

## Carving out their gourds

One hour to carve one pumpkin. JPLers took some simple rules and created amazing Halloween displays.

By Leslie Mullen

Since 2011, JPLers in Sections 352 and 355 have been holding a Halloween contest to see who can carve the best pumpkin. The only rules: you must use a pumpkin given to you that day, and you only have one hour to carve it. There are no other rules, so preparation ahead of time is allowed. The pumpkin-carving has gained national attention due to news articles, videos and social media posts of some of the most ingenious applications of pumpkin engineering and science.

Josh St. Vaughn, deputy spacecraft manager for the Europa Clipper mission, came up with the idea for the 352/355 pumpkin-carving competition when he was section manager of 352.

The first year of the contest, St. Vaughn's only rule was you couldn't touch the pumpkin you were given before the contest began. He said people assumed they couldn't do anything ahead of time. One year, however, a team realized there was no rule against preparation. They carved many smaller pumpkins before the day of the contest, and used them in their final pumpkin-carving display. "By today's standards it was quaint, but at that time it was by far the best entry and so they won," he said. "And here's what happens when something wins: all these people are hyper-competitive so every year it

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The Europa Clipper Pirate Ship pumpkin was awarded first place in the Section 352 competition.



Super Nova Death of a Star took second place in Section 355's competition.



Photo by Lillian Chen

The best-costume award went to the ISS Team, from left: Carmel Levitan, Lola Levitan, Josh Fisher, Gregory Halverson.

# JPLers display creative costumes

**By Mark Whalen**

A little bit of rain didn't scare off Halloween revelers Oct. 31. Forced by the elements into von Karman Auditorium, more than 40 JPLers showed off their frightening, funny and sometimes forgettable costumes to a panel of judges and a happy crowd.

A three-judge panel awarded the best costume prize to the team depicting an astronaut, the International Space Station, a SpaceX rocket and the ECOSTRESS instrument. ECOSTRESS science lead Josh

Fisher was the ISS, while his wife, Carmel, portrayed the SpaceX rocket and his daughter Lola was the instrument. Intern Gregory Halverson was the astronaut. Space X will launch the instrument to the ISS as part of its payload next June.

Second place went to the Price is Right Team of Melissa and Bobby Burke, Kim Johansen and Marc Razze. Third was Dolores Zawol dressed as Giovanni Domenico Cassini.

More Halloween photos are available on JPL's Facebook page.

rachets up the level. Some of them don't quite work, but the thought processes to get there are really cool.

"I really didn't know how crazy it was going to get," said St. Vaughn. "I had hoped it would get more intense and creative! The winning doesn't matter; it's about the fun and teamwork that happens throughout the whole process."

The winners are:

**Section 352**

First: Group 352M – Europa Clipper Pirate Ship

Second: Group 352C – The Harvest (Ghostbusters Stay-Puft Marshmallow Man)

Third: Group 352B – Operation Frank-O-Drop / Pumpkin Parachute

**Section 355**

First: Group 355M – Class "H" Mission (Hamster Wheel Pumpkin)

Second: Group 355S – Super Nova Death of a Star

Third: Group 355L – Starshade Pumpkin Launch Restraint and Unfurling System (Plus)

Videos and additional photos are available at <https://www.flickr.com/photos/nasa-jpl/albums/72157672207667603>.





# What would you do if the shaking started? | 3

By Mark Whalen

Should an earthquake occur while you're at work, would you know what to do?

This year, the annual California Shake-Out, held on Oct. 19, helped employees practice emergency preparedness skills—such as the “Drop, Cover, and Hold On” drill—and building evacuation. The mandatory exercise provided a potential opportunity to save lives.

William Michael, supervisor of the Emergency and Continuity Management Group, notes that after dropping, covering and holding on, it's best to check six sides around you – above, to the right and left, to the front and back, and below – to make sure it's safe. Don't go outside until the shaking has stopped.

If a quake strikes while you're outdoors, go to an open area away from power lines, buildings, trees and walls. If the temblor hits while you're driving, pull over and stop, and avoid power lines and overpasses, if possible. Stay inside the car.

For both vehicle and home use, emergency planners suggest buying or making survival kits that stock items such as food, water, medicine, blankets, flashlights and portable radios. Some kits contain sturdy



JPL's Urban Search and Rescue team prepares for quakes and other emergencies.

shoes to help maneuver debris-strewn areas after the quake.

