about blimps, we had to call Goodyear. We couldn't call the manufacturer of our blimp, because they didn't know." One of the MetLife cameramen had worked at Goodyear. "He told us that we weren't good enough to fly for Goodyear," Conrad recalled. "He beat that into us quite often—that they could do amazing things with airships."

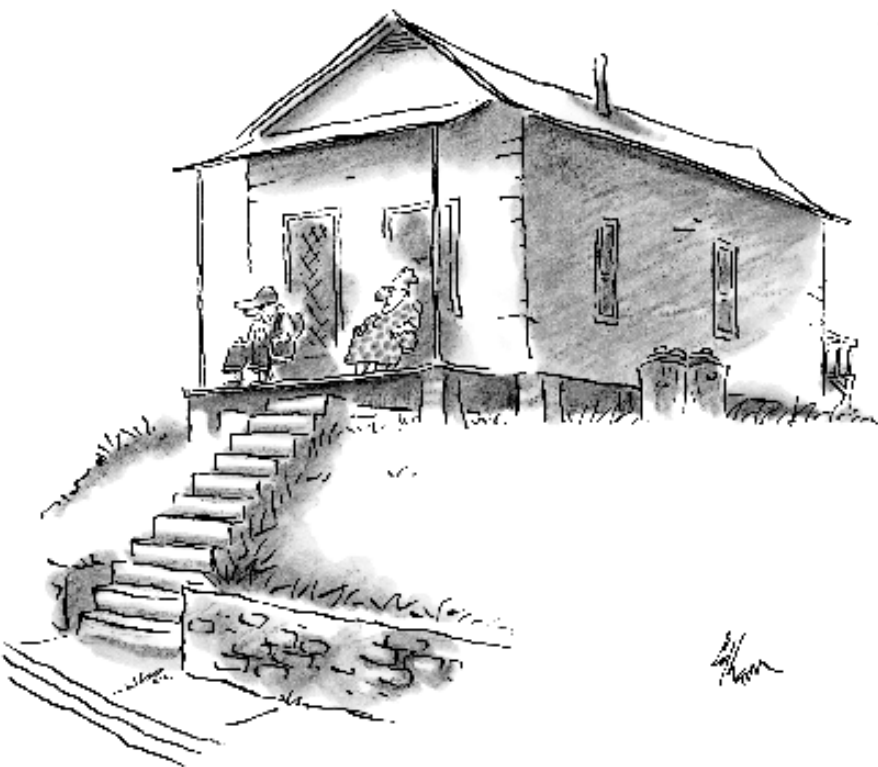
When Snoopy One spent the night at the same airfield as the Goodyear blimp in Chicago, the Goodyear crew wasn't particularly friendly. "They weren't snobbish, but they certainly suggested that they'd been around a *lot* longer than I had," Conrad said, with his habitual shrug.

Conrad started making occasional calls to the Goodyear airship-operations headquarters in Akron, asking for technical advice from Jim Maloney, a legend even among the pilots at Goodyear. "He was extremely cordial," Conrad told me. "And every time after that I talked to him he was very helpful, too."

Maloney's father, whose name was also Jim Maloney, had flown an airship for Howard Hughes before becoming a pilot at Goodyear; photographs of the singular flight of the Spruce Goose, the tycoon's flying wooden boat, show the shadow of the elder Maloney's blimp passing overhead. The young Jim Maloney was on board, and he was enchanted. Aware of the rigors of an airshipman's life, Maloney, Sr., proceeded to block every application that his son made to fly for Goodyear, from the age of sixteen on—through college, through graduate school in electrical engineering at the University of Southern California, and throughout a successful career as a university professor and an engineer. After his father died, in 1976, the younger Maloney's application was accepted.

Conrad idolized men like Maloney, and was eager to become a member of their fraternity. If he did, Conrad promised, he would never leave. "I could see myself doing this every day for the rest of my life," he said.

In 1925, Goodyear launched a promotional blimp called the Pilgrim. The company soon had a fleet of six ships, each of which appeared over the skies of America's major cities and fairgrounds.



"I credit our long marriage to Stockholm syndrome."

The fleet was the brainchild of P. W. Litchfield, the industrial genius who built Goodyear into the foremost tire company in the world. An M.I.T. graduate who grew up in Boston, Litchfield appears in photographs as a tall, dignified lord of science, resplendent in gray wool suits and rimless glasses. After joining the company in 1900, Litchfield developed and promoted many of Goodyear's most successful products, including the air-filled truck tire, the airplane tire, and the standard all-weather tire tread.

Motorized balloons were not Litchfield's invention. On September 24, 1852, Henri Giffard flew a hundred-and-forty-five-foot-long blimp with a three-horsepower engine from Paris to Trappes, seventeen miles away. In the mid-nineteenth century, a German pilot named Ferdinand Graf von Zeppelin embarked on a decades-long quest to build ever bigger airships with rigid hulls. His famous aircraft would later bomb London during the First World War.

