# Three Views from a Basket by Peter Cuneo, Dave Eichhorn, and Ken Tuley 



David Eichhorn, Peter Cuneo and Key Tuley ready for their gas balloon launch from Fiesta field. Guymon, Oklahoma, the next morning at about

0930 CST. The total distance flown was 314 miles, with 14 hours 30 minutes aloft. We launched with 24 bags of ballast at 25 pounds each and landed with about 14 bags. Our launch elevation was about $5,300 \mathrm{ft}$. MSL and the landing site elevation was about 3,000 ft. MSL.

We had been working toward getting this flight into the air for most of the winter, but between needing the right

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launch weather, busy personal schedules for the flight and chase crews, somewhat limited hydrogen gas supply and proper landing conditions, this weekend was the first one we could make work.

The flight occurred near the end of our typical winter window as spring winds start picking up by mid to late March in the area from eastern New Mexico through Kansas. We had a good

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## Our Ediltorial

Though we are not be flying balloons of any sort right now, I am still getting a steady stream of inquiries about gas ballooning and I have multiple requests for gas training flights and instructional materials. So now is a good time to take a step back and make plans for the future gas balloon flights which I am sure are coming.

Is there some piece of equipment in your system that needs replacing? Is there some facet of gas ballooning that perhaps confuses you? Or, are you an enthusiastic newcomer to gas ballooning and are looking for a mentor? Perhaps you have a book on your shelf that you've been meaning to read for a while. Six months ago, I was bemoaning that fact that I never had enough time to complete any project. Soon, we will all be back in that mode, so at the risk of sounding like great-aunt Mabel, now is the time for us all to make use of our unplanned downtime and check some items off the "To Do" list as completed.

We will all be back at work, in the air, or in the chase truck very soon now.

God Speed, Stay Well and BE SAFE!

## Peter \& Barlaara


flight that generally followed the pre-flight forecast trajectory (see trajectories and flight track with close dots below), but to no one's surprise, we did have a fast but safe landing when we got to Oklahoma more on that later.

Both Dave and Ken have recorded their impression of the flight, sso the reader can compare the thoughts of three pilots on one flight.

NOAA HYSPLIT MODEL
Forward trajectories starting at 0300 UTC 15 Mar 20 06 UTC 09 Mar GFSG Forecast Initialization


My (Peter's) personal memory of the flight was an almost dead-calm launch with a placid ascent rate, transitioning into a slow initial track to the northeast around the northern edge of the Sandia Mountains, just east of the city. This is one of my favorite routes from this launch site, as it provides a beautiful view of the city as the sun sets and the lights come on across the metro area.

Cutting diagonally across the north-south track of Rio Grande and Interstate 25 is mesmerizing. Continuing to the northeast and approaching the massive dark rock formation that is the Sandias at night can be a bit
 intimidating and provides a wake-up call to the navigator. Dave was flying at this point and his comparison, later in this article, to his many hours flying IFR in military aircraft provides a unique perspective on the flight.

The first inclination is to ascend to well above the top rim of the rocks. However, at the rate we were going (about 5 knots) we chose another option and stayed just below the crest and let the natural flow swing the balloon around the north end - all the while keeping a close eye on the variometer, and a quick hand on an open ballast bag just in case anything unexpected happens. But isn't that true of ballooning in general? This worked, and our northeast track rotated to a more easterly track as we crossed over the northern foothills of the Sandias. This area is sparsely populated, but isolated lights were still visible from several homesteads below. Ken phoned a friend who lived in the area and spotlight beams were crossed in greeting from ground to air and the reverse - but no laser pointers were used in the filming of this episode!
 ground is acceptable and a night vision monocular, to get a better 3-D view of the landscape, can also come in handy. Another new toy that was onboard for its maiden flight was a Garmin ADS-B out transponder that allowed us to be tracked as probably the slowest moving aircraft on the Flight Radar app. This hardware generally worked as advertised, and was reviewed in Issue 2 of The Trail Rope, but it is not really intended for low, slow-flying aircraft and it had a tendency to think we were flying too slowly to really be airborne.

The Ortiz Mountains were now directly ahead in our flight path. These are much smaller and somewhat lower than the Sandias, but again, the orographic flow directed us slowly to the southeast of these, still significant rocks. Our flight path resembled a gentle " $S$ " as we snaked our way towards the plains of eastern New Mexico.

