



Julia Bayly photo

# THE AUDACITY TO DREAM

IT BEGAN WITH DON CAMERON, WHO A DOZEN YEARS AGO HAD THE VISION OF RACING ROZIER BALLOONS ACROSS THE ATLANTIC. THIS SEPTEMBER, CAMERON'S DREAM BECAME A REALITY, FOR THE BRITISH MANUFACTURER AND FIVE TEAMS FROM AROUND THE WORLD.

BY RUTH P. LUDWIG

**"THE REAL WINNERS OF THIS RACE," SAID BERTRAND PICCARD, "WILL BE THE ORGANIZERS, WHEN EVERYONE HAS LANDED SAFELY ON THE OTHER SIDE." WITH THAT, THE BELGIAN**

team lifted off into the pre-dawn Maine mist. Twenty three minutes later, four more identical Cameron rozieres had followed into the darkness. The Chrysler Transatlantic Challenge had begun.

As G-BUFE, balloon number five piloted by Richard Abruzzo and Troy Bradley, left the Bangor racetrack, thousands of spectators offered a cheer that must have been heard by Europeans waiting for them on the other side.

Abruzzo and Bradley, both New Mexicans with a deeply ingrained love of the sport, had decided that, while they wanted to win the race, their ultimate goal would be to go for the alternate contest, the team to make the longest flight.

They were after a record—that set by Abruzzo's father, Ben, when he and his teammates Maxie Anderson and

Larry Newman were the first to cross the Atlantic by balloon in 1978. The elder Abruzzo's absolute endurance record of 137 hours, 5 minutes, 30 seconds still stood. Richard and Troy wanted to be the ones to break it.

## *History of the event*

Back in 1981, when Don Cameron and Alan Noble approached Ben Abruzzo and Maxie Anderson with the idea of a transatlantic race, they received a lot of encouragement from the team which had beat them across the sea. Cameron had attempted the crossing in a rozier balloon of his own construction, only to be forced down just shy of the coast of France.

As the British pilots talked about the idea with other aeronauts, they were met with enthusiastic support. No one,

then, was surprised at the race becoming a reality, only that it took so long.

In July of 1991, Cameron Balloons sent a notice to *Ballooning* to announce the race, and to invite U.S. pilots to enter.

## *In search of sponsors*

Cameron and Noble wanted to race ten identical balloons across the Atlantic. All would be built by Cameron Balloons, Ltd. of Bristol, England. Pilots would find their own sponsors, to the tune of approximately £125,000 each. American balloonists, with others around the world, went to work searching for sponsors. With the exchange rate, the tariff was high—about \$250,000.

Dozens of pilots wanted to make the trip, but few were able to entice corporations to even consider the idea, and none came up with the requisite funds.

It became clear to the British officials that sponsorship by individual teams would be a problem. Then Chrysler Europe

entered the picture. Noble won't divulge the total financial support, but the company provided the bulk of the sponsorship for all teams.

"It was a turn key operation," says Noble. "All the expenses, travel, lodging, training and balloons were provided for each three-person team."

## *The equipment*

One reason it took eleven years to put the race together was the development of modern rozier equipment.

Pilâtre de Rozier, for whom the balloon is named, developed the equipment in 1785. After Rozier's death (he used hydrogen for the gas sphere, an explosive combination with the fire below), the concept remained largely dormant until Cameron began working with the concept in 1978. He used scaled-down models of his hot air balloon burners to heat the air in a long cone attached to the gas cell at the equator, and flew the prototype across the Atlantic.





Ruth P. Ludwig photo

*At left, the five balloons await launch at Bass Park in Bangor, Maine.*

*Above, a chile ristra, presented by the Governor of New Mexico, hangs outside the Americans' gondola for luck.*

*At right, Don Cameron catches a snooze aboard the British gondola. Quarters were tight.*

Rob Bayly photo



Cameron made several long distance flights to test his creations, including the aborted transatlantic flight and a successful flight into Russia. (*Ballooning*, Spring, 1991)

Roziere flight slowly began to catch on. Jacques Soukup and Don Cameron made several flights to establish, then break world records for the new FAI AM class.

