Carnegie Mellon University Sweepstakes

Buggy Book

2023

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What is Buggy?

What is Buggy?

History of Buggy

At 9:30 a.m. on May 14, 1920, with what a witness called a conglomeration of rain barrels, orange crates, and ash cans with wheels, the iconic sport of Sweepstakes, more commonly known as Buggy, began its 99-year history. A dozen box-like push-mobiles with male drivers inside lined up on the street that used to run between Hunt Library and Baker Hall. Each buggy was propelled towards Schenley Park by a pusher who rode on the back of the buggy for the downhill portion of the course. At the bottom of the hill was a pit stop, where the pusher switched places with the driver and the mechanic had to swap the rear two wheels to demonstrate the buggy's mechanical prowess.

In 1921 the founders of Buggy eliminated that pit stop. Instead, a design competition was created to judge the mechanical features of the buggies. When it became mandatory in 1922, buggies like Delta Upsilon's enormous fish became obsolete and mechanical perfection became the new goal. Teams reached unprecedented speeds when two extra pushers were added the same year, and from 1925 onwards, the race was run in heats to reduce collisions. In 1926 a fifth pusher was added to the team, and in 1928, Frew Street was extended, making the Buggy course what it is today.

Buggies over the Years

As the years progressed, buggies became lighter and more aerodynamic. Buggies began to follow innovations in materials science and mechanical engineering closely as early as the 1930's.

After World War II, Soap Box Derby style buggy, introduced by George Bach of Delta Tau Delta, dominated the buggy scene, with DTD winning for 5 consecutive years. That design was copied by ATO in 1953 with ANDY I and resulted in one of the closest races in history. ATO further developed the prone Golden Goose, and together with the ANDY 1 and 2, dominated the Buggy world until 1963. Fiberglass composites became a construction standard through the early 80's due to its ease of use, and carbon fiber crept into buggies in the late 80's, starting with Spirit's revolutionary buggy Quantum Leap.

Teams have worked at perfecting their composite technology since then, adding core materials and reducing weight. These days, a well-made carbon fiber shell can weigh less than 9 pounds.

History of Wheels

A light buggy, however, is nothing without good wheels. Prior to World War II, most wheels were pneumatics. Starting in 1947, Soap Box Derby wheels were used, until the early 80's when the hubs changed from steel to plastic and were deemed unsafe. Goodyear wheels introduced by Sigma Nu changed the speed of the event. When the supply dried up, many teams adopted off-the-shelf solutions like the Panaracer wheelchair wheels and Xootr scooter wheels. Other teams made custom wheels out of rubber or polyurethane and saw improvement over stock wheels.

Around 2010, Zero Error Racing began offering over-the-counter, high-quality polyurethane wheels. These wheels have become the standard today for any team looking for fast wheels without having to cast their own.

COVID Years

While anticipating the 100-year anniversary of the buggy tradition, Raceday 2020 was cut short due to the COVID-19 pandemic. To keep the tradition of buggy alive, the 2021 Sweepstakes Committee (Tishya Girdhar, Natalie Herrmann, and Bethany Bauer) worked with the University's COVID Coordinating Committee to ensure practices were held and followed all COVID mitigation strategies.

These efforts provided the teams with the necessary hands on experience to keep buggy alive. Sweepstakes was able to facilitate a time trial Raceday experience to showcase the hard work that teams put in that year. Although trucks, official timing, and wheel treating were not allowed, the competitive spirit in all involved was alive and well. We can thank these efforts for buggy's continued existence now.

Today

After an exhilarating first year back with an unprecedented amount of DQ's during Raceday 2022, teams and buggy are back, and as always -- better than ever. While this year has brought unprecedented change in all areas of buggy, we have seen teams rise to the challenge amid changes to design competition, the addition of an all gender divisions, and improvements to safety.

With many teams finally having a real Raceday under their belts, with better aerodynamics, closer race lines, and faster pushers, who's to say what this year will hold? Will the two minute barrier finally be broken? Even if it is broken, teams will never stop innovating. Having a fast enough buggy to roll past hill 3 might just be the next milestone... who knows? Pittsburgh weather has certainly lived up to its reputation with cold evening push practices and even colder morning rolls. New buggies have rolled in and teams have been pushing all year round, so be prepared for another exciting year of Buggy!