P. W. Litchfield developed an unshakable conviction that blimps could serve as practical "land yachts" for the residents of inland states like Ohio. His commercial interest in airships began in 1910, when, as a young Goodyear executive, he travelled to the North British Rubber Company factory in Edinburgh, Scotland, and witnessed the operation of a machine that spread rubber over fabric. He bought the machine, which was built to produce tires, and had it shipped home to Akron. Back in Ohio, he became acquainted with the publicist Walter Wellman, an airship enthusiast and later a correspondent for the *Washington Record-Herald*. With its new Scottish machine, Goodyear agreed to produce the fabric for a two-hundred-and-fifty-eight-foot airship, called the Akron, for Wellman and his partner, Melvin Vaniman, who intended to pilot the ship across the Atlantic Ocean. The Akron left Atlantic City, New Jersey, on July 2, 1912, and promptly exploded, killing Vaniman and his crew. Early airships were filled with hydrogen—a gas that is twice as light as helium but is also highly flammable.

Litchfield was not deterred. During the First World War, Goodyear manu-

factured about a hundred airships for the military; it also sent aloft eight hundred observation balloons, many of which blew up under enemy fire. In 1919, a Goodyear blimp took off on a demonstration of the craft's peacetime potential. It erupted into flames and crashed into the roof of a bank in Chicago, killing thirteen people, including two reporters who had gone along to record the flight. A mechanic, Henry Wacker, fell to the street and, miraculously, survived.

In the nineteen-twenties, most of the American blimp industry switched from hydrogen to helium. Although helium makes up thirty per cent of the mass of the visible universe, it is difficult to obtain in bulk quantities. In the twenties, nearly all of the world's available supply of helium was in underground deposits within four hundred miles of Amarillo, Texas. The Helium Act of 1925 gave the U.S. government a virtual worldwide monopoly on the production of the gas, which it sold to Goodyear and denied to the company's German competitors. (Thirty-two billion cubic feet of the gas is now stored in an underground reservoir in Texas called the Bush Dome.)

In 1926, P. W. Litchfield became the president of Goodyear; soon afterward, he christened the *Pilgrim*, and began a campaign to convince Americans that blimps were the future of air travel. On September 29, 1931, a Goodyear pilot, Frank Trotter, flew an airship close enough to the spire on the Empire State Building to toss the morning papers onto the roof. The next day, Trotter returned in his airship to pick up the mail.

Trotter's two daring flights above Manhattan were the closest that America ever got to realizing Litchfield's extraordinary vision. A series of deadly airship disasters, beginning with the crash of the *Shenandoah*, in 1925, and culminating with the fiery explosion of the hydrogen-filled *Hindenburg*, in 1937, marked the end of the futurist romance with airships.

Even after Litchfield retired as president, in 1940, he clung to his convictions about the utility of airships. In his memoirs, he wrote, "Two or three recon-

naissance airships, able to patrol the ocean from Alaska to Panama, might have prevented the tragedy of Pearl Harbor." The Goodyear blimp fleet survived as the sole incarnation of Litchfield's dream, diminishing slowly over the years until blimps more or less disappeared from the skies.

In 1958, a Madison Avenue executive named Bob Lane moved to Akron and took a job as Goodyear's vice-president of public relations. When he arrived in Ohio, Litchfield's fleet of six blimps had been reduced to a single, aging ship, the *Mayflower*, which flew over the beaches of Miami advertising Coppertone lotion for two hundred dollars a day. Lane discovered that the Goodyear management regarded the blimp as a relic of Litchfield's reign.

"They didn't realize what they had," Lane recalled. "It was like having the only sign in Times Square!" In his first few weeks on the job, Lane convinced Goodyear's board of directors that the blimp was a unique corporate icon, a floating, inflatable billboard whose odd, lumbering vulnerability could inspire wonder and yearning in children and grownups alike. He obtained permission to send the *Mayflower* on a six-month tour of the East Coast. Lane's hunch was right: people lined up in the streets to see the blimp, and contacted Goodyear asking for rides.

Two years later, Frank Chirkinian, a short, energetic sports director for CBS, proposed placing a camera on board a blimp to broadcast aerial images of a football game. "I had done the Orange Bowl game in '59," he recalled. "I was impressed with the shot they had taken from an airplane flying overhead, and I thought, Well, geez . . . Goodyear has a *blimp*."

Chirkinian's favorite cameraman for risky assignments was Herman Lang, a CBS regular who had endured a series of escalating torments at the hands of the director, including being placed on top of a seven-hundred-foot radio tower at the Cotton Bowl and in a hundred-and-fifty-foot crane suspended over Miami Harbor. "He always volunteered for the worst possible job, just as long as he could stay on the crew,"



Chirkinian remembered. "He wasn't a great cameraman by any stretch of the imagination. But he was eager. He was just what I was looking for."