In 1990, Soukup and Kirk Thomas hosted the first World Roziere Balloon Championship in Tyndall, South Dakota. (*Ballooning*, Winter, 1990-91)

Four balloons entered the race, two built by Cameron and two homebuilts. Nick Saum, flying his own creation, easily won the competition. He then went on to set numerous world Roziere records, which still stand today.

The balloons in the Chrysler race combined an envelope very similar to that which Cameron had used, with a capsule capable of sustaining the pilots should a water landing be required.

Navigation and communication were via satellite. Global Positioning Systems would give the location of the craft to within a few feet, and radios included long range HF, air-band VHF, air traffic control radar transponders with encoding altimeter, and even a fax machine to receive up-to-the-minute weather and instructions from race headquarters in Rotterdam.

#### *Chrysler's role*

As major sponsor, Chrysler would participate in several aspects of the flight planning.

One of these was to help make the final determinations as to teams. From those pilots who had forwarded resumes and interest to Cameron, and who had survived that company's rigorous screening process, Chrysler selected their preferred final pilots and alternates.

In the case of the Americans, it was Richard Abruzzo and Troy Bradley, with Dave Melton

as reserve pilot and crew chief. All three had gas as well as hot air balloon experience, Bradley and Melton having built and flown their own NH<sub>3</sub> balloons. Bradley also has significant experience in helium and hydrogen balloons.

"Ever since I was 15," says Abruzzo, "it's been a dream of mine to cross the ocean or do some other long distance flight."

Like Bradley, he had been out looking for sponsorships before Chrysler entered the picture.

"I've been doing nothing but playing my whole life," laughs full time pilot Troy Bradley. "Although I have to say it can get pretty exciting during some of the windy tethers we have to do."

Dave Melton earned his private ticket in 1989. Living and flying in Espanola, New Mexico, he has taken an active interest in ammonia ballooning.

After serving as crew chief and reserve pilot this year, and going through the same training as the other pilots, Melton hopes to be

on board one of the balloons in the next transatlantic race.

#### *Preparations*

The training effort to prepare the teams for the Chrysler Transatlantic Challenge was immense.

Since so few of the pilots had roziere experience, and many were not even gas balloon pilots, the first order of the day was instruction in flying the combination systems.

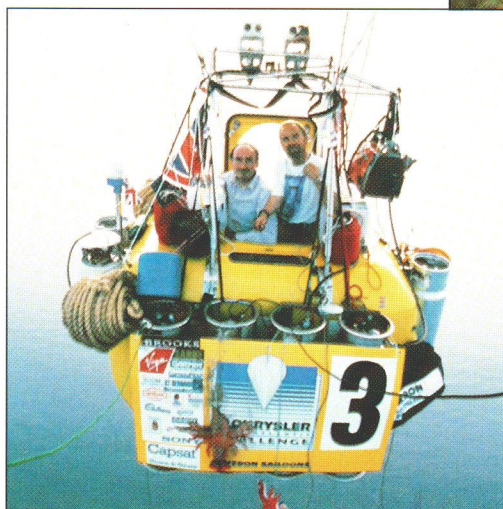
Jacques Soukup and Kirk Thomas generously offered their South Dakota property and roziere balloon for the effort. Nick Saum brought his own roziere, and the five teams spent five days in South Dakota becoming accustomed to the way the systems handled.

But flight was not the only training required. What would happen if the pilots should be required to ditch at sea?

And what about all that navigation and communication equipment? Parachute training? Operating a bilge pump?