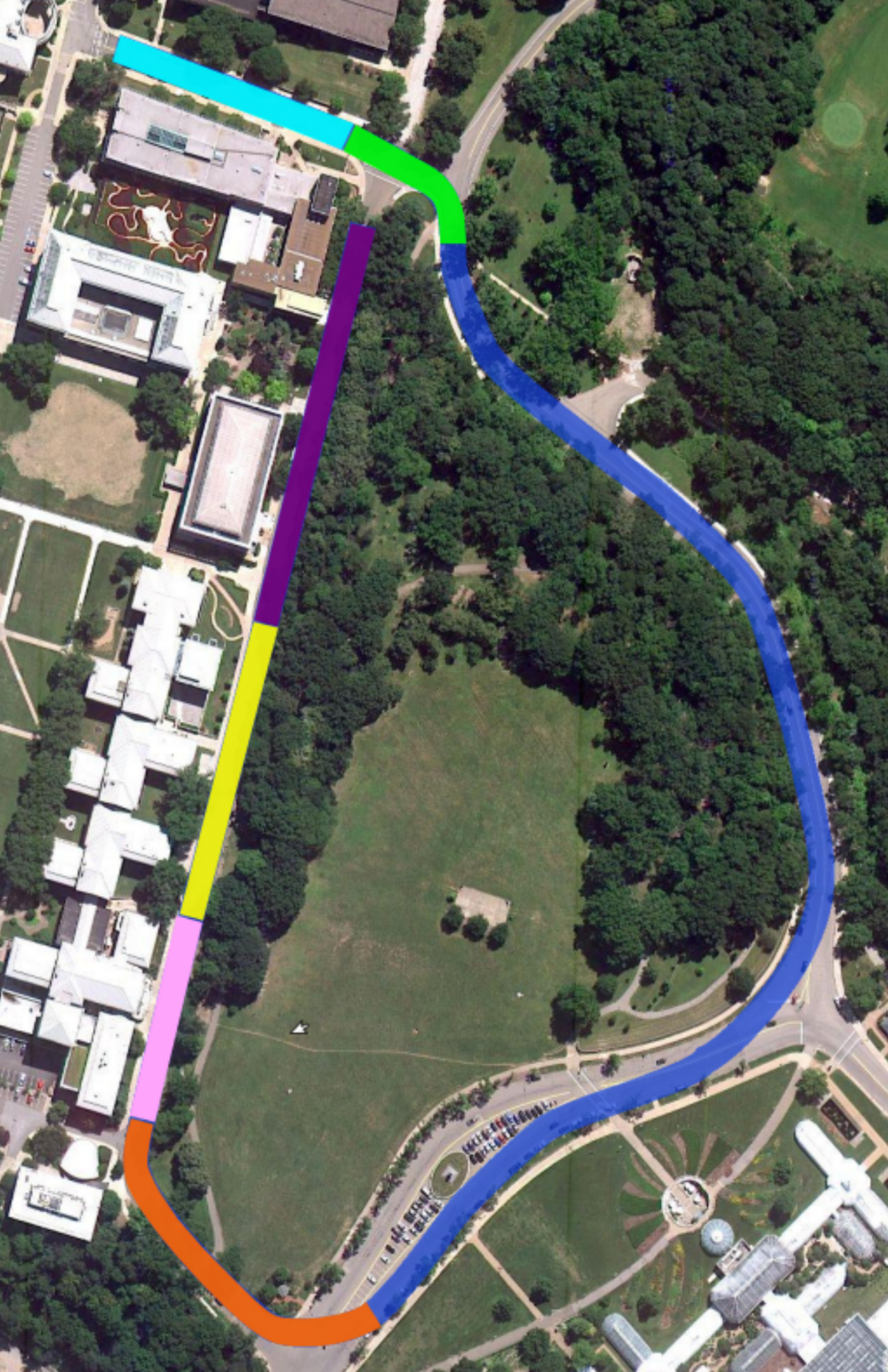
Creation of BAA

Having returned for his PhD at Tepper, Sam Swift, a former Fringe pusher, came out to an early morning freerolls in March of 2008. There, he began taking pictures of buggies on the course. PiKA Racing, keeping the tradition of secrecy around their buggies, took offense to this, and brothers did their best to block his camera from taking photos. Feeling more slighted than usual, Sam collected all the PiKA buggy photos he could find and organized them all on a website. He then sent out an email to the Sweepstakes email list sarcastically apologizing for taking the photos, and as a peace treaty, would be releasing them on a website appropriately named "pikabuggy.com." Coincidentally, the website had commenting capabilities, where old alums, including PiKA alums, would discuss memories of participating in buggy.

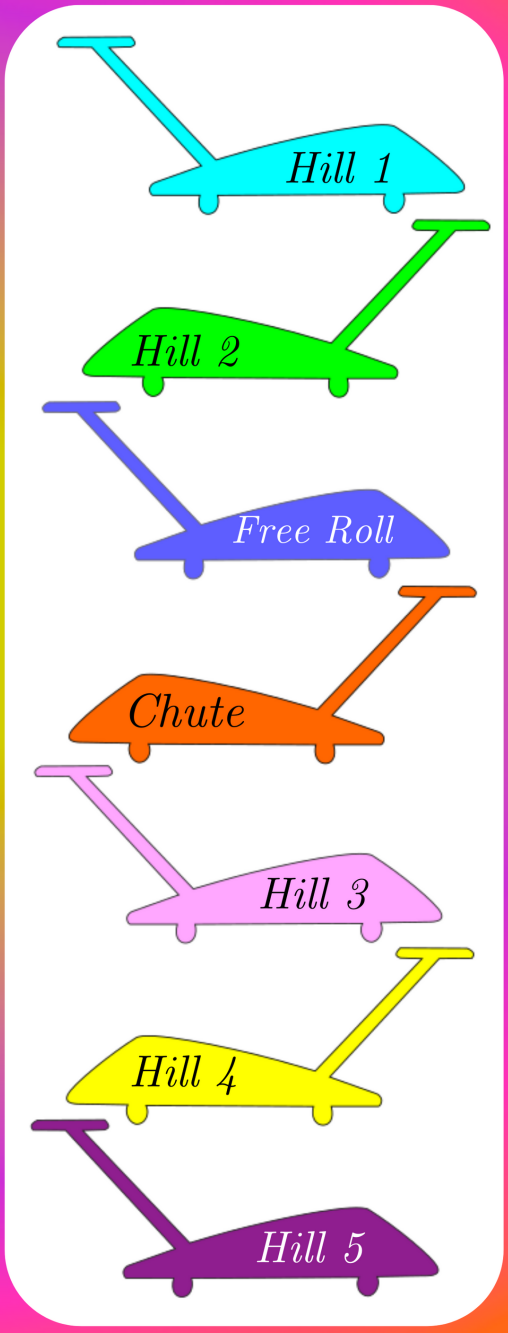
That year during raceday, the comment section exploded into a live discussion about the races. From there, the founding members of what we now know as the Buggy Alumni Association (BAA), decided that an alumni interest group should be formed. By the fall of 2008, the pikabuggy.com website was changed to cmubuggy.org and the BAA was founded.

BUGGY ALUMNI
ASSOCIATION
cmubuggy.org

BUGGY ALUMNI
ASSOCIATION
* BUGGY * SWEEPSTAKES 2012 * CARNEGIE MELLON UNIVERSITY * BUGGY * SWEEPSTAKES 2012 *



The Course



Buggy Terms

Buggy

1. A vehicle built, operated, and pushed by CMU students for the races held during Carnival.
2. Commonly held name of the Sweepstakes race and the sport in general.

Capability Test

Also known as "capes," a set of safety tests that evaluate a buggy and driver's ability to brake, steer, and see.

Chute

The tight right-hand turn. (halfway through the course) from Schenley Dr. to Frew St.

Drop test

A test of each buggy's braking system; performed before every day of rolls and after each race.

Freeroll

The mostly downhill portion of the course, during which the buggy is freely rolling and the driver is completely in control.

Heat

A time slot on Raceday where up to three teams race against each other at the same time.

Hills

Term for the uphill portions of the course, divided into five sections, each with an individual pusher.

Pushbar Rule

The Hill 5 pusher must have a hand on the buggy as its nose crosses the finish line.

Rollout

Distance the buggy travels up Frew St. after the chute before the Hill 3 pusher catches up.

Rolls

Weekend practices held from 7 a.m. - 9 a.m. (weather permitting) throughout the year leading up to Raceday.

Spinout

The act of losing traction on the course, resulting in the buggy spinning.

FRINGE
NikeAir

SIGMA NU
esp

Apex

NO
PAKIG
VALID

Team Terms

Driver

Typically a short, lightweight, person courageous enough to pilot the buggy around the course.

Mechanic

Builds, maintains, and manages their team's buggies year-round the off-the-track heroes.

Pusher

The athletic force behind every buggy on the course. Five are required for each buggy on Raceday.

Flagger

Holds a flag landmarks for their team's driver on the course to help them navigate key turns. Sometimes it's hard for divers to see so low to the ground!

Catcher

Stops the buggy after it crosses the finish line. Usually also a mechanic.

Follow Car

A vehicle that follows the buggies, for immediate response in case of a crash. During heats, also contains judges and crew.