The place for Herman Lang, Chirkinian decided, was inside the Goodyear blimp, taking shots of the Orange Bowl. He called Mickey Wittman, the Mayflower's publicist. "I asked him, 'Is there enough room in the gondola?' and he said yes," Chirkinian told me. "Then I asked him, 'Have you any idea what it would cost?' and he said, 'Well, we wouldn't charge you anything, as long as you took a shot of the blimp.'"

That bargain shaped the future of televised sports. A camera mounted in a blimp could help establish the physical location of an event before or following commercials, or be used to photograph formerly inaccessible places, like the back end of a golf course; the slow movement of the blimp guaranteed crisp aerial shots, and the vehicle could easily be positioned for the perfect angle on the game. All Goodyear asked for in return was "pops," occasional ground shots of the blimp accompanied by a few kind words about Goodyear tires, embedded in broadcasts of the World Series, the Super Bowl, the Final Four, and other major sporting events. The blimp reportedly gains Goodyear twenty million dollars' worth of free television exposure per year, against estimated operating costs of seven million dollars.

Although Chirkinian is grateful for what Goodyear contributed to televised sports coverage, he has never been a fan of blimps. "There's something about that big fat cow up there that does not look at all stable to me," he said. "I'm reminded of the tragedy of the dirigible in New Jersey." When I pointed out that the Hindenburg was filled with hydrogen instead of helium, he shook his head with vigor. "That image is burned in my mind forever," he said. "You can espouse all the safety factors you want, but there's something about that blimp that just *bothers* me."

Entranced by the sight of Jon Conrad practicing his takeoffs and landings on a Sunday afternoon, one visitor after another pulled off the 405 freeway and made his way to the Carson

airfield. Whenever Conrad landed the blimp, the spectators responded with oohs and aahs. A few of them went inside Goodyear's blimp-operations office, a low structure on the northern edge of the airfield, to inquire about rides. Jim Wood, a Goodyear publicist, typically handles such requests. The good news is that there's no charge, he tells them. The bad news, he adds, is that blimp rides are reserved for Goodyear's corporate customers.

The walls of the trailer's modest reception area are hung with photographs, cartoons, and other mementos testifying to the blimp's place in American life. Hanging above battered, comfortable couches are framed photographs of celebrities. There are shots of Ronald Reagan, Johnny Cash, various Rose Parade princesses, Johnny Depp, and the white-helmeted daredevil Gary Gabelich, who set a world land-speed record by driving his Blue Flame race car 622.407 miles an hour on the Utah salt flats using Goodyear tires.

Outside, the ground crew was preparing Conrad for another takeoff. John Seiuli and Sean Siatuu are two big Samoans who anchor the ropes on the blimp. Seiuli said that his neighbors were always excited to see the blimp, and often asked him for rides. He told me that he had been up in the blimp only once. "At first I was nervous," he recalled. "Then it wasn't so bad."

"It's the gentle giant of the sky," Siatuu said.

Jeff Robinson, the crew chief, said that he thought Jon Conrad would make a good pilot. "He's relaxed and kicked-back," he said. "I think he'll do real well." He added with a laugh, "I've been here for twenty-three years, and he's the first new pilot I've seen, so who really knows?"

As a pilot-in-training, Conrad was not yet allowed to ferry passengers. Instead, he had spent much of the day's training session wearing "foggles," dark sunglasses with lenses that have been severely sandblasted, save for a small rectangular cutout. The lenses, which made Conrad look like the villain in a cheap sci-fi movie, allowed him to see the instrument panel but not the windshield. By restricting his view in this way, the foggles would help teach Con-

rad to land the blimp in heavy fog or other conditions that impede a pilot's vision.

Three men to a rope, the crew walked the ship away from the blimp mast, a thirty-foot pole in the center of the airfield. As the blimp bounced softly down the runway, the crew heaved it into the air. The maneuver, known as an "upship takeoff," provided Conrad with an additional angle of lift.

With Crayton at his side, Conrad circled the landing field. Using instruments as his sole guide, he swooped low over the field and then headed back up into the sky. At a height of a thousand feet, Crayton unexpectedly told him to take the blimp up another two thousand feet, above the afternoon cloud cover. At three thousand feet, the blimp was buffeted by an upward gust of wind. Conrad shook his head, annoyed. The blimp wobbled.

"You know you have a big wind up here," Crayton chided. "You know you have to be more aggressive."