Rob Bayly photos



*After a flight whose worst moment was an unexpected sonic boom, Don Cameron and Rob Bayly crashed through the waves to make a perfect landing on the beach in Portugal. GPS helped them find their way down through the clouds.*

## THE TEAMS

*After flying with his famous father for many years, Richard Abruzzo, now 29, says he finally decided to "do the paperwork" to get his license in 1988. He lives in Santa Fe, where he is the Director of Racing and Special Events for the Santa Fe Ski Company. Abruzzo flies the Peak Express, a logoed balloon, for the Sandia Peak Ski Area/Tramway and Santa Fe Ski Area.*

*Troy Bradley, 28, is a full time professional pilot for World Balloon Corporation in Albuquerque. Those who attend festivals regularly have often seen Troy flying the black Breyer's Ice Cream balloon, as well as the new ammonia craft.*

*The most experienced team making the trip was the British contingent of Don Cameron and Rob Bayly. Cameron, the builder of the aerostats, has accumulated half a dozen flights and about 250 hours in rozieres. Bayly is a television producer in London who competes regularly in the Great British Long Jump and other competitions.*

*If speed were to be the criteria, one would have expected Jochen Mass of Germany to win hands down. Mass is a Formula 1, 2, and 3 race car driver, and has won many prestigious European championships. Mass and the other German pilot, Erich Krafft, participated in the Trans Australia challenge in 1988. Krafft is a highly experienced aeronaut, and has run a full-time balloon advertising company in Germany since 1979.*

*Flying for the Netherlands were Evert Louwman and Gerhard Hoogeslag. Louwman had already tried crossing the Atlantic once, launching from St. John's, Newfoundland in 1985. He was forced to ditch in the middle of the crossing. Unfortunately, he still wouldn't complete the trip, landing his Chrysler balloon in the English Channel. Hoogeslag earned his balloon and airship license in 1985. He works for Ad Air in Oostmarsum developing air supported structures.*

*The Belgian team, winner of the race, was made up of Wim Verstraeten and Bertrand Piccard. Verstraeten has over 1,500 flights to his credit, including the first balloon flight over Mount Kilimanjaro. He has flown in Russia, South Africa, Kenya, the U.S.A. and Tanzania. Bertrand Piccard comes from a long line of accomplished aeronauts. His grandfather, professor August Piccard, invented the Bathyscaphe, which reached an altitude of 50,000 ft. Bertrand is an experienced hang-glider pilot, former European aerobatic champion and world altitude record holder.*

Abruzzo and Bradley were concerned about the effects of high altitude on their operational capabilities. The two contacted Rob Roach, a high altitude expert in Albuquerque, where they spent time in a pressure chamber, documenting behavior and physiological changes up to 20,000 feet.

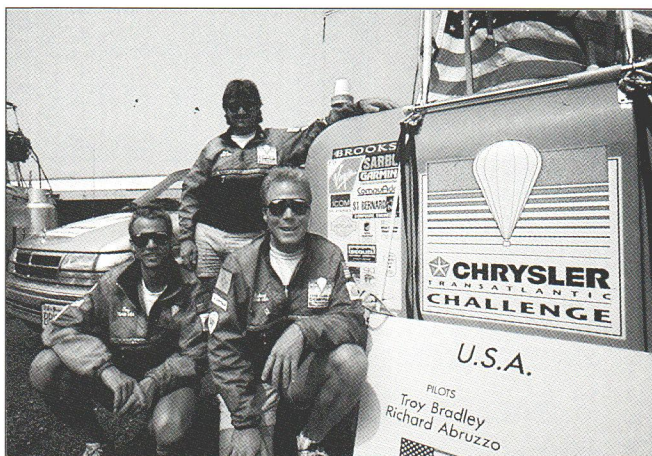
The pilots all had survival suits which would both help them float and conserve body heat in the event of a sea landing. For the Dutch pilots, these suits proved useful indeed.

The capsule/gondolas were created with submersible keels to stabilize them in the ocean, and, once in Maine, the teams took a capsule out to Bar Harbor to bob around in the waves. Earlier self-righting tests were carried out in a swimming pool.