Times

Times

Men's Times

Year	*Team*	*Time*
2022	SDC	02:08:74
2021	SDC	02:11:30
2019	SDC	02:06:61
2018	SDC	02:03.17
2017	SDC	02:02.16
2016	SDC	02:02.50
2015	SDC	02:12.36
2014	SDC	02:04.47
2013	SDC	02:04.99
2012	SDC	02:05.84
2011	Fringe	02:05.08
2010	Fringe	02:07.50
2009	SDC	02:03.30
2008	PiKA	02:04.35
2007	PiKA	02:07.39
2006	PiKA	02:07.30
2005	PiKA	02:07.87
2004	PiKA B	02:11.70
2003	PiKA	02:10.10
2002	PiKA	02:09.17
2001	Fringe	02:09.07
2000	PiKA	02:06.71
1999	PiKA	02:09.72
1998	Spirit	02:08.20
1997	Spirit	02:11.90
1996	PiKA	02:08.15
1995	PiKA	02:09.98
1994	PiKA.	02:09.17

Year	*Team*	*Time*
1993	Spirit	02:09.89
1992	Spirit	02:07.01
1991	Spirit	02:07.22
1990	PiKA	02:07.05
1989	Spirit	02:06.58
1988	Spirit	02:06.20
1987	Spirit	02:11.32
1986	PiKA	02:08.67
1985	SigNu	02:09.05
1984	PiKA	02:09.50
1983	PiKA B	02:09.00
1982	SigNu	02:10.80
1981	CIA	02:10.50
1980	PiKA	02:16.40
1979	Beta	02:18.40
1978	Beta	02:20.00
1977	PiKA	02:17.80
1976	PiKA	02:23.30
1975	PiKA	02:19.30
1974	SigNu	02:20.20
1973	PhiKap	02:23.00
1972	PhiKap	02:24.00
1971	PiKA	02:28.50
1970	PiKA	02:28.50
1969	Beta	02:22.50
1968	PiKA	02:22.50
1967	PiKA	02:24.80
1966	Beta	02:27.80

Men's Cont.

Year	*Team*	*Time*
1965	Beta	02:28.70
1964	Beta	02:31.50
1963	PiKA	02:31.75
1962	ATO	02:27.50
1961	ATO	02:27.20
1960	ATO	02:34.50
1959	PiKA	02:29.70
1958	ATO	02:28.40
1957	ATO	02:25.00
1956	ATO	02:25.00
1955	ATO	02:26.00
1954	ATO	02:28.10
1953	ATO	02:30.50
1952	DTD	02:36.00
1951	DTD	02:41.60
1950	DTD	02:41.80
1949	DTD	02:42.50
1948	DTD	02:48.00
1947	DU	
1946	DTD	02:49.00
1941	KapSig	02:55.00
1940	KapSig	02:53.00
1939	KapSig	02:44.00
1938	KapSig	02:43.00
1937	KapSig	03:00.00
1936	KapSig	02:46.80
1935	Beta	02:47.20
1934	KapSig	02:49.70

Year	*Team*	*Time*
1933	Beta	02:48.50
1932	Beta	02:54.80
1931	DTD	02:59.00
1930	Beta	02:57.50
1929	PhiKap	03:05.60
1928	KapSig	03:04.40
1927	KapSig	03:15.80
1926	PiKA	03:18.30
1925	KapSig	
1924	KapSig	
1923	KapSig	
1922	SAE/PiKA	04:30.00
1921	ISD	04:38.00
1920	Tau Gamma Phi	

Course Record

Women's Times

Year	Team	Time
2022	Spirit	02:45:18
2021	SDC	02:38.50
2019	SDC	02:27.30
2018	SDC	02:23.60
2017	SDC	02:23:27
2016	CIA	02:31.06
2015	CIA	02:35.64
2014	SDC	02:33.45
2013	SDC	02:32.60
2012	SDC	02:30.90
2011	SDC	02:34.96
2010	Fringe	02:40.59
2009	SDC	02:25.60
2008	SDC	02:28.84
2007	SDC	02:31.00
2006	PiKA	02:38.50
2005	Fringe	02:37.91
2004	PiKA	02:29.83
2003	Fringe	02:44.81
2002	PiKA	02:30.58
2001	Fringe	02:34.70
2000	SDC	02:35.79
1999	PiKA	02:45.92
1998	PiKA	02:43.28
1997	Spirit	02:37.78

Year	Team	Time
1996	Spirit	02:35.91
1995	Spirit	02:33.03
1994	PiKA	02:42.81
1993	PiKA	02:38.69
1992	Spirit	02:33.52
1991	PiKA	02:35.88
1990	PiKA	02:35.66
1989	Spirit	02:35.65
1988	PiKA	02:37.60
1987	Spirit	02:36.60
1986	Spirit	02:38.94
1985	CIA	02:45.33
1984	PiKA	02:48.60
1983	CIA	02:46.50
1982	CIA	02:49.29
1981	SDC	03:04.08
1980	CIA	03:06.30
1979	SDC	03:11.00
1973	KapSig	05:07.50
1972	KapSig	04:25.30

Course Record

Past Chairmen

2023	James Wong
2022	Frank Li
2021	Tishya Girdhar
2020	Diya Nuxoll
2019	(Spring) Joyce Chen
2019	(Fall) Hunter Rideout
2018	Camilla Xu
2017	Enosh Shachar
2016	Edward Cao
2015	Elon Bauer
2014	Lars Wander
2013	Josh Hixson
2012	Anthony Pacella
2011	Chris Shellhamer
2010	Jessica Thurston
2009	Andrew Hundt
2008	Mizel Djukic
2007	Mike Rem
2006	Arnold Oh
2005	Sara Player
2004	Janice Golenbock
2003	Janice Golenbock
2002	Scott Wabnitz
2001	Scott Wabnitz
2000	Debby Keller
1999	Debby Keller
1998	Dani Barnard
1997	Fiona Bedford
1996	Greg Dupier
1995	Pete Harllee
1994	Demian Johnston
1993	Alexis dePlanque
1992	Alexis dePlanque
1991	Ray Fratto
1990	Erica Levy
1989	Chris Hansen
1988	Louis (Gino) Cosentino
1987	Shawn Stufft
1986	Gretchen Von Grossmann
1985	Luan Denny
1984	Nancy Burns
1983	Sandy Ruscin
1982	Elaine Andrysick
1981	May Slava
1980	Janet Danek
1979	Marianne Dwyer
1978	Gerd Beckmann
1977	Mark Gardner
1976	Joan Bothwell
1975	Dave Kanner
1974	Dary Turner
1973	Don Dietrich
1972	Jeff LaRochelle
1971	Jeff LaRochelle
1970	Harold Herre
1969	Robert Gebbia
1968	Jim Wentz
1967	Mike Smolens
1966	Paul Magnuson
1965	Roger Powell

Sweepstakes

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Sweeps

Sweepstakes Chairman

James Wong

I'm not sure when I decided I wanted to be Chairman. By the end of my senior year, I had done just about all there was to do, after driving, pushing, and mechanicing. Joining Sweepstakes seemed like a natural progression for being able to use my culmination of experiences to help direct the sport as a whole.

After being elected, I didn't have a good idea of what I wanted to do with this position. My only goal was to run smooth, efficient rolls. Over this year, however, starting up All-Gender races, overhauling safety equipment, and trying to revitalize Design Competition all became priorities.

However, I couldn't have accomplished any of these feats from this year on my own -- I have had the privilege to work with the most talented group of students. Each of the teams also brought out the best of their leadership as Chairmen for this year.

I also need to thank everyone from Sweepstakes, as their hard work constantly impresses me. Isabel has been everything I could ask for from an Assistant Chair -- her experience, organizational skills, and advice have made my job orders of magnitude easier. Ale stepped up to take on a job she wasn't expecting and has been one of the most competent Safety Chairs we have had in years. In addition, Elena, Juju, and Elizabeth have all brought passion and new ideas that continue to push the boundaries and enhance the visibility of Buggy.

Thank you as well to the BAA, Elizabeth, and Stacie for providing support and advice throughout this year. Finally, thanks to everyone at Fringe, for bringing me into this crazy sport and giving me all the tools I needed to succeed.