Our speed now gradually increased as we moved east-northeast throughout the night as first Dave and next Ken took turns at gauging the response of the balloon to ballasting and valving. I laid down and occasionally snoozed a bit with half an eye open for any unexpected events. We got comfortable in our small airborne, mancave as we interspersed idle gossip with a discussion of ballooning concepts such as pressure ceiling, superheating, adiabatic heating and cooling, use of the trail rope, valving and ballasting techniques, airspeed versus ground speed and response times to flight maneuvers. The moon set at approximately midnight and the night sky displayed the Milky Way and a few shooting stars for our entertainment.

We had hoped to execute some intermediate landings just at sunrise but our speed continued to increase
 else would one expect in the spring in Oklahoma? It seemed to take forever for our speed to peak and then oh, so slowly start to decrease, one mph at a time. We stowed all the gear as securely as possible and continued our descent at approximately 200 fpm . As we approached an open field that appeared to have good access for the chase vehicle, we saw a natural crevasse further downwind but decided that we had enough room and the proper approach rate to land in the open terrain. Our ground speed had decreased to about 30 mph . We were not able to deploy the trail rope due to a snarl in the quick release mechanism and hit the ground still descending at about 200 fpm . Just before we hit, we were able to open both of the four-foot diameter deflation ports located in the crown of the envelope. Dave ended up and by sunrise our flight log shows that we were in the Texas panhandle, heading towards northwest Oklahoma at about 4,000 feet AGL with a speed of 40 mph over the ground (but still ZERO airspeed!). The decision was made to land in the morning and a descent was initiated with Dave flying. Considerable valving was required to maintain the descent and to counteract the start of solar heating as the sun rose higher. Our ground speed increased as we descended until we were topping 50 mph at about 1,500 feet AGL. It was going to be an exciting landing, but what

on the bottom of the pile of bodies in the basket, underneath the bed which had broken loose on impact. We eventually got him untangled as he credited his Air Force POW endurance training for remaining calm.

During the short wait for the crew's arrival, we walked off the drag mark (about 150 feet) and started sorting through the gear that was scattered about. The flashlight that we thought had gone overboard was found nicely nestled in the open food bag. The remaining sandbags were emptied.

At some point, a concerned local rancher arrived. He had
 watched the landing and was relieved that no trip to the Emergency Room would be necessary. Thanks to Ray and Sue Palmer, Anita Eichhorn, Bobbie Tuley, and Kim Vesely for getting up at 3:00 am to drive from Albuquerque to Oklahoma to bring us back.

The map on the second page shows our flight track (the closely spaced dots) as well as our return drive (the more widely spaced dots) and it may be noted that while heading southwest, about 5 miles outside of Dalhart, TX we were forced to backtrack to the northeast due to a serious accident with fatalities. So while the flight took about 14 hours, the return trip, including a stop for a leisurely dinner, took about eleven hours.

As with just about every gas flight I have ever been on, there were a few minor inconveniences, but I would do it all again and I think Ken and Dave would also - they have to - then need one more flight to get their 'airborne heater' restriction removed from their pilots' certificates! Flight number 51 for me and number 1 for Dave and Ken complete and in our respective logbooks. Perhaps we'll get it perfect on the next one!


Top photo: Post landing pack up with (from L) Sue Palmer, Ken Tuley, Peter Cuneo and Ray Palmer.

Bottom photo: This photo does not depict what is really happening. The truck on the right is backing up to get out of the stalled vehicles on the left due to an accident that stopped all movement for hours.


Altitude, VSI (vertical speed indicator, temperature chart from the Flytec.

## A 6,000 Hour Pilot's Viewpoint - David

## Eichhorn

There I was...back in my element. It was my first gas balloon flight on the $28^{\text {th }}$ of February 2020 and I was back flying on instruments....

I have over 6,000 hours flying jet aircraft for the US Air Force. I've flown over 47 different kinds of aircraft from gliders to the F-104 Starfighter.


And I thoroughly enjoy flying balloons. It's so different, challenging, and inspiring.

Floating where I once raced...but racing along at the high Mach numbers was almost always done on instruments or, at least, to exacting standards. So instruments
were my lifeblood; altitude and airspeed. Airspeed was life. Now, as you know, I float along at zero airspeed.

We took off from Fiesta Field just before sunset. There was at most a quarter moon that we lost in just three hours. It got very dark and the Sandia Crest looked very close. Were we high enough? Were we headed toward the mountain into high terrain or were we going to fly to the northeast paralleling the ridge at just seven miles per hour?