## *Hanging out in Bangor*

The teams began to arrive in Bangor August 16. Noble and his staff set up temporary headquarters at the downtown Holiday Inn, not knowing whether they'd be there for one week or six.

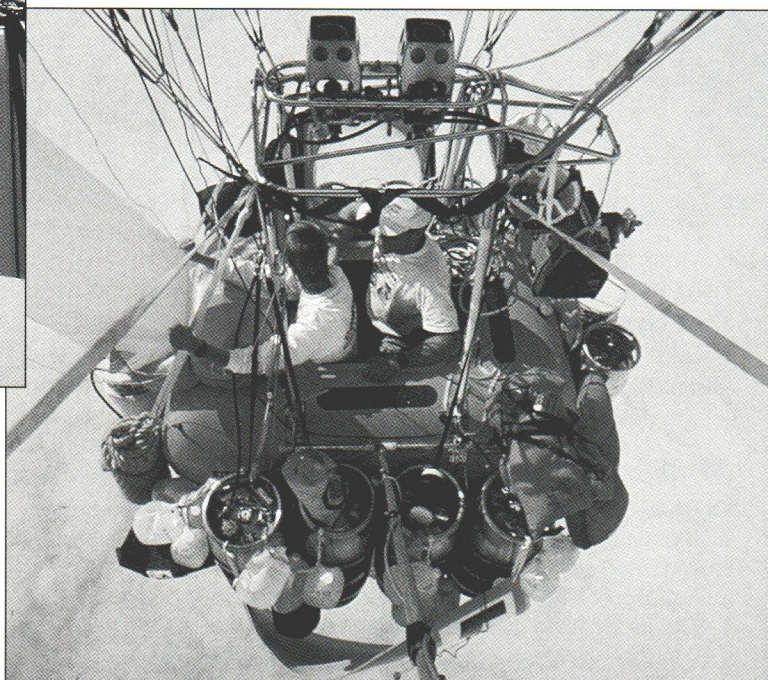




Jennifer Rawles photo

*The American team, above, of Troy Bradley, David Melton and Richard Abruzzo.*

*At right, Bradley and Abruzzo above the clouds over the Atlantic.*



Richard Abruzzo/Troy Bradley photo

As the equipment arrived at the Bangor International Airport, the pilots and crew chiefs were kept very busy putting all the pieces together and familiarizing themselves with how it all worked.

Daily training sessions were conducted both at the hangar and at the hotel, and weather information began to stream in from the race's official headquarters in Rotterdam.

As standby's came and went, and the balloonists settled in to life during a Maine summer, the residents of Bangor provided entertainment, tour guide services, and companionship.

Nearly all the pilots traveled to Presque Isle, about a four-hour drive, to visit the monument to *Double Eagle II*.

They were treated to an old fashioned New England clam-bake, days at the rocky coast of Acadia National Park, and a softball game against Husson College, whose team members batted left-handed to give the balloonists a break.

Local hot air pilot Darald

Young kept balloons at least visible, accompanied by a hot air replica of the Chrysler balloons.

And Jochen Mass used his professional driving skills to win a scavenger hunt provided by the Bangor Chamber of Commerce.

"It was kind of scary," says Richard Abruzzo. "He did the course in 50 minutes, and it took the local guys from the chamber, who already knew the roads, an hour and a half!"

Morning briefings were held every day, and 3 standby launch windows were called and then called off before the trucks finally brought the equipment from the airport to the launch field.

#### **Honorary German**

After about two weeks in Bangor, the German's crew chief/reserve pilot, Uwe Schneider, made the difficult decision to return to Europe to participate in the European hot air balloon championships (which he won).

That left the German team without a valuable player, so they recruited one of the most experienced roziere pilots in the

world to help them out.

Nick Saum, of Golden, Colorado, arrived in Bangor to help the Germans finish their training, and to oversee their launch.

"The honorary German" sent his pilots off with a bag of tricks, which, had they not been forced down very early in the flight, would have given them quite a competitive edge.