The view from the top of the hill really is different and I'm so glad I've been able to see the hard work and dedication of each of the teams through this whole year. It's been an honor serving the buggy community and good luck this Raceday!

Isabel Vala

Assistant Sweepstakes Chairman

I'll be honest, I'm not sure how I ended up here. I fully intended to stay a mechanic for the entire time I was at CMU. And yet, here I am, decidedly not mechanicing. From basically the day I joined Apex, buggy became the best part of my college experience in all its waking-up-at-4am-to-sweep-the-ground glory. After leading a team and building a buggy last year, I honestly could have left CMU happy with my impact on both Apex and buggy as a whole. But I was only a junior and thus had more time.

So, I ended up on Sweepstakes. I did not anticipate any of this year. Being at the top of the hill during rolls has given me an entirely new perspective on buggy and has allowed me to interact with so many different people that I would never have had the chance to do otherwise.

While it's not building a buggy, prepping for rolls and planning Raceday was something that I have found a lot of satisfaction in. This year's Sweepstakes has done a lot, from making races more inclusive and welcoming, to making rolls safer. And I couldn't be prouder to have been a part of it. Thanks so much to James and Ale for being amazing at what they do, and to Elena for keeping me sane these past four years (but especially this year).

And, most importantly, thank you to the Scotty Dog vs Pierogi Race from 2019, just for existing.

Ale Bonacini

I can't say that this is how I envisioned my second year in buggy. To be honest I am not really sure how I ended up here. Nonetheless this has been the most rewarding experience I could have ever asked for.

Pushing for DG my freshman year, making history as the third ever all women team, introduced me to a crazy sport that I have now invested basically my entire life in. I could go on and talk for hours about all I've done during my time as safety chair. About how I have truly done my best to improve the safety of this sport and put my heart and soul into creating a culture in which drivers are not afraid to speak up. But somehow this job has become my entire personality so I'll try to refrain myself from doing that.

Being able to work first hand with all the teams and see the passion, time, and innovation that they put into every single one of their buggies has made the countless late nights and early mornings extremely worth it. And somehow after this very strange year spent on top of the hill watching buggy after buggy go down the free roll I can say with confidence that I wouldn't want to change a single thing.

All of this would have not been possible without the amazing people that stood by my side. I, in fact, want to thank James and Isabel not only for being the best Chairmen and Assistant Chair I could have ever imagined to work with, but also for being two amazing mentors and supporting me even during the toughest of times. Thank you to Juju and Elena, and also Elizabeth Z. who have (somehow) helped me stay sane. Lastly, I want to thank Tishya and Linna for all the support and guidance they provided since day one.

Design Competition Chariman

Elena Harllee

To the casual observer, the mechanical complexity of the buggy world is perhaps not immediately obvious. Most buggies look pretty much the same: a weird amalgamation of a tube and an airfoil, a pushbar, some wheels, and possibly a colorful paint job. But in reality the mechanical variation from team to team and buggy to buggy can be enormous, and is the result of countless hours of design and innovation on the part of teams' mechanics. Showcase is designed to let everyone get up close to the buggies in order to see these variations for themselves and Design Competition lets the teams really express their mechanical prowess and get professional eyes on all the engineering work they've done over the years.

The biggest news for Design Competition this year is our decision to make it required for all teams. Sweepstakes believes not only that all teams should be able to present the engineering choices behind their buggies, but that doing so should be expected of teams, and that it will help teams get more feedback on their designs. We believe that Design Competition can be better than it has been in the past, and that the involvement of all teams can only serve to improve this part of buggy.

It's been a pleasure serving as your Design Competition and Showcase Chair this year, and I'm excited to see the results this Saturday.

Marketing and Communications Chairman

Elizabeth Zapanta

For me, Buggy is a family affair. Raceday was live-streamed annually with retired pusher and driver commentary. My childhood dream was to be in the back of the follow truck.

I fell into becoming Design Comp Chair last Spring and immediately knew I wanted to be a part of Sweepstakes again. Now, I can say that I have thoroughly enjoyed my first full year on Sweeps Many thanks to James, Isabel, and Ale who entrusted me with the inaugural term of this position and letting me do whatever I want when it comes to my job.

Plus, it's kind of fun to tell people that I have no responsibilities other than run the TikTok and Instagram (which you should follow if you haven't already). I personally enjoy showing up at rolls for *the content*.

Though I'm still trying to get Buggy to go viral, I have loved getting the student body more interested in the sport and making ourselves visible beyond the occasional watching capes on the way to class or Carnival Weekend. I hope to continue to expand this presence so this wacky tradition that is near and dear to us all can continue for at least another hundred Racedays.

Juju Nieto

Buggy Book Chariman

I like to tell the story that I was recruited for buggy before I even decided to come to CMU. The opportunity to drive for PiKA was obviously my deciding factor in committing to Carnegie Mellon (shoutout to Katy Zapanta)!

In all seriousness though, buggy has been the one of the best things I could have ever gotten out of my time here. What I thought would be a short-lived attempt at becoming an athlete, quickly turned into an unexpected gift. Over the past four years I have developed a deep love for this sport and a deep admiration for those crazy enough to be involved in it. Being able to make this year's Buggy Book was a joy and in the words of Jon Hua, "the jacket is always a plus."

I would like to thank my parents and family for encouraging me in all I do, and for not killing me for getting back into Cleo. Thank you to Katy for roping me into this and being a phenomenal leader. To Elinore, Margaret, and Yin for trusting me as head driver. To Rob, Aaron, Jon, and the entire PiKA organization for always rooting for me. To James, Isabel, Ale, Elena, and Elizabeth for being such great collaborators and people. To Annie Nguyen and Jai Ta for helping me design this book! To my friends who have and will continue to cheer me on. And to anyone who has ever had to listen to me talk about Buggy... thank you.

The early mornings, permanent scar on my head, and loss of sleep from making this buggy book have all been worth it. I cannot wait to drive headfirst down a hill one last time this year.

If you ain't Pike...

WRCT
88.3 FM
cmu tv
W3VC
SWEEPSTAKES
Carnegie Mellon University
Sweepstakes 2019
Lifetime
Chairman's Choice
Award
Presented to
Anne Witchner

Kaycee Palko

One of the most important, and often unrecognized roles of Sweepstakes is the position of faculty advisor. Faculty advisors are the backbone of each year's Sweepstakes and have consistently contributed to making buggy a better sport.

Former Sweepstakes Faculty Advisor, Kaycee Palko, has been involved in advising Sweepstakes since 2006, and has touched the lives of countless students, alumni, and buggy fanatics alike. While this year Kaycee has stepped into a new role at CMU, we wanted to dedicate a Buggy Book page to her to let her know how grateful the buggy community is for her constant support of Sweepstakes and the sport for the past 17 years.

Thank you Kaycee!