Conrad's other problem was that the blimp was at least three hundred pounds too light, thanks to the superheat added by the ascent above the clouds; direct sunlight can make the blimp lighter in a hurry. As Conrad tried to bring the ship down low over the Links of Victoria Golf Course, which is adjacent to the airfield, the extra lift queered his approach. The blimp was so light that it felt as if Conrad were trying to force a cork underwater. The assistant crew chief, Tony Sanico, waved him off. Conrad had botched the landing. Crayton told him to start over.

Conrad retracted the blimp's landing wheel and headed into the clouds again. He circled over the 405 freeway, then returned for his second attempt. He floated momentarily over the high-voltage wires to the west of the airfield, then brought the ship down low enough for the crew to catch it. But this time he hit the ground roughly, forcing the crew to let go of the dangling ropes. Once more, Conrad retracted the wheel and pushed forward on the throttle. On his third try, the crew caught the airship's ropes, then tugged the reluctant craft toward the mast, securing it by its nose.

"I thought we were going to stay below the clouds," Conrad explained, after climbing wearily from the cabin. For the first time in two weeks, he looked exhausted. As he walked back down the runway, his brow was glazed with sweat.

"I should have taken off heavier than I did," he said. "I got a good workout today. I'm not a real ball of fire right now. I'm spent."

As usual, John Crayton's advice was short and to the point. "During the transition to instrument flight you were a little sloppy with your tracking," he said. "You recovered nicely. You came to your decision point. Your timing was right." Crayton paused. "Did you come back in the correct weight configuration?" he asked.

"No," Conrad said glumly.

"He's much better than when he started," Crayton said, after his student had gone off to study. He had a few doubts, however. "He hasn't quite got the smoothness yet," he said. "He still makes mistakes."

The crewmen who work with the Goodyear blimp do not think of it as an inanimate object. Forever expanding and contracting, the blimp comes to resemble a living thing. The "A-watch," which begins at eleven at night and ends at seven in the morning, is when the blimp's true personality is said to emerge. Fabian Furriel, who had been on A-watch for the past four nights, has served on the blimp crew for the past sixteen years.

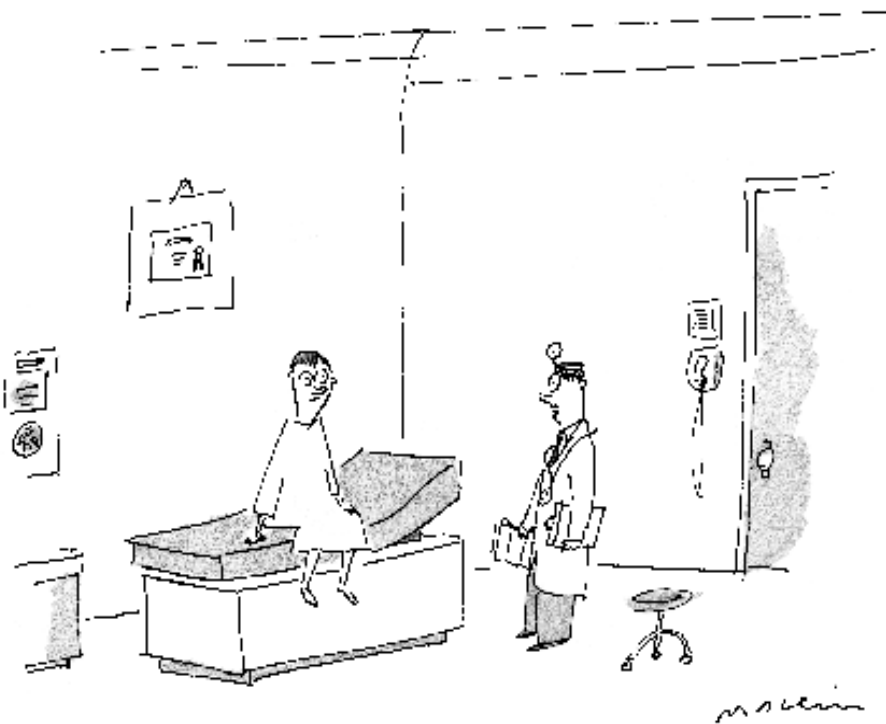
Furriel is famous among the other crew members for his peculiarities, which include the practice of wearing his Goodyear summer uniform of shorts and a short-sleeved shirt year-round, rain or shine, even in the snow. If you ask him whether he's cold, he answers back, "Define cold." Then he stares straight at you, but not in an unfriendly way. He's just intent on hearing your answer. "Define wet," he will suddenly say. "Define happy." No matter what kind of definition you give, he will then explain why your answer is wrong.

Leaving the office just after 11 P.M., Furriel walked down the field toward the airship, whose ghostly creaks and clanks echoed through the heavy fog. Under

RUMOR OF THE WEEK BY EDWARD SOREL

The Reverend Franklin Graham, Billy Graham's son, is said to have assured President Bush that the prophesy "The meek shall inherit the earth" is simply a mistranslation.