#### **Launch**

Arriving in Bangor at 12:30 a.m. the morning of Wednesday, September 16, drivers came around the bend of the interstate to stare into the dark at five giant, elongated moons, standing completely still in a perfect line.

The final decision to fly had been given at 4:00 p.m. Tuesday, after the meteorological team in Rotterdam indicated favorable conditions.

Equipment was brought to the launch site, the infield of the race track at Bangor Auditorium's Bass Park.

Crew chiefs took charge of putting all the pieces together, while the pilots returned to the

#### **Transatlantic Firsts**

**1978** First successful Transatlantic Balloon Crossing.

*Double Eagle II*. Ben Abruzzo, Maxie Anderson, Larry Newman. Launched in Presque Isle, Maine, landed 137 hours, 5 minutes, 30 seconds later in Misery, France.

**1983** First Solo Transatlantic Crossing. Rosy O'Grady.

Joe Kittinger. Launched in Caribou, Maine, landed in Italy.

**1986** Evelyn Brink, crosses with husband, Henk, and Willem Hageman to become the first woman to make the crossing.

**1987** First Hot Air Transatlantic Crossing. Per Lindstrand and Richard Branson launched in Carabasset Valley, Maine, landed in Ireland.

**1992** First East to West crossing. Thomas Feliú and Jesús Gonzales Green, launched from the Canary Islands, landed in Venezuela.



hotel for a final nap, shower, and good hot meal.

Although access to the infield was strictly controlled, over 3,000 people made the nighttime pilgrimage to Bass Park to watch from the grandstands. They weren't disappointed.

You could reach out and touch the excitement as the five crews prepared themselves for the historic trip.

About 2:00 a.m., as the pilots arrived on the field, there were a lot of well wishes for each other, and thanks to the many people who had helped along the way.

"My mom and Tammie [Rogers, Bradley's girlfriend] were crying," says Troy Bradley, but they felt confident.

"We were worried that there would be some apprehension, but in the end, we went out with a good feeling."

Finally, at about 2:45, the launch field and grandstands became strangely quiet.

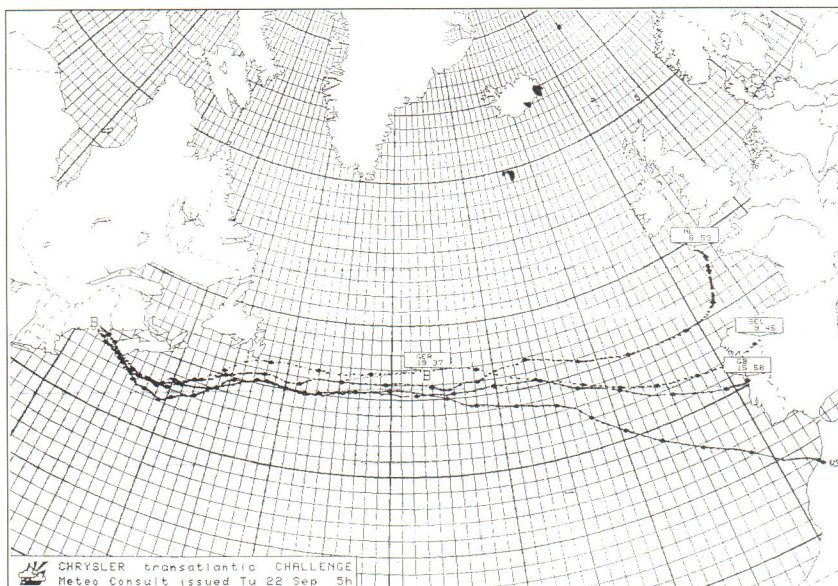
A few minutes later, Bangor Mayor Bill Cohen approached the first balloon, followed by television cameras and a microphone. He presented a key to the city to Wim Verstraeten and Bertrand Piccard, and offered Piccard the microphone for words of farewell.