Instruments. Our altitude was below the ridge so the direction of travel was critical. We were headed 050 degrees, which is parallel to the ridge. Sure didn't seem like it. That tall mountain looked very close and the basket had turned, so which way were we headed? Oh yeah, 050 degrees, parallel to the ridge. We were headed toward Placitas. VFR at night. Moving slowly at the whim of the wind.

I was back in my element. Trust your instruments. Every IFR pilot knows how your eyes and inner ear can fool you. So trust your instruments. We were at 8,000 feet MSL heading 050 degrees. Well, unless we descended a bit, then we were headed due north but the dirt was uncomfortably close in the dark if we descended so we threw over some
sand and maintained altitude and a good direction at 8,000 feet MSL. Keep the cross-check going. VSI is starting to show a descent, throw another scoop of sand. The direction is holding steady. Lights on the horizon are obscured to the right; let's avoid that direction for now. Ground speed still 7 mph . We were getting nowhere fast but moving around Sandia Crest, not toward it.

The VFR chart was my friend. On Victor 611, the IFR route from ABQ to Santa Fe, the minimum altitude is 9,000 feet MSL but that also ensures NAVAID reception. We didn't need NAVAIDS. But veer a bit to the right and the minimum altitude increases to 13,000 feet. MSL We were safe at 8,000 feet MSL as long as we were heading toward Placitas.

Once around the ridge, it hung close because it is big, it is dark and we were barely moving away from it. All seasoned pilots know noises are louder at night and the mountains all look bigger. So knowing the terrain from the VFR chart and knowing my instruments, in this case, the altimeter and compass, we safely navigated around the huge ridge and climbed to 10,000 feet MSL and headed to Texas. Where we hung a left turn and landed by Guymon, Oklahoma at 30 mph . A rip out landing just like a hot air balloon. An exciting end to an exhilarating flight.

## Another Perspective: Ken Tuley

I've been around balloons for about 40 years now. Mostly hot air, but I've done a fair amount of helping set up and launch gas balloons. I still remember the first time it was "down one diamond" on the old Benihana netted balloon. Of course, more recently I've helped Peter and his regular flying partner and wife Barbara Fricke launch the quick fill Padelt version. In my "working" life, I've spent a lot of time talking and introducing others to the sport of ballooning, both hot air and gas. All my gas knowledge was second hand from interviewing and talking with folks who have been there. But now I get to experience it first-hand and what an experience it was.

The balloon system setup for this flight seemed to move at a fast pace. In fact, we launched about an hour before our predicted launch time. We didn't even have time to send someone to pick up the traditional Subway sand-
wiches for a midnight snack. Before I knew it, we were weighing off and about to be airborne.

When the crew did let us go, the ascent was so different than in a hot air balloon. I thought the ascent would be like a hot air balloon. Instead, we just started floating. Quicker than I normally do in a hot air balloon, and of course without the burner noise. Just quiet, quick, and even ascent. And of course the view. Being a hot air pilot, when the sun is setting I'm wanting to be on the ground and now we're just getting airborne.

Peter talked us through the initial ballasting, with Dave near the hopper to dump the scoops of sand. It wasn't long though that Dave took over the flying decisions while I got to dump the sand. It was a little comical... Peter-"We should probably ballast." Dave-"One scoop please." Ken-"One scoop dumped." It didn't take long for Peter to be out of the loop in this scenario.

As we started making the turn around the north end of the Sandias, I texted a friend of mine who lives in Placitas, and who knows of my ballooning life, that we were headed her way. After a few back and forth texts to better describe our location, she texted she had us spotted. She even texted the picture up to us. See the picture below with the moon and our balloon.


At our slow pace of seven knots or so, it took a while, but we eventually flew right over her house. They are flashing their porch lights; we're shining a flashlight down at them. As we passed over Placitas, the lights of Albuquerque began to disappear behind the mountain
and the lights on the ground below became sparse to match the housing density. It wasn't too much later that the moon set and it became dark...and cold! Dave continued to fly, evening doing his own ballasting. As our conversations waned, I managed a little nap. When I woke up, it took a few minutes to get oriented. Those lights are Las Vegas, we're going in this direction, etc.

Then it was time to switch pilots. I was now in command of the aircraft. Watching the GPS, verifying altitude change with the Flytec, and ballasting as needed to keep us at an altitude moving east. This is a different experience for me. While flying hot air balloons, I refer to my instruments to verify what I'm seeing and experiencing. In the darkness, I have no reference points, other than the instruments. Peter drifts in and out of sleep. Dave is definitely napping. It's so quiet, so dark and because I'm just sitting, it's getting colder. Oh, and did I mention that our speed started picking up. A couple of hours before sunrise, my flight partners woke up and we started looking for that first hint of light from the sun. We caught up on our plotting and started projecting where and what might happen when the sun did come up.


