

May/June 2009 \$4.00

BALLOONING

the journal of the Balloon Federation of America





*It's every child's dream --
to float away beneath a simple toy balloon!*



UP

A TEAM OF SEASONED BFA MEMBERS HAVE BEEN CALLED ON TO HELP BRING THE NEWEST DISNEY/PIXAR ANIMATED FILM TO LIFE!

by Leslie Deane



In the new Disney/Pixar movie UP, retired balloon salesman Carl Fredericksen takes flight from the comfort of his armchair. Bouyed by a cluster of toy balloons Fredericksen pilots his airborne house through a series of misadventures.

Emmy winning actor Ed Asner brings the character of Carl Fredericksen to life.

Art courtesy Disney/Pixar

Veteran chair-flyer, Jonathan Trappe is certainly more than an “armchair pilot,” (see *Ballooning*, Sept-Oct 2008), yet that’s how strategists at Disney’s Pixar cast him to promote for “UP,” their tenth animated feature that debuts in May.

The film is about a retired toy balloon salesman, Carl Fredericksen, who launches his life (and his house) with a cluster of toy balloons. Fredericksen’s voice is created by the familiar Ed Asner.

As with its previous nine films, Pixar endeavors to engage movie patrons of all ages with stories that delight both children and adults. “UP” lives up to expectations.

For the movie’s main character and its adult audiences, it is a “coming of old age” story. To deal with the death of his wife, Fredericksen fulfills a promise he once

made to her by traveling to the mountains of South America.

He gets there by flying his house attached to a giant cluster of helium balloons, accompanied by Russell, a wilderness scout working on his “help the elderly” merit badge. The mismatched partners embark on an aerial adventure fraught with a flying villain.

Because the film’s chief antagonist is a dirigible pilot, the plot promises to provide an aerostatic dog fight or two.

“We based the villain’s dirigible off the Graf Zeppelin,” said director, Peter Docter. “Except the one in the movie is about three times bigger. It had to be massive.”

He said Airship Ventures assisted Pixar with their dirigible field research, taking them on a cruise of San Francisco Bay. The sound of one of their airships is used in the film.

Balloonists will observe that occasional aeronautic



Hall of Fame balloonist Tracy Barnes was brought in to help develop the cluster design and to provide the individually branded cluster balloons, each ranging from 5 to 8 feet in size!

Top: Jobnathan Trappe (l) and Tracy Barnes (r) discuss the makeup of the UP clusters. Below - photographer Nidia R. Ramirez (l), Barnes (c) and Trappe crewmember Robin Person inspect a few of the special cluster cells. Top photo by Nidia R. Ramirez, bottom photo by Jonathan Trappe

A unique problem facing the touring aeronauts is that these cells were designed to be reusable, unlike the once-and-done cells normally associated with cluster flights. After each event the cells must be deflated - how? - by using a ShopVac to suck the helium out of the balloons because, as Jonathan Trappe told BALLOONING, "unlike toy balloons, helium doesn't just go rushing out the neck of the balloon when you let go!"

liberties were taken in the script and Docter himself admitted he had a few misconceptions about balloons till he actually flew in one.

After a flight over Napa Valley, Docter said they changed several of their "cheats," such as how Carl Fredericksen steered the balloon.

"Just like in 'Cars,' where we made sure the racing enthusiasts weren't disappointed," Docter said, balloonists will be right at home as long as they remember that 'UP' is about adventure and fantasy.

Docter says it's also about connecting. Carl Fredericksen connects with both a departed loved one and a society that says he's past his usefulness. And because Fredericksen makes good on a promise, and Russell the scout earns his last remaining merit badge, the film is also about finishing unfinished business.

The movie itself is finished however. It was a wrap in early April and is in theaters this month.

To raise awareness of "UP" and its story, Pixar contacted Trappe, who organized a team of balloonists to conduct two ten-city tours that kicked off in April.

"When I was contacted about the tour, the first thing I did was reach out to balloonists like Troy Bradley and Beth Wright-Smith to make sure we deliver a tour that's fun and also safe and fully FAA compliant," Trappe said.

He and Wright-Smith are flying the east coast junket, which began in Miami and ends in Washington, DC. The west coast tour, which began in Seattle and ends in Los Angeles, is covered by Whit Landvater and Troy Bradley. Details and dates can be found on Trappe's web-

site at www.clusterballoon.com/UP.

"For this tour, the house stays on the ground but Carl's armchair goes aloft," Trappe explained. "Each stop on the tour includes a media event where local reporters take a tethered ride in the armchair."

"The pilots aren't actually going to be in the tethered balloon for the majority of the tour," said Beth Wright-Smith.

"We'll be on the ground making sure their 'ride' goes smoothly. They won't have to do anything. We'll be letting them up and bringing them down.