"I'm going to hold up a number of outstanding medical bills. Tell me how many you see."

his arm, he carried the Spirit of America's immaculate logbook, which will minutely chart the craft's vital signs, hour by hour, for the next ten years or so, until its demise.

"I do a walk around the mast, check the cables, the mast junction box," Furriel said, describing how he typically began his evening routine. The blimp's envelope, he said, weighs 3,772 pounds, is made from twenty-four hundred square yards of fabric, and comes in a box that's about the size of a small van.

As the blimp slowly tracked around the mast, a rainy pitter-patter on the asphalt seemed to get heavier as the airship moved toward the patch of grass where we were standing. The blimp sheds water at night, and in the morning can often be found surrounded by a puddle of water.

For the next eight hours, Furriel stayed in constant motion while giving me a series of lectures on the operation of his favorite craft, the one thing in his life that he had ever mastered, he said.

"That yellow box, that's the hand-rail junction box," he said. "That gives

us the main power from the mast." He resumed going down the checklist in the logbook. "You've got the pressure switch box, the blower cable, the dome light, the rectifier—that's a fancy word for a hanging battery charger," he said, barely drawing a breath as he grabbed the railing of the blimp car and swung into the cabin. "I make sure the wheel lock is installed, and the gas blower is working. That's a fan that blows air into the forward ballonet. If we have a storm and need to maintain pressure, we have the gas blower on continuously. As the outside temperature cools down, the helium cools down, and that creates a void. The void has to be filled. I like to use the analogy that the ballonets act like a pair of lungs."

Hooked up to cables, boxes, and switches, and shedding water at a furious rate, the airship at night resembled a sick whale on life support. Hanging out of the pilot's side window was a pressure switch box, which was connected to four plastic tubes that took readings from different areas of the ship: the forward ballonet, the aft ballonet, the bottom of the helium-filled

portion of the bag, and the center of the leviathan's belly.

"Each hour, we take a set of readings," Furriel said. "The outside temperature. The temperature of the helium. Wind velocity. Amount of fuel aboard. The pressure settings." At midnight, the air temperature was 51°F, the helium was at 46°F, and the wind velocity ranged from zero to five knots. The ship was carrying a hundred and twenty-six gallons of fuel. The pressure was currently at 1.5 inches, Furriel explained, which meant that if a person somehow climbed on top of the blimp and jumped up and down, it would feel very much like a moon walk at an amusement park. Adjusting the switches inside the car, Furriel ran the gas blower for a couple of minutes to pump a little more air into the fore ballonet. The Spirit of America flew best slightly nose-heavy, he said.

"Life? Define a life," Furriel said, when I asked him how standing A-watch had affected his life. "I started Wednesday night, and I'll do this till Tuesday morning. I go to church. On Tuesday night, there's a men's study group."

He often dreamed about airships, he told me. "Blimpmares, that's what I call them," he said. "Most of the dreams I have are fatal to the airship." His dreams had included collisions in which propeller planes and helicopters tore through the blimp. He pointed out that in 1990 a twenty-eight-year-old man named John Moyer crashed a radio-controlled plane with a four-foot wingspan into the Goodyear Columbia, ripping a foot-long gash in the envelope. The airship was forced to make an emergency landing at the Carson airfield.

Standing in the back of the blimp cabin, Furriel stuck his head up into a giant Plexiglas bubble. A catenary curtain, which draped over the balloon and held it tightly in place, was visible as a dark scalloped swath of fabric at the top of the bag. Cables suspended from the curtain connected it to the top of the car.

At around one o'clock, Furriel climbed outside and polished the underside of the car as it slowly drifted and bounced around the mast. By 3 A.M., the air temperature had reached 49°F, and the blimp was hovering three feet

off the ground. Inside the main envelope, the helium purity level was at 98.9 per cent, meaning that very little air had leaked. It costs about twenty thousand dollars to fill a blimp with helium, Furriel said. By 4 A.M., the blimp was hovering eight feet above the ground; the helium, trapped inside the insulating balloon enclosure, was now substantially warmer than the chill outside air. Furriel hauled the blimp back down and added weight by tossing four bags of lead shot into the cabin. Although he had been up with the blimp for five nights in a row, he did not complain of feeling tired. "Sooner or later, the airship takes over your life," Furriel admitted. His pride in the Goodyear fleet sustained him. "We're the best in the world," he said.

Having just completed the written portion of his Goodyear pilot's exam, Jon Conrad was being grilled on his answers by his examiners, Don Ploskunak and John Crayton. The men sat around a brown Formica table inside the office. Conrad was wearing his American-flag tie. Ploskunak, a tall man who resembles a Texas football coach, was wearing a green polo shirt and dark sunglasses.

