

BUGGYALUMNI

ASSOCIATION

2015 Raceday Preview

Welcome to Carnival 2015! BAA Headquarters has been going all out to bring you the latest information in this year's Raceday Preview. It's an exclusive perk for our members, and we hope you enjoy it. If you can't keep this all to yourself, and you want to share it with some friends, please encourage them to become a member today by following the Membership link on cmubuggy.org.

We are often asked how someone can get involved in the BAA. This question often comes up when there's almost nothing going on (summer time). As some of us have expanded our families or moved on to other parts of the country, we see some great opportunities for fresh blood to join the ranks of the BAA committee. Share your talents, find your niche, get involved! Visit http://cmubuggy.org/about#getinvolved to find out how. We also know that many of you (though you may not have wanted to) have moved away from the course, but this makes it the perfect opportunity for you to do something with other buggy people in your region! If you have an event you want to throw, let us know and we would be more than happy to help.

Last year the BAA successfully handed off operating the timing system to the Phoenix tech who will be able to manage all of our time taking needs with little assistance. Our 6th annual Lead Truck Auction is underway so get out there and bid on a heat so that you don't get left behind. The lucky winners will get a view that even chairmen don't get, and help us raise money for our continuing Buggy Alumni efforts. As one of the original projects from the Lead Truck Auction, the JumboTrons are returning for the 6th year and are becoming a staple of the raceday experience. Also, we are once again partnering with Sweepstakes and Alumni Relations to produce the buggy guides that have been an enormous hit since we introduced them in 2009. Be sure to find one at various locations around the course so you know who you're rooting for!

Wondering what you might expect to see at Raceday this year? Well, we have new wheels, new buggies and a huge lack of experience. Top free roll times are being pushed by some unexpected teams, and others are slipping a bit. The lack of spring practice leaves our knowledge of push teams a bit limited. Apex is going into their 4th year and will be graduating their founding members. Will this be their last hurrah and how fast will Ember be able to roll after struggling since its introduction? Spirit has been experimenting with new wheels and has a good looking new buggy, Inviscid, added to the fleet. The Zoo is fast as always but still tail happy, and SigEp holds steady as a contender with Cuda and a wagon steering retrofit on Kraken. Their free rolls are in the upper echelon with SDC, Fringe, and PiKA. SDC graduated a large portion of last years push team potentially opening a window for Pika, while Fringe looks to recapture lost glory.

Be sure to stay tuned to cmubuggy.org for all your Raceday essentials. If you can't be in Pittsburgh for Carnival, you'll have plenty of company on our chat line and at cmuTV. For everyone else, we'll see you on the hills!

Contributors: Ben Matzke, Connor Hayes, Sam Swift, Shafeeq Sinnamohindeen Cmubuggy.Org
Photo Credit: Ben Matzke, Shafeeq Sinnamohindeen, Guillermo Gomez

Sweepstakes 2015 Schedule of Events

Wednesday, April 15

WRCT Pre Raceday Broadcast

7:00pm - WRCT Pre-Raceday broadcast - http://www.wrct.org/> 88.3 FM Pittsburgh

Thursday, April 16

Design Competition

10:00am (closed) - Weigand Gymnasium, UC

Buggy Showcase

12:00am - Weigand Gymnasium, UC

A Data Scientist's History of Buggy

12:15am - Buggy Showcase Stage

Bar Hangout

8pm - Hough's Taproom & Brewpub, 563 Greenfield Ave (houghspgh.com)

Friday, April 17

Sweepstakes Prelim Races

8am -12pm

Buggy Alumni Association Luncheon

12:30pm - Coffee Lounge, Baker Hall

Buggy Alumni Panel

2:00pm - Giant Eagle Auditorium, Baker Hall

Saturday, April 18

Sweepstakes Final Races & Exhibitions

8:00am - Schenley Park Course

Awards Ceremony

4:30pm - Midway Main Tent

See you on the hills.