Piccard's words were of thanks for the people of Bangor and their very generous hospitality. With hopes of a safe flight for all, he cut the tie-off strap holding the balloon to the ground, and the Belgians drifted slowly away from the crowd.

Minutes later, the performance was repeated with the Germans, the British, the Dutch, and, finally, the Americans.

As each balloon pilot cut through the strap (popping a quick release wouldn't have provided such a good television shot), that country's national anthem was played and the crowd gave its warm send-off.

Bangor had come to love the balloons, and, as Information Coordinator Les Stevens said, "We wish them well, but I'm kind of sorry to see them go."



### The flights

For the first couple days—longer than planned—the balloons stayed low, drifting out across Nova Scotia and south of Newfoundland. Several could see each other the first day, but not after that.

What's it like to live in close proximity to another person for such a long time? For the Americans, it was no problem.

"Troy and I think alike," says Richard Abruzzo. "We treated every part of the flight as a total team effort."

Bradley agrees. "We sat down ahead of time and discussed the way we would handle decision making and flight operations."

"We talked about what our goals for the flight would be before we even took off. There was not a single argument on board."

In probably the best testament to the American team's cooperation, Bradley noted, "We landed better friends than when we took off."

There were moments, however, when that teamwork was more necessary than others.

### Tense times...

For instance, the first day, nearly all the teams reported indications of the valve at the top of the balloon being stuck open after valving off some helium.

*Starting from the same place, all five of the teams swung at first southeast, then in a more easterly direction. By the time they crossed the Atlantic, they were many hundreds of miles apart.*

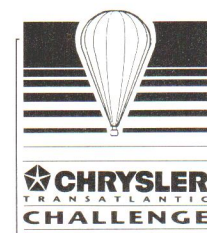






photo taken by friendly Moroccan

photo by Moroccan helicopter paramedic



*Within four hours of a calm, stand-up landing, Abruzzo and Bradley were on their way by military helicopter to the capital city of Rabat and the American Embassy. The very friendly Moroccans had helped to pack the equipment and even served refreshments.*

If this were the case, the balloon would lose its gas, and have to land at sea.

The Americans decided to let the expanding gas of daylight hours escape through the appendix at the bottom of the balloon, and avoid valving as much as possible.

However, the two heard a popping, snapping noise as they were coming into the ceiling Wednesday morning. Abruzzo said they thought the appendix was constricted.

The second day, the problem appeared even worse. They were flying higher, and could see the appendix bulging up through the center of the hot air cone.

Both men jumped to valve helium, concerned that the helium cell would burst, and that they didn't even have time to put their survival suits on.

The valve functioned just as designed, and the remainder of the flight was uneventful as far as the balloon was concerned.

Noble later said the appendix was not constricted, and the noise the pilots heard was probably the sound of ice cracking

off the tube as it expanded.

He explained that because the appendix swells when venting helium, and because it was sewn to the hot air cone, that swelling would probably be visible inside the cone.

### **...and beauty**

Troy says probably the most fascinating time during the flight was the day the pair watched cumulus clouds build around them at 10,000 feet.

"The clouds grew to 13,000 feet or more, then dissipated, then grew again," he says. "It was just like being in a jet and flying through that stuff, but this time it was all around us."

Other teams reported seeing whales during the flight, and ships, and all commented on the spectacular beauty of oceanic sunrises.

### **Hard work**

The Americans were surprised at the amount of constant work necessary to fly the balloon. Abruzzo and Bradley had hired Bob Rice to provide weather services both before and during the flight, and were in frequent

communication with him and race control.

In addition, all the pilots kept in touch with each other as much as possible, sharing any information which might be helpful.

"These were our friends," says Troy. "We all wanted to win, but we wanted to help each other too."

"One of the worst feelings in the world was to know the Germans were in trouble, and not to be able to help."

The pilots were unable to sleep for more than 15 hours during the entire flight, and then only in short naps when the time permitted.

According to Abruzzo, they ate less than a half of what they should have been eating, but both were too busy and excited to notice. And while the days were warm, sometimes as high as 100° for one balloon, the nights were cold.