"Kaycee was incredible to work with for my entire time with Sweepstakes. The thing that stands out the most was her support when the 2020 raceday cancellation was announced. She took the time to call members of Sweepstakes individually to make sure we were okay during a disappointing and scary time. I particularly remember she texted me that evening to let me know she had taken care of cancelling all of the police officer reservations for rolls and raceday because she knew it would be a sad and difficult thing to do. In the weeks after the cancellation, she was instrumental in turning everything around, making cancellations for the physical raceday, and helping to pull together virtual raceday, to bring the community together to celebrate the centennial. As unconventional as it ended up being, Kaycee really helped make the 2019 -2020 year a memorable and enjoyable one for the buggy community." - Diya Nuxoll, (*Sweeps 2020*)

"It was so great working with Kaycee on Sweepstakes, and it's mind-blowing to think about how much work she's put into Buggy over the years. She's done so much behind the scenes just to keep the sport going, and has been an incredible advisor through all of it." - Joyce Chen, (*Sweeps 2019*)

"Kaycee was always quick to listen, provide a kind word of support, offer guidance, and respond to grievances with dry humor. She was instrumental in keeping Sweepstakes sane, and the student body in line. I was always astounded by her composure and quick decision-making in an emergency. It's a miracle that she put up with us for as long as she did." - Linna Griffin, (*Sweeps 2017*)

"Kaycee has been a phenomenal advocate for the sport of buggy and the students and alumni that participate. Her support is what made it possible for the entire buggy community to continue to build and compete safely every year. Thank you for everything, Kaycee! You're the best!" - Hunter Rideout, (*Sweeps 2018*)

Former Sweepstakes Faculty Advisor

The

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Tale of a Chairman

Aviva Young, Apex

When I first started at Carnegie Mellon in the midst of the pandemic, freshman me was looking for some friends, and just by chance, I stumbled into virtual shop hour for Apex. It was hosted by what would become two of the most incredible women in engineering I have ever met in the form of the then head mechanic and build lead. Little did I know, they would become two incredible mentors and friends, who have shaped my experience at Carnegie Mellon for the better.

Buggy was one of the first communities I became a part of here, and I think that it is definitely a uniquely CMU thing.

It combines the spirit and physical rigor of any sports team with an innovative, hands-on engineering project, to create a unique experience unlike any I've ever seen before. From the countless shop hours put in by our mechanics to painstakingly handcraft our next buggy from scratch, to our fearless drivers hurtling down the freeroll every weekend, to our incredible pushers sweating in the frigid Pittsburgh mornings, the dedication and persistence of Carnegie Mellon students to our strange sport never ceases to amaze me.

Every time I try to explain what I do at college to my grandma and grandpa, it takes a little while. Videos usually help, but it takes some mental gymnastics to explain the distinctive combination between soapbox car racing, Olympic luging, and carbon fiber manufacturing. Yes, college students really do get up that early on the weekends.

Yes, there is a person in there.

It takes even longer to explain the sheer amount of hard work and dedication that students put into buggy to make it the incredible experience that it is. From bonding over frozen fingers at four in the morning, to midnight snacks after push practice, to finally celebrating Raceday, buggy creates a bond like no other. Being a chairman over the past year, I have had the opportunity to work with some amazingly dedicated people, and I've learned a lot about team management, communication skills, and adaptability. We've experienced our challenges, but we couldn't have overcome them and made it to Raceday without the combined efforts of the entire team. I have had an incredible journey with Apex over the past three years, and am forever grateful for this community that buggy has given me.

Tale of a Driver

Cynthia in Seraph RD21 (above) and RD22 (below)

Cynthia Xu, Spirit

When I first visited CMU as an admitted student, I learned three things: firstly, that Walking to the Sky was, perhaps, just a little bit of an eyesore; secondly, that because I was short, I would inevitably be recruited to drive for buggy; and thirdly, that the floor of Maggie Mo was surprisingly comfortable to nap on. Little did I know that the latter two points would become concurrently relevant barely five months later.

I joined SPIRIT Buggy my freshman year and never looked back.

Despite Raceday 2020 disappearing beneath the tides of the pandemic, I was afforded the opportunity to participate in Raceday 2021. Despite its limitations, it was still an extremely special experience. I suppose, however, it couldn't hold a candle to Raceday 2022 — ending a quarter-century women's champions drought made Raceday 2022 just a little bit more meaningful. In a way, however, Raceday 2022 didn't feel like an end goal, but just the beginning: like we had paved a road for those who will come after us from a trail blazed by those who came before.

Looking back, all of us have truly overcome so much these past couple of years as a sport, as organizations, and as individuals. I know that several teams among us have had to rebuild virtually everything from the ground up after Covid, and the fact that we are where we are, now, on Raceday 2023, is a testament to the tenacity and perseverance of all of us who have come together in both competition and cooperation to keep the tradition of buggy alive.

When people find out that I'm a driver, they often ask, "What's it like being in a buggy?" I tell them that it's fun, that it's fast, and that if they're ever free on a weekend morning, they should come join us. What I can never seem to truly articulate, however, is the feeling of flying down Shenley Drive with the sun rising behind me, the strength in my teammates' voices when we shout our cheer, or the pride on our alumni's faces when they see how far we've come. These moments of adrenaline, elation, and family are why we commit ourselves to this sport.

N.F.J.

Tale of a Mechanic

Christian Lanuza, PiKA

It all started with a man named Jonathan Huanathan. There I was, minding my business going about Buggy like any other day – then WHAM! I was shoved in the back of a truck by none other than Jonathan Huanathan himself. Him and his sidekick (good ol' Chooks Loyet) needed another man for a project and I got pulled into it because they found out that I had been a mech for SDC in the fall.

What they didn't know was that I had shown up to a whopping three mech sessions and rolls across a full semester! I was about as much of a noob as anybody else.

They had me cook some wheels and attach them to tube-like contraptions to send them up and down a hill. It turns out that this is actually some kind of sport that the kids at CMU play. They call it Buggy but its official name is Sweepstakes.

After I expertly cheffed up the wheels, attached them to the tubes, and read them a bedtime story, a few men burst into the back of the truck. While I hoped they were my saviors, they ended up taking the Buggy out of the truck instead. At some point during this experience it came to my attention that there was a person inside of the tube like contraption.

To this day I am still baffled as to how they weasel their way in and out of there.

After my spectacular performance I was given a promotion to PiKA Wheelman. I guess that meant I was here to stay.

My name is Christian Lanuza and I am one of the head mechanics and acting program chairman for PiKA racing.

Tale of a Pusher

Victoria Nguyen, CIA

I never meant to be a pusher. As a MechE major, I naturally gravitated towards mechanicing. When garage hours were scheduled at the same time as my classes in the Spring semester, I thought “well I guess I could give pushing a try.”

Pushing lit a competitive spirit that I had not experienced in years. As a former competitive swimmer, I understood this spirit. The same spirit that motivated me to finish the last 50 meters of a 200 butterfly was the same one that helped me get a final push in on hill 4. I could almost hear my former swim coach saying "find that second gear."

What I didn't know, at this point, was the importance of team. It was the team that got me through the exhaustion of rolls—the "good morning" during not-so-good mornings, the incomprehensible 4am conversations that had no business being that funny, and the post-rolls brunch.

I think that's the tale of many pushers—we never meant to be a pusher. We had to be convinced to wake up at 5 in the morning to push a buggy uphill, but here we are behind Hunt Library at 1 in the morning for push practice.

Going into this Race Day, it's easy to get caught up in the competition of it all—I want to win too. But let's not forget about the team we have by our side.