"Do you know how shot bags are put together?" Ploskunak asked.

"Yes, a crew member showed me," Conrad answered.

Ploskunak looked down at Conrad's answer sheet, and he read the young pilot's answer about the ideal pressure for the Spirit of America's helium balloon. "You wrote, 'Pressure should be between one and two inches,'" he said. "We prefer to come in at two inches." It wasn't clear whether Ploskunak thought the difference was significant.

"You wrote down that the maximum rate of descent is one thousand feet per minute," Ploskunak continued. "Fourteen hundred is the figure we use."

Conrad protested that the figure given in the pilot's handbook was one thousand feet. Ploskunak checked the handbook. "We tested it out at fourteen hundred," he said sternly. "But the book does show one thousand." He looked down at Conrad's answer sheet again.

"Why do we hook up the rip line to

the rip handle when the ship is on the mast?" Ploskunak asked.

"That way, the ship will deflate if it comes unmoored," Conrad answered.

"That way, your blimp doesn't take the mast with it and land in a cornfield somewhere in Missouri," Ploskunak teased. When Conrad was interviewing for the Goodyear job, he admitted that once, while he was piloting for MetLife, the Snoopy One had flown off its mast, travelled a hundred miles, and crashed into a barn filled with coffin linings in rural Missouri.

As the questioning continued, the scene became reminiscent of a graduate student taking general exams in a proudly esoteric subject, like Finnish grammar. Ploskunak and Conrad discussed the fine points of superheat and volleyed opinions about landing techniques. After an hour, the three pilots broke for lunch.

"He's got that real laid-back, lighter-than-air attitude," Ploskunak told me. "He's probably ready to fly."

In the afternoon, Conrad headed outside to board the Spirit of America with Ploskunak and Crayton. For his flying exam, he was told, he would have to do some figure eights above the local stadium, then bring the airship home.

"O.K., gang, this is Jon's big day," Crayton said, addressing the crew. The test was to last from one until four. Conrad was in the pilot's chair, with Ploskunak to his right; Crayton sat behind Conrad, offering a comforting presence. Conrad started the propellers, and the crew jerked the airship fifteen feet into the air. As the crew watched, Conrad gunned the engines, and the ship angled upward about thirty degrees and crept up into the sky with elephantine grace.

Hanging for a moment above the field, Conrad paused to retrim the ship. The nose was awkwardly high.

"If you don't do such a steep climb, you won't have to retrim," Ploskunak

advised. Conrad climbed to twenty-six hundred feet. Flying over the Home Depot Center, a new soccer stadium, he expertly simulated some TV-event maneuvers, making left-hand box-pattern turns around the stadium. Then he performed figure eights.

"Ballonet blowers on, props forward, mixture's rich, slow my speed down," Conrad reported. Ploskunak took occasional notes and issued terse instructions.

"Turn left," he said.

"The nose feels like it doesn't have enough air in it, so I'm going to put some air into the nose," Conrad said, as he readied the craft for his first landing.

"You don't want to put *too* much air in the nose," Ploskunak cautioned. "You don't want to plow into the ground."

"This is my favorite part," Conrad said calmly, as the ship approached some high-voltage wires near the airfield. Coming in low amid very light winds, a pilot has comparatively little control over his craft. "I don't have anything to work with," Conrad said. For a moment, the airship hung in the air above the power lines. The cockpit was silent as the blimp made its landing approach. The ground crew broke into a trot and grabbed for the ropes, as the ship floated slowly back to earth. The landing was perfect. Crayton shook Conrad's hand.

Later, Crayton gathered the crew around the mast and made a little speech. "We welcome you to a fraternity of pilots that's seventy-seven years old," he said to Conrad, handing him a box with his silver pilot's wings—a winged Goodyear blimp. "And one more thing we have here as part of the process," he added, stepping neatly out of the way so that the crew could dump two buckets of water over Conrad's head. Conrad smiled, and then went inside to the pilot's lounge, dripping wet, to call his parents, Jack and Norma Conrad, back in Scottsbluff.

"Well, I got my wings, finally," he said.

"Well, I thought your test was tomorrow!" Jack Conrad joked. "Congratulations on that."

Conrad was already thinking about his first solo flight as a Goodyear pilot. "I can't wait to get down to San Diego and flash these babies," he said, point-



ing to his new wings. “As far as being a blimp pilot goes, it doesn’t get any better than the Super Bowl.”

Two days before the biggest sporting event of the year, the Spirit of America hovered four feet off the ground at Brown Field, in San Diego. Docked nearby were some of the blimps owned by the Lightship Group. The Sportsbook.com blimp was a third the size of the Spirit of America, and came equipped with a flame-themed paint job that would have been at home on a souped-up Camaro. Jon Conrad ambled around the field, drinking a Coke. On Sunday, he’d be flying the Goodyear blimp solo back to Carson.