Should a major quake occur on Lab, JPL has emergency preparedness plans in place beyond the practice sessions.

“If we have a big earthquake, the plan is for the building wardens to evacuate everyone to our pre-designated refuge areas,” said Michael.

After a quake, a management team will gather in the Emergency Operations Center in Building 310. Their charge includes

assessment of damage to structures and to verify their habitability.

The Lab has more resources to help with emergencies. JPL's Urban Search and Rescue (USAR) team and the newly-formed Disaster Assistance Response Team (DART) conducted real-life training for a simulated quake. Both groups, staffed by JPL volunteers, meet periodically to practice their rescue skills.

For more information, visit <https://psd.jpl.nasa.gov/prepare/earthquake>.

## Lab's AIDS Walk team brings in \$5,000+

JPL's team at the Oct. 15 AIDS Walk Los Angeles raised more than \$5,000 for thousands of men, women and families affected by the disease in Los Angeles County.

The funds raised at the event remain a vital lifeline that sustains AIDS Project Los Angeles Health's prevention, care and advocacy programs. Proceeds also benefit more than 20 other HIV/AIDS service organizations that are able to participate and raise funds through the Community Coalition Initiative.

JPL's participation was organized by Spectrum, the JPL affinity group for the LGBTQ community.



From left, JPLers and family members who joined the march: Hared Ochoa, Ravita Kartawinata, Fiona Le, Lauren Velasco, Anh-Hong Rucker, Brian White, Laura Napoli, Crystal Cisneros, Jeffery Nunes, Yesenia Martinez, David Coren, Jenny Hua, Dustin Buccino, Bryan McEnerney, Jeffrey Megivern.



# Celebrating JPL's diversity



Foods from 17 countries and/or cultures highlighted JPL's 37th annual American Heritage event Oct. 12. Staff members were entertained by JPL's Shop 300 band, which played rock music between dances representing Irish, Chinese, Spanish, Egyptian, Native American, Indian, Polish and Armenian cultures.

Photos by Leslie Mullen





# Twenty years ago, JPL lost a friend and colleague

By Mark Whalen

For those who knew him, and for many more who did not, the recent end to the 20-year Cassini mission to Saturn will recall tender memories of a JPLer whose final, lasting contribution came at Cassini's beginning.

Along with his friend Shoba, Jordan Kaplan, an engineer for Galileo and Mars Pathfinder, took off in his single-engine plane from Whiteman Airpark in Pacoima on March 16, 1997. Shortly after takeoff, an intense engine fire led to a crash.

Shoba died in the accident. With third-degrees over 90% of his body, Kaplan died eight days later. He was 32 years old.

His final project was Cassini.

"His trip to Saturn actually started the day he died," recalled Kaplan's brother Joshua. "The Cassini team honored his memory by having his name and one of his favorite quotes embroidered on the mylar panel that was attached to the spacecraft. It was from "Porgy and Bess" and it read: 'Fish gotta swim and birds gotta fly', which he rewrote as 'Fish gotta swim and man's gotta fly'. That was his mantra.

"When the Cassini team asked for permission to add the panel to the spacecraft,

it was denied," said Joshua. "Somehow, they managed to do it anyway. Along with this quote was his name and the words 'Engineer, Musician, Pilot, Friend'."

A bench with these same words, made of granite that was mined from a quarry near the Kaplan home in Rockport, Mass., now sits in JPL's 301 patio at the same spot that he and his friends would play music each Friday during their lunch hour.

"For more than 20 years and over 1 billion miles, my brother crossed our solar system to reach the rings of Saturn," said Joshua. "He had a front-row seat as Cassini sailed past planets to arrive at its des-



The Jordan Kaplan memorial bench near Building 301.



JPL Photo Lab

At Kennedy Space Center seven months before launch, the Cassini mission team attached a dedication to Kaplan on a mylar panel.

On Sept. 15 Cassini set its final course to plunge through the atmosphere and end its journey in what can only be imagined to be a remarkable site."

## Letters

My family and I would like to thank JPL for the condolences and kind thoughts on the recent passing of my father, Edward (Jim) Johnston, at age 91. Thanks to Section 3918 for the beautiful plants and cards. Thanks to his former colleagues for all of the kind words and interesting stories about my dad. My dad loved working at JPL. It lifted his spirits to hear stories about what was going on at JPL.