"The locations for the events are still tentative in some cities," she said. "But they may be at arenas/stadiums that will have some protection from the wind. Some venues are indoors, such as in Washington, DC.

"We will be operating under FAR part 103, ultralight aircraft," Wright-Smith explained. "The safety concerns are the same as for any other tether," she continued. "We need enough room to safely operate and calm, stable conditions in which you can safely get people up who don't know anything about balloons."

"Although we will be close enough that we could yell at them, we will have radios to communicate with the new 'aeronauts.' The only strange thing for the pilots is that we'll be on the ground controlling the tether instead of controlling the tether in the air," she said.

Compared to the details of creating the aerostat, organizing the tour was the easy part.

For example, to assure that the novice armchair pilots stay put, the seat employs a five-point seat belt with a center rotary buckle,

ARMCHAIR AERONAUTICS

Making a house fly in reality was even a bit more magic than Disney could manage, so they settled for Carl Fredericksen's comfy armchair. Because the chair had to fly under FAA scrutiny a trip to the nearest thrift store was out of the question. Instead Composite Tooling of Albuquerque was brought in to fabricate the chair and its composite/foam base (B&C), Superiaire in Albuquerque rigged the chair for the flying wires (D) and theatrical set dresser Robert Ortega was brought in to 'age' the chair (E). Safety required the final step, a racing style 5-point chest/seatbelt harness complete with a special imported UP branded roundrel (F). Finally the allup flight testing was done just days before the two tour teams took to the road!

- A - disney/Pixar art
- B & C - courtesy Composite Technologies
- D - courtesy Superiaire
- E - Jonathan Trappe photo
- F - Nidia R. Ramirez photo
- G - Ron Behrmann photo



similar to what is used in auto racing. The belts came from Aircraft Belts, Inc. in North Carolina.

They needed to be branded with project-appropriate art," Trappe said. "We ordered the 'roundel' (similar to a hood ornament on a BMW) out of Belgium, and it shipped from China. It's just a little thing, one of a million details on this project, but its another small thing that makes the system look great when its all together," he explained.

"If you ever worked with Disney, you will know how precisely they want their real-world creations to match their animated dreams," Trappe stated.

Particular attention was

paid to the chair itself, which uses a carbon fiber superstructure built by Composite Tooling in Albuquerque.

"CTC has been making composite structures since 1986," said Cathy Lawrie of Composite Tooling.

"Although we chiefly contract to the US government now, we have built sailplanes, Indi race car parts, space vehicle and missile components, propellers, gim-bals and hundreds of other carbon/epoxy structures. Industrial art is how I think of it," she said.

"UP" is their first Disney venture, but Lawrie hopes for more unique challenges like this one.

"The trickiest part of the project, other than the

many hours of tedious labor, was trying to translate drawings of Carl Fredricksen's chair into a slightly larger than life sized chair without losing the humorous and dynamic character," Lawrie said.

"I think we succeeded," she claims. Trappe agrees.

"They have taken tremendous care to build the gondola frame exactly as indicated in the concept art and scaling the real-world chair to the precise angles and dimensions of the Pixar art rotations," he described.

Once the gondola superstructure was completed, Matt Guthrie and Garry Haruska at SuperAire in Albuquerque took over the

finishing: stitching the load ring, connecting the rigging, even perfecting the upholstery.

"They also worked with a theatrical stage set dresser to 'age' the gondola, so it looks like it has delivered years of comfortable service. It was made in April 2009, but it looks as though Carl has been comfortable in it for quite some time!" Trappe quipped.

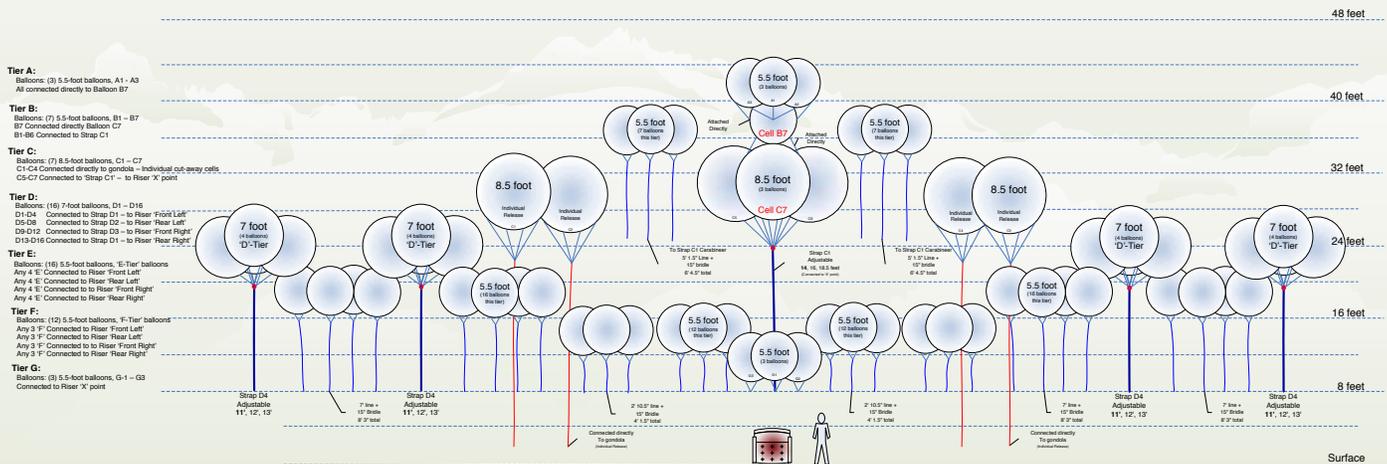
To assure that the balloons were as perfect as the armchair gondola, Trappe engaged the legendary Tracy Barnes and Statesville Blimpworks to construct the balloon clusters. The individual balloons range in size from 5 to more than 8 feet.