At last, the sun did come up and it immediately started to warm up. Although it was probably because we started moving around in the basket.

Sunrise was beautiful and we started seeing more lights on the ground of northwest Texas. We really had picked up some speed and distance overnight. We dialed in AWOS for Dalhart, TX and the ground winds weren't too bad, at least not at the first report. Later reports would show the increase in ground winds. While we considered landing near Dalhart, we thought that we could fly a little longer, let the sun
get a little higher in the sky, and hopefully still get on the ground before the predicted high winds actually appeared. So we flew right over Dalhart's airport, heard and saw a little private plane take off beneath us. Don't remember hearing him on the aircraft radio though.


We were barely past Dalhart when we couldn't seem to hold the easterly course and got a shift to the northeast. So next up on the map, Guymon, OK. My wife has relatives there, so I text her and tell her to alert the family, we're coming in! By this time, we're doing more valving than ballasting and our speed is picking up. We drop down...the speed picks up. We go back up...the speed picks up. We're clicking along at about 48 mph . We joke about can we make 50 . It doesn't take long before we hit 50 . But at a few thousand feet AGL, it doesn't seem that fast. Even though I know we're part of the wind in a balloon, I still think that going 50 mph would feel like I'm moving.

So we're approaching Guymon and looking for a landing site. Lots of wide-open spaces and we actually have a little more east direction so we're going to
miss the town and end up a little outside of town. We talk through the landing. Valving, dropping the trail rope, opening the deflation ports, staying in the basket, etc. I'm in text communication with the crew. They are not too far away, the Guymon relatives actually see us in the air and are out chasing us. The crew confirms the ground winds where they are, and at the Guymon Airport are fast and gusty.

We pick the landing spot. Lots of space, no trees, plenty of room for a high wind landing. I'm on the trail rope. I go to open the quick release only to find it had managed to get snarled. I try to get it open, while Dave and Peter are managing the rest. Then I hear Peter say, "Hold on", we're landing here, "PULL". I'm facing the direction we've been, not the direction of flight, so I don't see the ground coming, and then boom, we're on the ground and dragging. For a 28 mph landing, we didn't seem to drag too far, and the ground contact was hard, but not that bad.

I think I was on the top of the pile of bodies, that's what happens when you're in the back of the basket when you land in high wind. As we can to a stop, the basket tries to dog house over us. I'm able to reach up and keep it from coming down on top of us. We later discovered that with the trail rope, still in its pouch, had flipped over the edge of the basket and was pulling the basket over on us. We manage to untangle ourselves and crawl out of the basket. Everyone is ok. We text the crew that we're down, safe and sound. We call the home base back in ABQ to relay the same message. Everyone's relieved because they were all watching the wind speeds, reported in the low 20 s gusting to 30 or more. The crew is about 30 minutes away.

Ok, now the work begins. We begin to pick up the stuff that we obviously hadn't secured well enough while still in flight. A local shows up. He tells us he watched our ap-


Packing up with Ken's relatives in Oklahoma.
proach and landing. He was surprised to find where we're from, but more surprised that we survived the landing. Then another truck appears. It's the manager of the land we're on. He's thrilled we're there. Just make sure you close the gate when you leave.

Shortly after that, the relatives show up. They had been watching us make our final descent, but made a wrong road choice when trying to get to us. Rookies! But it was good to see them and we, of course, put them to work packing up the envelope.

About the time the envelope was all rolled up, the rest of the crew arrived. We finished packing up, all the while relating the tales of the flight and landing.

Then it's off to brunch in Guymon and home. But as Peter mentioned, even that was an adventure due to road closures and having to not only backtrack but take the long road home.

I can't wait to do it again. Yes, to get the airborne heater restriction removed from my certificate, but I'd like to spend more time in the air during the daytime. Of the 14 hour flight, only about two hours was in sunlight. I'd like to shoot a few landings; hopefully, standup ones and just enjoy seeing the countryside from a gas balloon.
Thanks to Peter and Barbara for the opportunity to fly your balloon. Thanks to the crew who chased us, including my wife Bobbie, who puts up with all my ballooning adventures.