**Paul Johnston**

Thank you, JPL, for the vibrant plant sent in memory of my father, Robert Guske, who passed

away last month. He was the smartest "Renaissance Man" I have ever known. A high school teacher who taught Latin, French, English, art and electronics (and who knows what else), always taking great joy in learning and sharing knowledge. An artist, actor, singer and organic gardener (he had to be to feed three sons). A husband, father and grandfather, but foremost a lover of God and his word (usually in the original Greek or Hebrew). He was thrilled to be on Lab for the Galileo arrival at Jupiter and was a strong supporter of JPL's quest to seek and share knowledge.

**P.J. Guske**

I would like to thank JPL for the beautiful lilies and for the many supportive individuals who helped carry us through these trying times of my grandmother's passing. The lilies brought comfort and peace to our home and are a great reminder of the sense of community I have and value at JPL.

**Linda Fine and family**

I would like to thank my JPL friends and colleagues for the lovely plant sent to me after the passing of my brother, Frank. The support given to me during his brief illness helped me through this difficult time. Thank you all.

**Ann Hall**

# News Briefs



Michael Watkins



Steve Snyder

## AIAA honor to Watkins, Snyder

JPL Director Michael Watkins and systems engineer Steve Snyder of the Electric Propulsion Group (353B) have been appointed 2018 Associate Fellows of the American Institute of Aeronautics and Astronautics.

The organization will formally honor and induct next year's class at a recognition ceremony and dinner Jan. 8 in Kissimmee, Fla., in conjunction with the 2018 AIAA Science and Technology Forum and Exposition.

## Water board honors Waliser

In recognition of his efforts to aid the California Department of Water Resources, Earth Science and Technology Directorate Chief Scientist Duane Waliser has received the department's Climate Science Service Award.

The awards, bestowed in early November, recognize ongoing assistance provided by researchers who have been working closely with the department on climate-science projects.

Waliser is leading development of experimental forecasts of atmospheric storms at a sub-seasonal time scale, which would provide several weeks' advance notice beyond the two-week period available from operational weather forecasts.



Duane Waliser

Other honorees were Jason Cordeira of Plymouth State University and David Meko of the University of Arizona.

## Humanitarian honor to Patzert

JPL climatologist Bill Patzert has received the Rotary Humanitarian STAR (Science, Technology, Aerospace and Robotics) Lifetime Achievement Award in recognition of scientific achievements that significantly improve lives. The goal is to raise public awareness and promote the application of scientific technological advances and their positive impacts on humanity.

The honor was presented Nov. 4 in Pasadena. Patzert also received a certificate of recognition from the California State Senate signed by Sen. Anthony Portantino (District 25).



Bill Patzert

## Bellan earns literature honor

JPL Senior Research Scientist Josette will receive the 2018 American Institute of Aeronautics and Astronautics Pendray Aerospace Literature Award for outstanding contributions to aeronautical and astronautical literature.

Bellan, a visiting associate in Caltech's Mechanical and Civil Engineering Department, is cited for "widely reaching, seminal and outstanding publications on bio-fuels, sprays and high-pressure flows to meet future challenges of aeronautics and astronautics combustion systems."

She will receive the honor in January at the AIAA Science and Technology



Josette Bellan

Forum and Exposition in Kissimmee, Fla.

## Breakthrough Award to JPLer

Darindra Arumugam of the Radar Concepts and Formulation Group has been named a recipient of a 2017 Popular Mechanics Breakthrough Award.

Arumugam was cited for his team's development of the Precision Outdoor and Indoor Navigation and Tracking for Emergency Responders (POINTER), which uses magnetic fields instead of higher-frequency radio waves that are often blocked by building walls to track first responders.



Darindra Arumugam

## Alma mater honor to Steltzner

Adam Steltzner, lead engineer on JPL's Curiosity Mars rover, recently received the Distinguished Alumni Award from the College of Engineering at the University of Wisconsin at Madison, where he earned a Ph.D. in engineering mechanics. The honor included a sculpture (right) in the campus' new Alumni Park.

The sculpture includes drumsticks (Steltzner is an avid rock drummer)

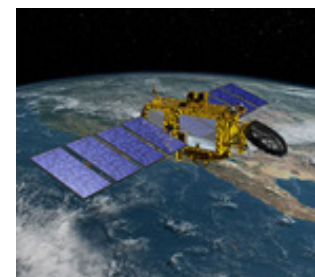


with a small image of Martian landscape and a tire tread representing a footprint left behind by one of Curiosity's six wheels.