Pixar's 'UP' Cluster - Carl Fredricksen's Flying Armchair

Becker Group, Exhibition Group

In partnership with
ClusterBalloon.com

Breakout View



Specs:

Balloon count: 64

Balloons:

- (7) 8.5-foot cloudbusters, filled to 321 cu/ft
- (16) 7.0-foot cloudbusters, filled to 179 cu/ft
- (41) 5.5-foot cloudbusters, filled to 87 cu/ft

Total envelope size: 8,700 cubic feet [approx]
Lifting gas: Helium (He)

Gross Lift: 573 lbs

Straps: 1-inch 18kN rated tubular nylon webbing, stitched by FAA certified rigger

Carabiners: Black Diamond Quicksilver Screwgate; Rated 25kN (vertical, closed), 9kN (gate open), 7kN (horizontal); 2 carabiners per strap: base and bud.

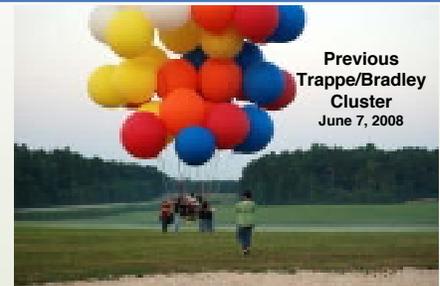
Individual Ropes: (64) 3mm 480lb tensile strength utility line

DANGER!

Cluster ballooning is potentially dangerous and could result in serious injury or death. Do not undertake any ballooning activity without training from an FAA qualified instructor.



Previous Trappe/Bradley Cluster
August 31, 2008



Previous Trappe/Bradley Cluster
June 7, 2008

When completely upright, the aircraft stands around 45 feet high.

Although the flying arm-chair is much smaller than a regular balloon, the individual balloons move around more in a breeze, making it tricky to fly, Wright-Smith says.

But no free flights are planned for the tour, since the riders will be novices and the tour will be in the congested areas of major metropolitan areas where free flights aren't possible.

"All flights are currently planned to begin at or shortly after sunrise, like any other balloon operation. We are hoping to get 10 crew for each location and they will

all be trained on-site," she explained.

Trappe's website has been an effective vehicle for recruiting volunteer crew. Many of the dates are already close to additional crew.

Nearly every child who ever held a helium balloon on a string and dreamed of flying aloft. Are the principals concerned that "UP" may inspire children to tie toy balloons to a chair and try this at home?

"Well not really," Docter laughed.

"We figured out it would take 23,500,000 toy balloons to lift an 1800 square ft house about the size of Fredericksen's. We think it's probably pretty safe to

assume no child would have access to even enough balloons to lift a chair," he said.

But Docter is overlooking those who are children at heart, like Jonathan Trappe, who is destined to break a new altitude record, hanging from a chair attached to a cluster of balloons, or to fly a house, like Carl Fredericksen.

"I would envision a multi-day cluster balloon house flight," he said, "perhaps launching out of California, heading east on a kind of reverse manifest destiny."



PROVEN DURABILITY & RELIABLE



Inflation Fans

Rugged Construction
High Performance Multi-Layer Wood Props
10" Pneumatic Wheels
9hp Honda Engine
Lifetime Frame Guarantee

Propellers

2 Blade & 4 Blade High Performance Props
2 sizes - 24" or 30"
3" or 3 1/2" Bolt Patterns
Replacement / Upgrade For All Models

Customer Comments

Dave Roberts
High Time Balloon Co., Ottawa, Canada

"It's the Mother of All Fans.
Tons of air with Honda reliability!
We wouldn't fly without one!"

COMMITTED TO BUILDING THE BEST PERFORMING FANS IN THE WORLD.

519.473.6444
www.machzero.com

machZERO
inflation