# The Kitty Hawk Flight 

## By Peter Cuneo

Forty years ago, in the midnight hour of Thursday, May 8, 1980 at 12:32am PDT, the balloon Kitty Hawk (N80KH- selected for the year of the flight 1980 and the initials of its name, Kitty Hawk) launched from the west coast of the United States. It lifted off from the parade grounds of Fort Baker, within sight of the Golden Gate Bridge and within a hundred yards of the San Francisco Bay shore. The flight would eventually be documented with a front page article in the New York Times (13 May, 1980) and an exclusive article in the August 1980 issue of National Geographic. The balloon had two souls on board: Max Anderson and his 23 year old son, Kris Anderson. Perhaps the best description of the whole project is given in Jim Mitchell's book. (ref. 4)

At launch, the 75 foot high, 200,000 cubic foot volume poly balloon weighed in at 9,000 pounds. The team would land 99 hours and 54 minutes and 2,817 great circle miles (more than 3,100 miles on the odometer) later on Monday, May 12, 1980 at 7:26am EDT at Sainte Félicité, Canada. This placed the balloon on the Gaspé Peninsula where the St. Lawrence River empties into the Gulf of St. Lawrence, on the east coast of Canada. Maximum altitude during the flight was $27,700 \mathrm{ft}$. MSL, maximum speed exceeded 85 miles per hour and minimum temperature was $-30^{\circ} \mathrm{F}$. Though the landing site was a thousand miles north of the intended destination after which the balloon was named, Kitty Hawk, North Carolina, the team still could claim the honor of competing the first non-stop, transcontinental balloon flight across North America and the longest overland flight ever for any balloon.

The envelope was built by Raven Industries of Sioux Falls, SD and the custom gondola was designed by Rich Schwoebel of Sandia National Laboratories in Albuquerque, NM. Albuquerque was also home to the Anderson family where Max was already famous for his trans-Atlantic flight with Ben Abruzzo and Larry Newman in the balloon Double Eagle II. Max and Ben had had a falling out over which of the two should get prime credit for the trans-Atlantic flight. Ben had written the exclusive National Geographic article on the flight and portrayed himself as the group's leader while Max claimed, probably correctly, to have been the one who originally conceived the idea of a trans-Atlantic flight. (ref. 7, Chapter 1)

The Kitty Hawk flight was originally conceived as a test flight for a later trans-Pacific attempt that Max planned to fly solo. Max was secretive about his plans both for the trans-continental flight and for the later fight across the ocean because he feared that his ex-partners, Ben Abruzzo and Larry Newman would plan similar flights and get the jump on
him. This was a real possibility as another team, led by Vera Simons had, in November of 1979, made the national news with a failed attempt of their own trans-continental flight in the balloon Da Vinci. Max even went so far as let it be known that he had paid the $\$ 2,500$ entrance fee to participate on the 1980 Gordon Bennett competition though he had no intention of flying in it. The Gordon Bennett was scheduled to launch from Fountain Valley, CA, near Los Angeles on April 26th, a total conflict with his real flight plans.

The envelope, gondola and flight team were all in California for a successful practice launch that occurred on Friday, April 11th ... and then the waiting began. Bob Rice, the project's chief meteorologist and owner of Weather Services, Inc. of Bedford, Massachusetts, had hoped for an early April launch, fearing that it would be necessary to move the launch site further north if the launch slipped into May. On April 22, while the team was waiting to launch, Abruzzo and Newman announced that they had entered the same Gordon Bennett competition that Max had feigned an interest in.

Abruzzo's team's secret agenda was to break the competition's existing distance record of 1,500 miles and to continue on across the continent using this as their own trans-continental attempt. They did stay aloft the longest ( 75 hours), flying 129 miles in their poly balloon, Double Eagle IV (N57135) but finished only in 6th place behind winners Jerry Tepper and John Meyers who covered 538 miles.

To complicate the strategy further, both competing teams claimed the loyalty of Bob Rice, who had been their meteorologist when they were on friendlier terms during the Double Eagle II flight. This put Bob in a very delicate position, not wanting to alienate either Abruzzo or Anderson.

After several weather aborts all throughout the month of April, Rice identified a late developing cold front on track to move eastward across the area on Wednesday, May $7^{\text {th }}$. He told the Andersons to get airborne on Wednesday evening, just behind the front to be sucked eastward toward their goal of Kitty Hawk, NC.

Around 10:30 pm, after drainage winds had subsided a bit, launch director, "Doc" Wiley, already experienced from playing a similar role in
the Double Eagle II flight, started the flow of helium to fill the envelope. The inflation went smoothly, with help from a ground crew that included members of a fraternity at San Jose State University. The inflated balloon waited calmly, glistening majestically on the launch field, illuminated by many lights against a dark night sky.