All week long, the Spirit of America had been taking exclusive aerial shots for various pregame shows on ESPN. The live footage was captured by a large Gyron camera, a giant black-and-white eyeball that hung out of the blimp cabin’s left door, clamped between a heavy pair of brackets. Javier Estrella, a Goodyear cameraman, beamed back dreamy, brooding shots of the city’s glittering esplanade and its sports arena, Qualcomm Stadium.

Estrella would be returning to the sky that afternoon with Tom Matus, the oldest, most experienced pilot on the crew. Before takeoff, Matus stood beside the Spirit of America holding an empty bottle of Wisk laundry detergent. It was his “wickie bottle,” he explained—the vessel into which he relieved his bladder while flying.

A natural charmer, Matus has the genial, boasting manner of an ex-athlete who is popular at local bars. He likes to describe himself as “the handsomest pilot.” He has been flying the Goodyear blimp since 1968—before Conrad was born. An admirer of astronauts, Matus is proud to have taken Buzz Aldrin on a blimp ride. Above his desk in Carson, he keeps a signed picture from the legendary test pilot Chuck Yeager, inscribed to “The man with the ‘Light Stuff.’”

Matus, who is one of the best storytellers on the crew, promptly filled me in on the origins of wickie bottles, which go back to an extra-innings Dodgers game in the nineteen-seventies. “We lost a shot in the fourteenth inning and

the director was furious,” he recalled. “Fourteen innings—a man’s got to take a leak.” He told me that he had kept the same wickie bottle for years. “When I retire,” he added, “I’m going to nail that thing to a nice piece of walnut.”

Matus was taking the blimp out for its final flight before Super Bowl Sunday. Bidding goodbye, he climbed into the cabin, then signalled to the ground crew for a rolling takeoff. He started low, with the crew running alongside the blimp, and lifted off, heading over the runway. The airship angled sharply upward—too sharply. The blimp was suddenly out of control. Its tail wheel smacked into the ground with the sound of tearing metal. The ship bounced once more and headed back up into the sky. Below, the crew stopped in their tracks. Carved into the grass near the runway was a twenty-foot-long scar.

Crayton watched the accident from the ground. “He dinged the tail wheel,” he said, in a worried voice.

The Goodyear blimp hung in the air like a wounded bird. The airship’s rudder wasn’t working properly, Matus reported by radio. With a broken rudder, the craft would be difficult to land. When the Spirit of America made contact with the ground, it bounced awkwardly.

Using the wind to push the ship sideways, the crew backed the blimp onto the mast. Steve Dien and Mike Spurlin, two mechanics, shined their flashlights on the underside of the aircraft. In addition to the dinged tail wheel, the tri-pulley for the starboard-side control cables had flipped over and needed to be flipped back into place. Matus walked across the field alone, his shoulders slumped in his Goodyear flight jacket, his wickie bottle by his side.

“The sun will shine tomorrow,” he said. “It will be a better day.”

On Saturday morning, however, things looked even worse for the Goodyear crew. Dien, the chief me-

chanic, told everyone the story of what had happened during A-watch. At 1 A.M., Dien found that a pulley controlling the upper rudder had come loose. He also discovered that a rivet had been sheared off the blimp’s frame. At seven in the morning, Dien called Crayton, who called Jeff Sassano, the ponytailed chief rigger, to report that there were “major problems with the airship.”

At 10 A.M., the crew reported to the field, but winds were high, making it impossible to do repairs. The bump on the runway couldn’t have come at a worse time. To skip flying today not only meant the loss of another chunk of free airtime for Goodyear; it also meant leaving the skies to Saturn and Sanyo. Crayton shook his head. Later in the afternoon, he hoped, the wind would die down and repairs could proceed.

At six o’clock, the crew reassembled on the field. There was no wind. Four hours later, the field was dark and the men were still working. Goodyear’s most experienced pilot had crippled the airship on the eve of the Super Bowl.

When dawn broke on Sunday morning, the Spirit of America was ready to fly. Overnight, Crayton reported, the crew had fixed mechanical problems, including the loose pulley, that usually took a few days of hangar time to resolve.

“I want to thank all you guys again,” Steve Dien announced as John Crayton climbed into the blimp cabin.

The Spirit of America’s readiness for flight was particularly good news this morning. Owing to security concerns about terrorism, the federal government had ordered the airspace closed within a seven-mile radius of Qualcomm Stadium, from eleven o’clock on Sunday until the end of the game. The Goodyear blimp would be able to make some game-day appearances before heading back to Carson.