2014 Raceday Results

The 2014 races were some of the most exciting in recent memory. The top of hill 1 was dicey in nearly every race with two and sometimes three teams shoving into the free roll at the same time. For the 4th straight year all of the races were condensed into one day so everyone went all out from the start. Much like this year, the Spring semester was shortned adding a lack of practice as a factor. These realities lead to an abnormally high number of crashes, spins and disqualifications with only 53% of the Mens teams finishing with an official time. The women's side was cleaner but nonetheless exciting with a lot of close races and some backhills passing. With many of the same attributes, 2015 looks to be just as unpredictable. Don't make any side bets, this year is going to be crazy!

Men Women

	Team	Buggy	Time	
1	SDC A	Malice	2:04.47	
2	Sig Ep A	Kraken	2:14.61	
3	Fringe A	Bissa	2:17.01	
4	Sig Ep B	Barracuda	2:17.32	
5	Spirit A	Seraph	2:18.12	
6	PiKA B	Chimera	2:25.47	
7	CIA A	Icarus	2:27.12	Re-Roll
8	Spirit C	Kingpin II	2:29.47	
9	CIA B	Impulse	2:31.87	
10	SDC D	Avarice	2:32.26	
11	Spirit D	Zuke	2:36.32	
12	AEPi A	Kamikazee	2:41.99	
13	CIA C	Orca	2:54.30	
14	Sig Ep D	Pandora	3:10.47	
DQ	Apex A	Phoenix	2:20.47	Roster
DQ	SAE A	Lucy	2:27.20	Interfere
DQ	Apex B	Phoenix	2:27.59	3/4 Trans
DQ	Spirit B	Zenith	2:30.72	1/2 Trans
DQ	Fringe B	Bolt	2:30.99	Drops
DQ	Sig Ep C	Mamba	2:31.78	Drops
DQ	SAE B	Rubicon	3:09.63	Drops
DNF	PiKA A	Banshee		Crash
DNF	SDC B	Vice		Spin
DNF	Sig Nu A	Krait		Spin
DNF	SDC C	Psychosis		Spin
DNF	Fringe C	Banyan		Crash

	Team	Buggy	Time	
1	SDC A	Malice	2:33.45	
2	Fringe A	Bissa	2:42.62	
3	SDC B	Vice	2:49.46	
4	CIA A	Icarus	2:50.67	
5	Sig Ep A	Kraken	2:52.76	
6	PiKA A	Chimera	2:55.48	
7	Sig Ep B	Barracuda	2:56.33	
8	Spirit A	Zenith	2:58.88	
9	SDC C	Psychosis	2:59.91	
10	Fringe B	Bolt	3:00.62	
11	Apex B	Phoenix	3:12.39	
12	SDC D	Rage	3:13.39	
13	Spirit B	Kingpin II	3:14.93	
14	CIA B	Impulse	3:24.28	
15	CIA C	Freyja	4:04.49	
16	Sig Ep C	Pandora	4:57.76	
DQ	AEPi A	Kamikazee	3:09.20	Spot Saft
DQ	Fringe C	Banyan		Crash
DNS	Spirit C	N/A		



Analysis of 2014 Push Teams

2014 will be a year remembered for many crashes, slow times, stange buggy decisions and continued SDC domination. While this may have been a boring end result, analysis of last years push teams reveals some interesting stats.