A clear sky and a moonless night greeted the pilots as they took to the air. In close order, a light plane took off from nearby Oakland Airport, piloted by Torin Brown. The two aircrafts met up at sunrise the next morning over the San Joaquim Valley and several rolls of film (no digital cameras in 1980) documented the balloon flight over a solid cloud deck.


After Brown landed and refueled, he was able to rejoin the balloon for some spectacular photos over the Sierra Nevada Mountains.

The balloon initially tracked rapidly eastward across California and into southern Nevada, but just before leaving Utah, it turned north and then veered north east through Utah, crossing into southwestern Wyoming exactly at the triple intersection point of Utah, Colorado and Wyoming. By the second morning of the flight the aircraft was flying more slowly over Wyoming at 18,000 ft. MSL. With the windows of the cabin open to the balmy $45^{\circ}$ $F$ temperature Max and Kris were about to encounter the most treacherous weather of the entire flight. Meteorologist Bob Rice is quoted in Ballooning (ref. 1, p. 38):
"Max and I have talked a lot about thunderstorms
....Theory says you will have certain performance around thunderstorms, and practice has proved it. The Kitty Hawk's envelope, as tall as it is, acts like a hard vertical column in the weather, and this becomes a factor in the performance of the balloon near a thunderstorm....Max flew it so well. We asked him for a specific altitude and he would give us that altitude."

Weather again caused problems in the form of a squall line over Milwaukee, Wisconsin, but again the team survived to fly on. Over Lake Michigan, a crisis of another type overtook the pair as described by Max Anderson (ref. 2, p. 267):
"My one encounter with canned ham nearly terminated the flight. The heavy food produced such indigestion and weakness that Kris considered landing to save my life. 'I would have done it,' Kris recalls, 'but we were over Lake Michigan, we were traveling at 85 miles an hour, and it was the dead of night. I decided dad had a better chance staying aloft.' Reached by radiotelephone in Albuquerque, a doctor friend prescribed $100 \%$ oxygen and a digestive aid and the crisis passed."

Another meteorologist on the team evaluated Kris's performance as of very high quality. (ref. 1, p. 38 )
"Kris was impressive. He learned fast, and


nice heater." It later turned out that the heater wouldn't light and the drinking water froze up.

The flight continued eastward over Lake Huron, into Canada and on to Quebec before returning to the U.S. at the northern tip of the state of Maine. In the final night of the flight, the track turned north and again entered Canada. Ample ballast still remained on board in the form both of sand and of a liquid mix of water and anti-freeze. However, as the track continued to turn more to the north, the ground team was worried that the track was heading toward uncharted parts of northeastern Canada. The decision was made in the gondola to aim for a nighttime landing at Loring Air Force Base in far northeastern Maine, near the border with New Brunswick, Canada.

Again referring to Jim Mitchell's excellent text (ref.4, p. 39):

At 10:20pm, it [the Kitty Hawk] was two miles south of Eagle Lake, making about 35 mph at 24,000 feet and heading just about due east. Max and Kris began a descent shortly, and at 10:40 were at 21,700 feet and 10 minutes later were at 20,600. At 10:55 they were 8 miles from Loring AFB and down to 18,100 feet. Loring had become the prime landing target, and at 11:15 the balloon was three and a half miles westsouthwest of the Base at 13,700 feet. The balloon continued to descend but at 11:32 Rice announced that it had overshot the Base and was still at 10,000 feet. It was not clear where Max and Kris planned to land thereafter, but they continued to descend at about 300 feet a minute, and at 11:45 were at 7,100 feet over the U.S./Canadian border. At 11:47, they were at 6,000 feet, and had their landing lights on
and were forecasting touchdown in 15 to 20 minutes. At 12:06, they were four miles inside New Brunswick at 4,400 feet. Loring radar was giving excellent fixes, reporting that at 12:12 the balloon was at 3,200 feet, at 12:20, 2,700 feet and at 12:25, at 1,200 feet. The balloon came down farther, but never landed, and at 12:30 was back at 2,500 feet.

Kris said later that "once we got on the deck wind speeds were 10 knots. It was pitch black and we couldn't see a thing. It was one of the worst ... [parts of the trip]." The winds carried the balloon almost straight north, short circuiting any plans to land in the Gulf of the St. Lawrence. It was not clear at the tracking center just what had happened to the balloon ... Most of us -Rice, Serna, and myself - spent the night at the tracking center.