The Teams

The Teams

Apex

Apex is CMU's newest independent buggy organization, founded in 2012 by a group of friends living in the Rez on Fifth. We are the open-source buggy team, meaning that we don't keep any trade secrets. Unlike other teams, our shop hours are fully open, and we are always happy to share our knowledge with other teams. We build a new buggy each year, allowing us to innovate and push the boundaries with new ideas in buggy design. Apex remains dedicated to our founding principles of teamwork, passion, innovation, and excitement. But above all, we're just a bunch of friends who all love buggy!

Buggies:

Phoenix (2013)
Firefly (2017)
Solaris (2019)
Molotov (2021)
Scorch (2023)

Special Thanks

Tyrant: Amanda Vallon
Mascot: Vulcan

Chairman:	Aviva Young
Asst. Chairman:	Kyle Hsin
Head Mechanic:	Robert Petruska
Build Lead:	Harry Ren
Asst. Head Mechanic:	Caitlyn Santiago
Push Captains:	Samuel Green, Rachel Wilson
Head Driver:	Leah Restad
Drivers:	Mia Pogach, Brooklyn Mao, Katherine Karl, Margaret Blair
Flagger:	Kyle Hsin
Social Chair:	Katherine Karl

Atlas

Atlas competes in the robotic buggy division, striving to be the first to have our buggy steer itself unaided around the raceday course. At the intersection of engineering and programming with a longstanding tradition of buggy racing, we're fostering an innovative community for autonomous buggies.

Chairmen:	Larry Chen and Alexander Lyons
Driver:	Servo'n'Sensors+TX2
Social Chair:	Christopher Bernard
Hardware Chair:	Owen Ball
Software Chair:	Thea Brick

Buggy:

BabyBuggy (2019)

Special Thanks

Oshadha Gunasekara

CIA

Founded in 1970, CIA was the first independent (non-Greek) organization to win the Men's portion of Sweepstakes, or Buggy in 1981. Open to all members of the student body, CIA's objective is to strike the right balance between performing well and having fun!

Buggies

Equinox (2015)
Tempest (2016)
Emperor (2017)
Aurora (2019)
Kingfisher (2020)
Roadrunner (2022)

Chairman:	Olivia Ehrman, Leo Hasher
Head Mechanic:	Nate Klein
Asst. Head Mechanic:	Julia Anitescu
Build Lead:	Elliot Frankel
Asst. Build Lead:	Aiken Xie
Head Driver:	Grace Conard
Drivers:	Audrey Young, Julia Liu, Lucy Chen, Abby Glass, Amy Germer
Push Captains:	Leo Nicolussi, Victoria Nguyen, Sam Rosenstrauch, Sona Marukyan, Jocelyn Tseng
Flagger:	Martine Leech.
Treasurer:	Winnie Quangkananurug
Secretary:	Mateus Gondinho
Social Couch:	Leo Hsu & Hannah Shane
PR Chair:	Victoria Huang
Alumni Relations:	Julia Liu
Design Chair:	Karina Shethia

DG

Delta Gamma Racing is the only sorority and entirely women-led team that has raced in the last decade. As one of the newest teams on the course, we are proud to make it to our second Race Day this year! Our team is small but strong, with hopes to build a buggy of our own next year to become more competitive. This year, having repaired another loaner, Insite, to see Race Day 2023, our goal is the same: just get around the course.

Buggy:

Insite (2003, Fringe)

Special Thanks

Special thanks to DG alumni Sophia Battaglia and Katy Zapanta for building the foundation of DG Racing and for their unwavering support post-graduation.

Head Chairman:	Lindsay Lamberti
Asst. Chairman:	Marissa Montadas
Head Mechanic:	Liz Flory
Driver:	Ines Maquaire
Push Captain:	Megha Korpol
Pushers:	Katherine Dettmer, Nicole Jani, Sarah Chen, Marissa Montadas
Flaggers:	Angie Zhao, Annabel Lee, Saniya Mandloi

Fringe

Fringe Buggy has been On The Edge since founded by a group of architects in 1969. Throughout our tenure, we've strived to improve our buggies with every new build, centering on safe, creative, and innovative engineering to give us a competitive edge. We've expanded our membership throughout the school and cultivated an environment where anyone can learn how Fringe Rolls Buggies Really Fast. This year, we've again been challenged to break away from the lingering effects of 2 COVID years, but as always, we pushed through together and we're excited to present our newest buggy and our talented team! Fringe ready? FRINGE ROLL.

Buggies:

Billy Jean (2018)
Bumper (2018)
Blind Faith (2019)
Baltic (2020/21)
Burnout (2022)
Brimstone (2023)

Special Thanks

We would like to thank Tammi Wong, Madison Scott, Graydon Loar, Andrea Roman & Thomas Gloria, Hunter Rideout, Declan Kelly, and Maya Liu. We would especially like to thank our sponsor, Conturo Prototyping, for providing us with the machining services to have the best possible parts this year.

No Thanks:
Drunk driving, construction, geysers, angry bikers who ignore barricades, things that go missing in the froom, concrete blocks

Chairmen:	Olivia Corrodi, Eleanor David
Head Mechanics:	Bhairavi Chandersekhar, Andrew Thrasher
Mechanic:	Rebecca Dettmar, Sam Radziwon, Winona Wang, Evan Somlo, Ellen Lee, Maelle Allanic, Anagha Pai, Sunny Kim, Jessica Wu, David Cohen,Izzy Gloria, Rita Paixao, Kendall Hart, Alice Tang, Jennifer Bortner, Maggie Gong, Elly Zheng, Isabelle Coburn, Rachel Yuan, Annie Liang, Aparna Nair, Ali Hoffman, Georgiana Bailey, Rhea Kalra, Eric Grynber, Eyal Davidov, Froom Ghost
Head Driver:	Ihita Mandal
Drivers:	Mansi Gandhi, Kyrsten Denise Rioveros, Irene Cui, Carleigh Cusick
Push Captains:	Erica Chiang, Justin Zhang

PiKA

Mens's 1922, 1926, 1959, 1963, 1967, 1971, 1975, 1976, 1977, 1980, 1983, 1984, 1986, 1990, 1994, 1995, 1996, 1999, 2000, 2002, 2003, 2004, 2005, 2006, 2007, 2008.....
Women's 1984, 1988, 1990, 1991, 1993, 1994, 1998, 1999, 2002, 2004, 2006.....

————

Buggies:

Raptor (2011)
Banshee (2013)
Cleona (2016)
Wraith (2019)

Special Thanks

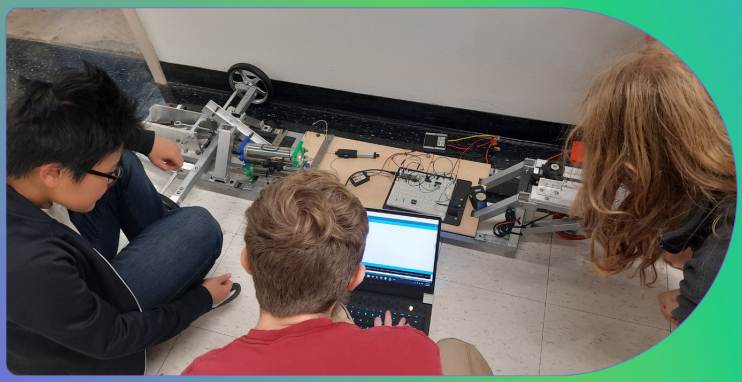
Jon Hua, Katy Zapanta, Yin Raquino, Rob Levin, Aaron Silverstein, Ryan Barrett, Justin "Squid" Belardi, Nick Calzolano, Tom Wood, Dave Conley, Keshav Raghavan, Eric Bruner, Sean Sechrist, Kevin Mclaren, Jim Plymyer, John Barrett, and all continued alumni support.