## NASA kudos to Jason 3

JPL's Earth-orbiting Jason-3 mission was recently honored with the 2017 Program and Project Management Excellence Award, bestowed by NASA's Office of the Chief Engineer in recognition of program and project management best practices.

"The proactive approach of the Jason-3 team is an exemplary model for multiple partners working together as an efficient unified project focused



on common goals to deliver a successful mission," noted the citation.



## Passings

Retired Deep Space Network representative Phillip Tardani, 91, died June 17.

Tardani joined JPL in 1951 and retired in 1996. His early work was in instrumentation of flight tests of rockets being developed for the U.S. Army including on-site testing at White Sands Proving Grounds, New Mexico. In 1956, Tardani established a JPL office at Cape Canaveral, Florida for joint operations with the Army Ballistic Missile Agency, leading to the launch of Explorer I in 1958.

At JPL, he joined the team developing and operating the Deep Space Network.

Tardani is survived by his wife, Diane, sisters

Anna and Linda, brothers Louis and Sam, daughter Gina Brannam, son Kirk Bowan, three grandchildren and five great-grandchildren.

Former Section 383 Manager Jim Johnston, 91, died Sept. 20.

Johnston joined JPL in 1961 and retired in 1999. He worked on Mariners 1 and 2, Topex, Jason, the Clear Air Turbulence Flight Test Program, and many other missions. Among his awards was the NASA Exceptional Service Medal in recognition of outstanding achievements in the development and application of microwave remote sensing instruments.

Private services were held Sept. 30.

Retired Stardust Mission Manager Robert Ryan, 83, died Oct. 4.

Ryan joined JPL in 1956. Besides Stardust, which in 2004 became the first spacecraft to successfully return cometary and interstellar dust particles to Earth, he worked on numerous projects including Pioneers 10 & 11 and Voyagers 1 & 2. He retired in 2008.

Ryan is survived by children Rob, Margaret, Kathy and Tom as well as nine grandchildren. He was interred at Mission San Fernando Cemetery.

John (Jack) Meenan, 83, retired JPL administrative and scientific computing supervisor, died Oct. 6.

Meenan worked at JPL from 1962 to 1996. He is survived by his wife, Bonnie, daughters Kerri, Denise and Bonnie, six grandsons and many nieces and nephews.

Memorial services were held at Forest Lawn, Cathedral City, Calif.

## Retirees

The following JPL employees recently announced their retirements:

### November

**Richard Williamson**, 51 years, Section 1620; **Michael Janssen**, 44 years, Section 3268; **Theresa Anderson**, 34 years, Section 312C; **Kuohwa Tan**, 29 years, Section 371; **Jacklyn Green**, 25 years, Section 312D; **Randolph Williams**, 20 years.

### October

**Donald Bickler**, 42 years, Section 326E; **Steven Gunter**, 38 years, Section 3830; **David Rider**, 34 years, Section 329H; **Randall Wager**, 28 years; **James McKelvey**, 21 years, Section 393C; **Myung-Chan Kim**, 17 years, Section 392P; **Robert Cox**, 16 years, Section 8000.

### September

**Bruce McLaughlin**, 40 years, Section 394G; **Stephen Edberg**, 38 years, Section 1865; **Michael Scharf**, 34 years, Section 173E; **Anne-Marie Krause**, 33 years, Section 252G; **Edward Sewall**, 19 years, Section 2745; **Glenda Sherman**, 16 years; **John Kreigenhofer**, 11 years, Section 252E.

## Classifieds

Ads submitted Nov. 3-10

### For Sale

**MOVING SALE:** round 42" dining table, heavy wood w/2 12" leaves, 2 matching captain's chairs + 2 chairs, \$200; Ikea 27" W armchair, black cloth has-sock, \$30; 2 identical desks: 66 x 29," dark grain-stained oak, 42" H hutch, glass front cabinet on one side, bookshelf on the other, CD storage, speakers, hideaway nooks, \$500/ea.; oak bunk bed w/ladder, 2 underbed sets of drawers for 2 separate twin beds, \$600; Cal King waterbed, 6-drawer pedestal, 45" H headboard w/shelves, stained glass + cathedral mirror; matching 56" tall drawers + nightstand, bed-spread, \$600. 818-790-4028.