As the balloonists continued to drift north after the aborted night time landing attempt, one worry now was that they would land in the waters of the Bay. Just after sunrise, with the balloon at 7,000 feet, a descent was initiated through a solid cloud deck with a floor of $3,000 \mathrm{ft}$. The balloon continued to descend, with the pilots now able to see ground features, searching for an open landing field. They settled down close to, but not yet on the ground against a ridge, the trail ropes entangled in trees and kept the balloon in the air. A Canadian Air/Sea rescue helicopter was able to use its rotor wash to blow the balloon out of the trees and move it to a more open area. The balloon was


The Kitty Hawk settles into a clearing near the town of Grosses Roches at the end of its transcontinental flight. Photo: WWP Overleaf: The Kitty Hawk over California's Sierra Nevada mountain range. Photo '1980 Bill Vandouris.
equipped with an explosive squib which was fired to separate the envelope from the gondola as it hung a few feet above the ground. The pilots were exhausted but uninjured and though the landing site was remote, it was soon overrun by press.

Post-flight festivities included a speech by Max at the museum at Kitty Hawk, NC, the original intended landing site, to more than 100 people; appearances on Good Morning America and the Tonight Show with Johnny Carson and finally a gala party back in Albuquerque.

Although some balloonists, Ben Abruzzo and Larry Newman in particular, questioned whether the landing location qualified this flight as a true trans-continental flight, the National Aeronautic Association did sanction the flight. The NAA used the criteria that the team had seen the waters of the Pacific Ocean on launch and had done the same for the Atlantic Ocean on landing. Soon, dual congratulatory letters arrived, addressed to Max and Kris from U.S. President Jimmy Carter, signifying that he very much appreciated the effort the two had made to complete the flight.

The Andersons never did cross the Pacific in a balloon and Ben Abruzzo and Larry Newman stopped talking about completing a "true" transcontinental flight, instead turning their attention back to the Pacific. Ben, Larry, Rocky Aoki and Ron Clark did complete a trans-Pacific flight from November 9-12, 1981 in the balloon Double Eagle V. (ref. 5 \& 6)

Fort Baker is now an historic site within Golden

Gate Park, while Loring Air Force Base was closed in 1994, but lives on now as Loring International Airport.

Max Anderson, Bob Rice, Rich Schwoebel and "Doc" Wiley are all gone now, but their contributions to this memorable flight live on. Kris Anderson is alive and well, still living in Albuquerque.

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Photo credits:
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Over Sierra Nevadas - Dean Conger
In gondola - Max Anderson


> A NOVEL BALLOON ASCENT
> From Scientific American
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> New York, July 25, 1874

The French nation has long been foremost in aerial navigation. Pilâtre de Rozier became famous as the first who ventured to ascend in a fire balloon, the invention of the renowned Montgolfier. This was on October 15, 1783, a few animals having previously been sent up, which safely returned to earth. Soon after, Pilâtre again went up, taking with him the Marquis d'Arlandes; and gradually it became so fashionable to take a trip into the higher regions that many persons fell victims to the aerial fever. Pilâtre himself lost his life, being precipitated into the channel in attempting to cross. It is to him that the idea of using balloons for war purposes is to be ascribed, as on his suggestion the Convention authorized the formation of a company of Aerostiers, who were employed in reconnoitering the enemy. Two officers made the observations, and communicated with earth by means of flags, or by messages written on paper and weighted to prevent their being lost. The last experiments of this kind were made in Algiers, in 1830, but with so little success that the company was dissolved.


Aerial navigation, however, assumed great prominence again in the late war, especially, as we have often described in these columns, during the siege of Paris. It was in this excellent school for aeronauts that Theodore Sivel, one of whose remarkable ascents forms the subject of our illustration, was educated. He traveled after the close of the war, with his beautiful balloon Koloss, in Sweden and Denmark, and then in Germany. His mother-in-law, Madame Poitevin, a well known aeronaut, was probably his instructress. The ease and elegance of Sivel's balloon in ascending created a general sensation.