Chairmen:	Mason Loyet, Phillip Wellener, Christian "Lightning" Lanuza, Matthew Wellener, Julia "Juju" Nieto
Ass Chair:	Belardi
Mechanics:	Mason Loyet, Leo Semen Badakar, Christian"Lightning" Lanuza
Head Driver:	Julia "Juju" Nieto
Drivers:	Elinore Tolman, Margaret He
Push Captains:	Gideon Deasy, Matthew Wellener
FOADs:	Johnny Pereira, Grisham Vazirani, Kian Canales, Elmer Wang, Nikita "JYD" Tcherevik, Crosby Davidson, Emiliano Plaza

Robobuggy

Founded in 2013, Robobuggy began when Roboclub members dived into a dumpster for the remains of the original Robobuggy "(Singularity)." used by AEPi and the CS department. Since then, four robot buggies have been built, each aiming for the goal of a fully autonomous course completion during raceday and finishing faster than a human team. Robobuggy has had several teleoperated course completions as well as assisted autonomous rolls. After a brief pause during COVID years, Robobuggy is back! Now, the team is building our latest iteration, and with centimeter-level precision GPS, we are pressing forth with achieving ever more reliable autonomous capabilities. If you want to join the team with the smallest driver and most LEDs in all of buggy history, stop by Roboclub in the UC basement anytime (we accept members from other teams too).

Chairmen:	Annie Chen, Ravi Dudhagra
Mechanics:	Annie Chen, Casey Walker, Juno Hoffman, JC Yordy, Ryan Bao, Catherine Vassiliadi, Carter Harllee, Mikhail Khrenov
Head Driver:	Intel NUC
Electrical Team:	Ravi Dudhagra, Abirami Elangovan, Anish Singhani, Owen Ball
Software Team:	Christian Luu, Jixiang Li, Jack He, Kevin Liu, Joseph Li, Gabriel Zaragoza, Mikhail Khrenov
Firmware Team:	Blaine Huey, Gary Bailey, Carson Swoveland, Delaynie McMillan, Brandon Joel Gonzalez, Ethan Lu
Push Captain:	Casey Walker
Pushers:	Larry Gang, Christian Luu, Jack He, Joseph Li



Buggies:

Singularity (2014)
Transistor (2015)
NAND (2018)
Short Circuit (2023)

Special Thanks

Roboclub, Milwaukee Tool, General Motors, Caterpillar, LockheedMartin, Aptiv, Anduril, Blue Origin, Charles River Analytics Epic Metals, Hakko, Formant, Foxglove

SDC

In SDC Buggy, we're proud to represent our dorm student community through the hard work, friendships, and fun we have together. We're always striving to improve and pay attention to every detail. We foster an innovative spirit while respecting and building upon the great contributions of our alumni before us. As our fellow insomniac would say, "May I never be complete. May I never be content. May I never be perfect."

Buggies:

Avarice (2010)
Inferno (2017)
Vanity (2019)

Special Thanks
Jeremy Tuttle, Annie, Javi, Jeremy Dropkin, Cathy, Jordan, Camilla, Joyce, Boyao, Drevin, Chris Goode, Connie, Wade, Eddy Ryan, Kyoko, Isabelle, Mike Darcy, Alex Roman, Sunny & Laura, GLong, David, Kathy, Gessner, Jing, Jon G, Alex Y, Ian Price, NickMo, CSM, Michelle & Nat, Jake, Derek, Dan & Katelyn, Omer; all alumni; Tera Monroe, and SDC GenBod; Sweepstakes; and our friends, fans, and supporters.

Chairman:	Yuma Matsuoka
Head Mechanic:	Paul Gonzalez
Mechanics:	Aiden Cheng, Alex White, Alice Ho, Andrew Yang, Nnenna Nwaigwe, Haqq Coulibay, Cole Herber, Daniel Zhou, Delaynie McMillan, Devank Agarwal, Elizabeth McBride, Elliot Escalante, Ethan Huang, Gordon Xu, Katherine Horng, Lewis Rockwell, Michael Meng, Rohit Garikipati, Rosemary Yang, Steven Jackson, Steven Lee, Tin Chi Lo, Todd Achuff, Yuma Matsuoka
Head Driver:	Suzanne Nie
Drivers:	Delaynie McMillan, Elizabeth McBride
Push Captains:	Matthew Garcia, Anna Yu, Erin Magid
Pushers:	Ace Engel, Asha-Anne Tyagi, Catherine Cai, Donald Dinerman, Kevin Liu, Keltin Grimes, Lee Wang, Minwoo Eom, Madeline Falk, Neville Caceres, Rosemary Yang, Ryan Flammer, Rohit Garikipati, Stephanie Eristoff, Spencer Matonis, Susan Huang, Trey Dubose, Tin Chi Lo, Yuma Matsuoka, Zoe White, Om Patel, JP Iaropoli, David Rotunno, Chetan Chilkinda

SigEp

We are Sigma Phi Epsilon (or SigEp) racing! We're a Greek org with lots of passion and love for buggy (and donuts, we also have donuts). We're driven to perform the best we can while never losing sight of the point of buggy: fun and companionship. Our organization relies on trust and communication; we welcome all with open arms and allow our new recruits to play an active role in the operations of the team, whether that be pushing, driving, or being a mechanic. We will always have room for new team members, and we will teach you everything you need to know. So come join SigEp racing!

Chairmen:	Matt Adetula, Mia Krishamurthy, Jack Winters
Head Mechanic:	Divit Malkan
Mechanics:	Nayana Balusu, Bilal Chaudhry
Head Driver:	Elizabeth Lee
Drivers:	Sachi Onisi
Push Captains:	Len Huang, Kristin Daniel, Nick Mlodzienski, Cheney Price

Buggies:	*Special Thanks*
Barracuda (2009) Kraken (2013)	Carl Young, Jake Muskovitz

SigNu

Top o' the morning top o' the morning top o' the morning

Head Chairman:	Perfect
Also Chairman:	So... Um... Yeah
Head Mechanic:	Non-Disclosure Agreement
Mechanics:	Vibe Check, TV Static, Wanna See My, Penjamin, Wendy's Nuts, Is That You?, Unschubable, Clippers Hoodie, Yuri (In Heat), tnasvormstive eduscifoanl experiende, Miwhere, Imposter, Mini Gabe
Drivers:	Dylan "Little Brother" Bonanno, Vanessa "Airplane Runway" Wu, Clarissa "Lao Liang's Neware" Liang
Pushers:	Drain, Sprinkler, 6th Floor, Roommate Situation, Runner-Up, Raccoon in Captivity, Mickey from Bumble, Very Nice!, Who?
Head Flagger:	DK's Lover
Flaggers:	Thomas' Lover, Oh- I Know, Bomb Lab, 现在我有 冰激淋

Spirit

SPIRIT Racing Systems is a multicultural organization and a facet of SPIRIT. SPIRIT strives to bring inclusivity, pride, and excellence to the sport of buggy. Born in the fall of 1984, it took just 2 years for SPIRIT to place first in women's, and in 1987, SPIRIT were champions in both men's and women's. In 1988, SPIRIT won again in men's, this time with a course record of 2:06.20, which would remain unbeaten for two decades. We are competitive, but above all, we are family. Our innovation and our resolution, together with history and our alumni, make us who we are today.