**PET SUPPLIES:** air-travel carrier for dogs & cats, airline approved, quality, expandable, soft-sided, best for small/medium pet, fits under front airplane seat, never used, \$30; bed, aqua colored, approx. 19" L x 25" W x 7" H (48.2 x 63.5 x 17.7 cm), rarely used, photos avail.; \$12. nuyrstar@hotmail.com.

### Vehicles / Accessories

'12 BMW e93 M3, white with red interior, fully loaded with navigation and 19" aluminum rims, \$36,500/obo. Text 626-716-1754.

**BIKE,** custom fixed gear, 54 cm, over 1500 invested, Skinny Benny stripped paint frame, Alex Flip Flop rear wheel (single speed & fixed), Cut Nitto riser bars, MTB stem, oury grips, Tektro brake, Origin 8 crank, double heavy duty straps, MTB pedals, genuine machined for brake Aerospoke, ahead set, brand-new Continental tires, \$500. Text 818-370-5774.

**HARO Metro Gomez** disc brake commuter, full disc, 18" frame (med. size), newly tuned, new parts include stem/grips/handlebar/tubes; some slight scratches, no dents or dings; 700c tires, very rare full hard suspension bike. Text 818-370-5774.

### Wanted

**SPACE INFO/memorabilia** from U.S. & other countries, past & present, for personal use (see <http://www.youtube.com/watch?v=S7PvjGp7mCU>). mrayman @alumni.princeton.edu, 818-790-8523, Marc Rayman.

### For Rent

**ALTADENA** (91001), 2 bed, 1-3/4 bath condo, secu-

rity access & gated, alarm ready, central air/heat, internet access, well maintained, carport parking (#2), nice closet organizers, kitchen w/marble floors, washer/dryer, den, fireplace, patio with garden and hot tub, community pool and more; you pay utilities, trash excld., \$1,890/month. 626-798-6185.

**ALTADENA,** furn. room w/awesome view for lease; non-smoker to share a beautiful 4-bedroom, 3-bath house across from community garden; close to local colleges and Pasadena schools, walk to JPL; utilities are included, central air/heat, internet access; near 210/134/110, bus stop, shopping, banking, entertainment, restaurants; \$820/month. 818-370-0601.

**MONTROSE,** 3-bd./1.5-bath home close to blue ribbon schools; central heating/air, large fenced yd. w/ fruit trees + fire pit, dual-pane windows, lots of natural light, lg. bonus rm., and long, spacious driveway; walking dist. to great restaurants/boutiques on Honolulu Avenue, near La Crescenta/La Canada, minutes to JPL; fridge, washer/dryer included; \$2,900/mo. <https://home.cozy.co/apply/317194>, 626-708-0753.

**PASADENA,** furn. room in a lovely 4-bd./2-bath house, big backyard, hardwood floor, big closet, shared bathroom, kitchen and laundry privileges; 2 miles to JPL, close to public transportation; short- or long-term lease available; must like dogs and be very clean; \$900 + \$900 deposit. 818-960-8654.

### Vacation Rentals

**MAMMOTH, Snowcreek,** 2 bd., 2 ba. + loft, sleeps 6-8, fully equip'd kitchen incl. microwave, D/W, cable TV, VCR, phone, balcony w/mtn. vw., Jacz., sauna, streams, fishponds, close to Mammoth Creek, JPL discount, no pets. 626-798-9222, 626-840-3749 or [valeriee@caltech.edu](mailto:valeriee@caltech.edu).

**MAMMOTH, Snowcreek,** beautiful updated condo, 2 bd., 2 ba. + loft (sleeps 6-8), great location by pond/meadow, new appliances, TVs, DVD players, free wireless Internet and washer/dryer, no pets. 818-952-2696 or [BigMtnPrettySky@gmail.com](mailto:BigMtnPrettySky@gmail.com).

**MAMMOTH, remodeled** 2 bed/2 bath + loft, short walk to Canyon Lodge; Courchevel 6 features full kitchen, cable/Internet TV, DVD, Blu-Ray, wireless hi-speed Internet, 2-car garage, Jacuzzi, grill, pool; no pets. <http://Courchevel6.com>.

**PALM DESERT,** Waring Place community, 4 bd, 3 ba, pool, spa, BBQ, fully equipped kitchen, wireless internet, washer/dryer, photos available. 626-487-9437 or [nuyrstar@hotmail.com](mailto:nuyrstar@hotmail.com).

Universe

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