In Leipsic (in the fall of 1973) he was descending rapidly, with five other voyagers; and seeing a great danger, he boldly discharged the gas at once (by a suitable mechanism for slitting up the balloon), after the anchor had taken hold, and obtained thereby full control over the empty balloon, without any loss or accident. His most remarkable ascent, however, was made on May 20,

1874, from Leipsic, when he ascended with five balloons, fastened together, which was, as he himself stated, "the grandest experiment ever undertaken in this line." This ascent is the subject of our picture. Around the main balloon, Europa, were secured the four smaller ones, named Asia, Africa, America, and Australia. The strong wind carried the balloons, which turned playfully around on their axes, in a westerly direction; and they were visible at an elevation of 9,000 feet, as their great bulk made them very obvious at that height. At about 7 o'clock Sivel detached the smaller balloons, and succeeded in drawing them down to the basket and hooking them thereto. He then opened their valves simultaneously, and descended, safely and majestically, to the earth near the railroad station at Dürrenberg. A few days after this ascent a double ascent was undertaken, Sivel rising in the before mentioned Koloss, and Madame Poitevin traveling in the balloon Zenith, making an almost unique display in aeronautics.

## Gas on the WEB

Pinterest Group
https://www.pinterest.com/debrafide/the-aeronauts-balloonist-of-the-victorian-and-edwa/

Great article on Dewey Reinhard
https://gazette.com/life/dewey-reinhard-colorado-springs-father-in-ballooning-reflects-on-audacious/ article b20d261a-655e-11ea-858f-17aefc471b72.html

Archives of Tony Fairbanks
https://www.tonyfairbanks.org/

New Hydrogen source ?
https://www.abqjournal.com/1459257/revolutionary-mobile-hydrogen-plants-made-in-nm-hit-themarket.html

## Gordon Bennett Information



The Gordon Bennett for 2020 has been postponed until 2021. Poland will host the competition in 2021 and Switzerland will host the Gordon Bennett in 2022.

## Dear Pilots, dear Friends,

Due to the actual pandemic situation, it is difficult to foresee the duration of the actual restrictions.
Taking into consideration all problems relating to ATC, teams' travel and access for the public, we have decided to postpone this year's 64th Coupe Aéronautique Gordon Bennett FAI World Long Distance Gas BalIoon Championship until 2021 ....still in Poland!
This has been decided with the approval of both CIA and FAI, as well as Switzerland's approval in postponing the 65th Coupe Aéronautique until 2022.

We are extremely grateful for your patience and support.
The journey doesn't end and we are now focusing on organizing an excellent race next year in Wroclaw.
We are already working with the organization site, CIA and FAI.
We will come back to you, no later than by the end of September 2020 in order to give you more details.
Take care and stay safe,

## Best regards

General Manager of 64ème Coupe Aéronautique Gordon Bennett
FAI World Long Distance Gas Balloon Championship

# Chair's Column <br> by Barbara Fricke <br> Chair of BFA's Gas Balloon Division 



The Gas Balloon Division Board has been asked by the BFA Board to rework the division's Bylaws. The current Gas Balloon Division Bylaws were last amended March 1, 1990. So it is probably time for some work on them. The BFA Board asked that we align our Bylaws with the BFA Bylaws, which are also being reworked and the BFA hopes to have their changes to the membership for voting this coming summer along with the elections. The Gas Division Board is working hard, but I doubt that our Bylaws will be ready for voting until sometime in the fall. In doing the rewrite, as of now, we are referring to the division as the Gas Balloon Division instead of just the Gas Division. Not a big deal, but the old Bylaws has it one way here, and another way there, so we are trying to be consistent. This is not something I like doing, but your Board members are putting in extra effort to get it done.

Speaking of elections, the time for BFA's elections and therefore elections for members to serve on the Gas Balloon Division Board are upon
us. I have appointed Bert Padelt and Peter Cuneo to the nomination committee for the Gas Division and they are working to secure members to run for the Board. The two directors on the Board whose terms are expiring are running again. Be sure and vote when your ballot comes this summer.

I was not surprised by the postponement of the Gordon Bennett competition out of Poland due to the uncertainties of our time and the present of the COVID-19 virus. Since the Board had already decided to have the 2020 America's Challenge be the qualifier for the 2021 Gordon Bennett, the Board will now have to decide what to do about the postponement and those who were qualified for the 2020 GB. Expect a email about this in the future.

## HISTORY TRIVIA:

Here is some interesting history about the Indianapolis Motor Speedway, originally designed and built in the early 20th century as a test track for the fledgling automotive industry. The first race at the facility didn't involve cars. Instead, helium gas balloons took off from the track in June 1909. Hence the pre-race release of thousands of helium balloons for many years. The winner in the 1909 race landed in Alabama. Cars didn't compete in an organized race at the speedway until 1911.

## GAS DIVISION OFFICERS \& DIRECTORS

## CHAIR

Barbara Fricke-term expires 2022 barbarafricke@msn.com VICE-CHAIRMAN
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