Buggies:

Kingpin II (2002)
Seraph (2004)
Mapambazuko (2011)
Inviscid (2014)

Special Thanks:
To our advisors and mentors: Cherlisa Tarpeh, Tom Felmley, Hope Dohner, Efrain Barbosa, Beichen Liu, Diamond Moody, Joe Frick, Chris Fulton, Jessica Lee, Maame Conduah, Evan Moss, Glen Philenn, Kade Smith, Robert Bowie, Chad Darby

Chairmen:	Sarah Gaiter, Chloe Wen, Cynthia Xu
Vice Chairman	Jacob Abrams
Head Mechanics:	Tony Yu, Rubin Chen, José Alejandro García Cortes
Mechanics:	Jasmine Zeng, Amari Boxill, Adithi Phadke, Mehar Goli, Tanya Vazquez, Sarah Gaiter
Head Driver:	Lara Witwick
Drivers:	Melina Castillo, Avi Wong, Natalie Sarabosing, Cynthia Xu
Build Lead:	Rosina Ananth
Push Captains:	Joshna Iyengar, Alexander Shepard
Pushers:	Seth Setse, Maxwell Adar, Jayson Ma, Maxwell Jones, Kay Oladeji, Jeremy Ocloo, Zuleima Noriega, Jason Easterlin, Ebi Indiamaowei, Julianne Curtis, Maame Conduah, Anna Iacocca, Mckenzie Van Der Hagen, Teresa Myrthil, Chloe Wen, Divya Seenivasan, Jorge Urias, Andres Lizardo, Anishwar Tirupathur, Avi Wong, Sarah Gaiter, Mary Carney, Jeremiah Cochran, Jacques Moye, Ellen Angwin, Abigail Ngowe, Hannah Hong, Janae Bacchus, Jay Madan, Kacy Liang, Anya Singhal, Nicholas Chung, Stephen Kershaw, Sophie Liu, Anja Meaney
Head Flagger:	Silas Wang
Flaggers:	Isabella Shaw, Mehal Kashyap
Media and Design:	Anishwar Tirupathur (*Media and Design Chair*), Ireoluwa Alarape, Dariyah Scott, Andres Lizardo
Shop Manager:	Nana Anokye
Support:	Helen Zhao (*Support Chair*), Avi Wong, Mary Carney, Michelle Chen, Jonathan Lai

Additional

Additional

"Congratulations, Seniors! You're Alumni now!"

You know you're going to miss buggy most of all. Here's how you can stay involved! Register before graduation (May 14) to get one year of premium membership benefits for free:

http://cmubuggy.org/seniors

Member Benefits

Supporting Members are the first to know when exciting new buggy events are happening and receive special Members-only content like the Raceday Preview.

After your first year

A contribution of any size makes you a supporter and helps us pursue our five-point mission:

1. Preserve and make accessible the history of the sport
2. Provide a channel by which alumni can remain connected to and support the sport
3. Support and improve undergraduate participation
4. Improve relations and raise interest in the greater Pittsburgh community
5. Unite alumni across organizations

Be sure to visit http://cmubuggy.org for access to:

* Buggy photos
* Sweepstakes history
* The latest in buggy news
* An online forum where you can talk buggy with your fellow alumni

Support Organizations

Carnegie Mellon University EMS provides 24/7 emergency medical response to the Carnegie Mellon campus community and surrounding areas, as well as medical standby support to CMU organizations as needed for major events (like buggy!). Licensed by the Pennsylvania Department of Health as a Quick Response Service, CMU EMS provides a Basic Life Support level of care to over 600 calls per year. CMU EMS has been in service since 1984. EMS is proud to be in the chute standing by bright and early every rolls day! Remember to call CMU EMS at 412.268.2323 in case of emergency. We hope everyone has a safe Carnival 2023!

cmuTV is a student-run television station of Carnegie Mellon University. They bring together all of the video footage of Sweepstakes including the live-stream, Raceday videos, team profiles, and behind-the-scenes footage of Buggy. Thanks to the team for all of their help and support!

Support Organizations

W3VC is the invaluable team of radio experts that keep rolls running smoothly throughout the year. From the top of Hill 2 to the end of the chute, this team of hardworking individuals makes sure the course is clear and reports any problems to Sweepstakes. When a team crashes, they are the first to let the top of the hill know what happened and what needs to happen. They are as crucial as the Sweepstakes Committee and we really couldn't do it without them. Thank you guys!

WRCT is a non-commercial freeform radio station hosted in the basement of Carnegie Mellon's University Center. WRCT broadcasts interviews as well as Race Day coverage during the buggy races. Many thanks to the team for making that possible!

Special Thanks

Sweepstakes Advisors	Elizabeth Koch, Stacie Gardner
Alumni Relations	Laurel Bosshart Furlow, Tim Leonard, Anne Witchner
Head Judge	Sydney Baker
Assistant Judge	Diya Nuxoll
CMU Construction	Joseph Yimin, Jamison Fielding
Fire Safety Marshals	Evan Orowetz, Jason Heider
Buggy Alumni Association	Connor Hayes, Ben Matzke, Tom Wood, Lou Conley, Matthew Gallabrese
Buggy Showcase Judges	Tim Angert, Bex Taylor, Sarah Bergbreiter, Rachel Kurchin, Mike Mackin, Michael Serebrennikov, Nath Akella
Other	Carnegie Mellon EMS Carnegie Mellon Police City of Pittsburgh EMS City of Pittsburgh Police City of Pittsburgh Special Events Committee cmuTV WRCT W3VC Phoenix Sport Technology Vertical Access Solutions Viewpoint Production Pro-Lit Lighting & Scenery Inc. Windswept

Sponsors

Burgh Bites Food Truck & Catering

Ford

Carnival Buggy Schedule

Wednesday 4/12

6pm - 7pm: WRTC Radio Buggy Preview
@ 88.3 FM

Thursday 4/13

Noon - 2pm: Buggy Showcase
@ Weigand Gym

8pm - 10pm: Buggy Kickoff Dinner
@ Fuel & Fuddle

Friday 4/14

8am - Noon : Sweepstakes Prelim Races
@ The Buggy Course

7-9pm: Buggy Bash
@ Schatz Dining Hall - 2nd Floor UC

Saturday 4/15

8am - Noon: Sweepstakes Finals Races
@ The Buggy Course

3pm - 4pm: History of Buggy
@ McConomy Auditorium

4:30pm: Sweepstakes Award Ceremony
@ The Lawn behind the UC

Can't watch Raceday 2023 in person?
Stream it online!
http://cmubuggy.org/live

Another Year of Raceday

2023

Carnegie Mellon University Sweepstakes