Crayton took off in the direction of Qualcomm Stadium, followed closely by the Saturn and Sanyo blimps. At 10:55 A.M., with the temperature climbing, a trio of blimps floated back over the horizon. Goodyear was again in the lead. Charlie Russell, another pilot, was waiting with Jon Conrad on the ground. “Most people couldn’t



LOST BROTHER

I knew that tree was my lost brother
when I heard he was cut down
at four thousand eight hundred sixty-two years;
I knew we had the same mother.
His death pained me. I made up a story.
I realized, when I saw his photograph,
he was an evergreen, a bristlecone like me,
who had lived from an early age
with a certain amount of dieback,
at impossible locations, at elevations
over ten thousand feet in extreme weather.
His company: other conifers,
the rosy finch, the rock wren, the raven and clouds,
blue and silver insects that fed mostly off each other.
Some years bighorn sheep visited in summer—
he was entertained by red bats, black-tailed jackrabbits,
horned lizards, the creatures old and young he sheltered.
Beside him in the shade, pink mountain pennyroyal—
to his south, white angelica.
I am prepared to live as long as he did
(it would please our mother),
live with clouds and those I love
suffering with God.
Sooner or later, some bag of wind will cut me down.

—Stanley Moss

live this way,” Russell said, yawning.

“Your wind is out of the southeast, very, very light as of now,” Conrad advised Crayton via radio. Conrad’s former teacher steered the airship toward the landing field, as the crewmen tried to tug it down to earth. The blimp hovered thirty feet above the ground, and then started to float back into the sky.

“Let it go, let it go!” the ground chief called out as several crewmen fell onto the grass. Crayton’s next three tries didn’t go any better. Thanks to superheat, the ship was now at least five hundred pounds light. On Crayton’s fifth pass, the crew wrestled the ship to the ground.

It was Jon Conrad’s turn to fly. The flight home to Carson might take three hours, he joked, putting on his pilot’s shades. Then again, it might take five.

“I need a good upship, guys,” Conrad said. He checked the instrument panel and the toggles, and then gave the ground crew a big thumbs up. The crew gathered around and tossed the great rubber blimp into the air. It bounced

once and headed up into the sky, with its nose at an elegant angle of twenty-six degrees. Levelling off at fourteen hundred feet, Conrad headed west; on the ground was the recently landed jet of Céline Dion, who had arrived in San Diego to sing “God Bless America.”

The no-fly zone was now in effect. At 11:32 A.M. on Super Bowl Sunday, the skies over San Diego were empty. For the moment, the Goodyear blimp was the only craft in the sky. And Jon Conrad was the only pilot.

The long reflection of the afternoon sun slanting off the Pacific suggested the inspiration for countless California rock-album covers of the seventies. “The Goodyear ten-alpha is up and green—excellent job on the ground,” Conrad said. He slowly steered the blimp toward the sea. At a thousand feet, you could see the waves breaking three hundred feet offshore. A plume of what looked like white smoke rushed to the water’s surface, leaving a lacy filigree in its wake.

“Crayton was planning on coming

back at E.Q., and he came back five hundred pounds light, and he’s been doing this for thirty-one years,” Conrad said when I asked him what he’d learned in his first full week as a Goodyear pilot. “That’s the nature of airships. Just when you think you’ve got it figured out, you don’t.”

Conrad’s legs bobbed up and down as he talked. “As a kid, I used to love watching Disney on Sunday night—a world that was just happy and peaceful—even for an hour,” he said. “Well, that’s exactly what it feels like up here.”

Flying over the Pacific is the equivalent of highway driving; the even temperature of the ocean means there are no thermal currents to navigate, allowing the blimp to quickly pick up speed. At five hundred feet above the water, and with the wind at our back, our speed increased from twenty to thirty-four knots as the ship sailed over the flat, dark ocean, past Dana Point to Laguna Beach. The visual excitement was above us, in the clouds—the cotton-ball-like stratum cumulus and, even higher, the wispy altocirrus, and the two enormous cone-like cloud towers off to our right. A powerful convective lift drew moisture thousands of feet straight up into the air.

“If we saw that in the Midwest, that would tell you there might be some activity by the afternoon,” Conrad explained. The skies over Carson were clear. Shifting the engines into neutral, Conrad assumed a look of peaceful concentration as he let the ship drift gently downward over the Links of Victoria Golf Course. It took about a minute to descend seventy-five feet; the ship’s landing weight was perfect.

The Carson airfield came into view. Four hours after leaving San Diego, the blimp had arrived only minutes after the ground crew’s truck, which had broken down twice along the way. Below, the exhausted crew were gathered around the mast, eager for an easy landing so that they could go home, see their families, and watch the Super Bowl on TV. Conrad pulled down on the right forward damper toggle to put a little more weight in the nose. He paused when I asked him for the time.

“I stopped wearing a watch once I began my association with airships,” he said. “It was either that or find a new job.” ♦