"The second night, it got down to the low twenties inside the gondola," recalls Abruzzo. "By morning, there was a film of ice over everything inside."

### **Landings**

The first team to land was the German one. After 84 hours of flight, Mass and Krafft were caught by unexpected bad weather.

"There was nothing on any of our charts," says Race Director Alan Noble.

"When we called up infra red satellite imagery, only one tiny cloud could be seen—exactly where the German balloon was located."

Mass and Krafft followed their ditching drill exactly, landing near a tanker in 20-foot waves in a force seven gale.

The tanker rescued them, and the pilots got off in Southern Florida about a week later.

Next to land were the Dutch, who, flying at low level in heavy rain, spent 12 hours crossing the Bay of Biscay, failing to find the Brest peninsula.

With winds still backing and the southwest coast of Cornwall 60 miles distant, they landed in the English channel and were rescued by an RAF Sea King helicopter.

The team had been up 121



hours, and covered 2480 nautical miles. After swimming to and climbing aboard a nearby fishing boat, Louwman and Hoogeslag had to jump back overboard so the helicopter could pick them out of the sea.

They had never expected the aircraft to arrive so quickly—it was there six minutes after the ditching.

### ***Belgians take the task***

Just an hour later, the Belgian team of Verstraeten and Piccard won the official race, making landfall in the village of Peque, near Zamora in Spain. Their flight time was 122 hours, and they covered about 2,660 nm.

The British entry of Don Cameron and Rob Bayly used their GPS to drop through a layer of stratus clouds for a landing on the beach near Figueira da Foz, Portugal, for second place in the race.

The Brit's generator had stopped about 12 hours out from Portugal, forcing the team to ration power.

### ***Record shattered, dream realized***

Abruzzo and Bradley had the same generator problem. Having taken a more southerly track, the Americans were 24 hours away from a Moroccan landfall when news of the Belgians' landing came over the radio. They were determined to go on and win the distance prize, and break Ben Abruzzo's duration record.

About two hours before the record would be broken, Dave Melton, his wife, Shelly, Troy's mother, Denise and Alan Noble went down to race headquarters to watch the clock. "It was about 2:00 a.m.," recalls Melton, "and we were pretty tired. But we wanted to be there. We took pictures of us all under the clock when they finally broke the record."

Abruzzo and Bradley requested permission to enter Algerian airspace, with the intention of flying on as long as possible. But, off the coast of Morocco, their generator quit,

taking with it all their satellite communication systems. With no communication other than a hand-held radio, the Americans decided to land in the morning, east of Casablanca.

In nearly calm winds, they drifted over a peaceful Moroccan valley, over an open air market and on to a classic stand-up landing. They had been picking up people all the way, and were even served bread and honey with hot tea by a local man after they had packed the balloon. It was so calm, says Abruzzo, that he and Bradley were able to leave the balloon inflated and walk back to take pictures.

That landing broke Richard's father's duration record, setting a new one of over 145 hours.

After celebrations with friends and family in Rotterdam, London and Bristol, Richard Abruzzo, Troy Bradley, and Dave Melton came home to Albuquerque just in time for a hero's welcome at the Albuquerque International Balloon Fiesta.

Balloonists from all over the world were on hand to welcome them home, to congratulate them on their success. Abruzzo's luck held out—he neatly picked the keys to a Pontiac Grand Am off the pole Friday morning. All three pilots say they want to make the flight again.

### ***Looking ahead***

Will there be a next year? "We hope so," says Noble. "Besides Chrysler, there are other parties interested in sponsorship. We would definitely like to make this a regular event."

"If we had won the race," says Bradley, "I would definitely want to defend our title. And now I want to go back to try again."

Abruzzo is more philosophical. "If you dare to have the audacity to have dreams," he says, "they can come true. This has been my dream ever since I saw my father get into a balloon in Presque Isle and fly away."