Front Hills (timed from start to crosswalk)

12	11	10	9	8	7	6	5	4	3	2	1
Sig Nu	Spirit	Sig Ep	Fringe	CIA	PiKA	Spirit	Apex	SDC	Sig Ep	PiKA	SDC
Α	В	В	Α	Α	В	Α	Α	В	Α	Α	Α
29.8	29.5	29.4	29.1	28.9	28.1	28.1	27.9	27.8	27.2	26.5	25.0

In 2014 3 of the top 5 front hill teams were disqualified, Apex for a last minute buggy swap, SDC B for a wheel ejection and Pika A for a crash. SDC A was a full 1.5 seconds clear of Pika on the front hills alone. With this advantage due their now graduated Hill1, look for changes in front hill leaders. Sig Ep placed 3rd on the front hills and likely would have been third overall if Pike had finished. We like to mention their buggy deficit, but their front hills are putting them back from SDC and Pike as well. Apex A placed 5th ahead of historically strong push teams at Spirit, Fringe and (in recent years) CIA. Having a potential king of the hill pusher and another year to improve on last year's horrible 1-2 transition could see them in the top 3 front hill times in 2015.

Lower in the order, Fringe A fell behind both CIA A and Pike B last year. Their free rolls are still above par, but their pusher fall off over the last two years is astounding. Sig Nu A squeaked into the top 12 showing they can have raceday success if they would roll more frequently. Pika B showed a small renaissance of sorts placing 7th behind long time rivals like Spirit A who had a disappointing 6th place front hills.

Back Hills (Timed from Hill 3 to finish)

12	11	10	9	8	7	6	5	4	3	2	1
CIA	Spirit	Spirit	Apex	Fringe	Apex	CIA	Fringe	Sig Ep	Sig Ep	Spirit	SDC
В	C	В	В	В	Α	Α	Α	В	Α	Α	Α
59.3	58.4	58.0	57.5	56.9	56.0	54.8	54.3	54.0	52.1	51.7	48.2

Spirit loaded their back hills last year having the 2nd, 10th and 11th place teams. For their A and B teams this is made more impressive when you look at their buggies' rollouts. Both teams were pushing before the hill 3 line. Fringe also looks to have stacked their back hills and may have made some roster errors. Their A and B teams were close even though hill 3 with Bolt was much longer than hill 3 with Bissa. The small wheels on Bolt could have lowered push times but the talent was definitely close. Apex A definitely loaded the front hills last year coming much higher on the front hills than the back hills. Apex B though was very close to Apex A, likely due to a better hill 3 pickup and a hill 4 roster error. Sig Ep A was slowed by a poor roll from Kraken, but Sig Ep B was mighty impressive coming in 4th. CIA B nosed into the last spot showing some depth we didn't know was there.

Coming into 2015, SDC and Pika A's push teams are the biggest unknowns. Did SDC bring in enough talent to offset what they lost last year? Pika could have loaded their backhills last year, but we never got a chance to see what level of talent they possessed. Spirit could benefit highly from an improved roll while Fringe, Sig Ep and CIA need to focus on push talent if they are to make a step forward. Hopefully this year will be full of clean heats so the push talent of each team can be put on full display.

cmubuggy.org

Rolls Mock Report (Basically Compubookie but Better)

After an entire "spring" of rain, snow, and 6am rolls cancellations sweepstakes has finally decided to consult a shaman in order to obtain good weather. The BAA doesn't know what demon you sold your soul to in order to get the skies to clear but we hope it lasts through raceday. At least they serve beer in hell.

Now let's get onto why you really read this report every Monday: So you can rant in the comments about any detail, no matter how minor, that I got wrong about what your team did. If the opportunity to bitch at the bottom about the fact that I didn't know that your 3rd roll pass test driver is actually the normal driver's identical twin from Norfolk is what gets you to pay for your \$5 accounts then bring on the hate.

Apex: Every story has an "Apex" (haha, get it?) and this story has definitely passed that point. Sure they have almost enough drivers now and can build buggies that roll decently but they can't say that they're the freshmen team

that doesn't know anything anymore. We all know you guys loved your newbie sympathy points: maybe you'll be happy doing buggy. Apex had 4 rolls with veteran and new drivers at speed and a pass test. All went off without incident and had decent rollouts.

AEPi: Having successfully pulled off Operation Mexican Thunder (ON SCHEDULE NO MATTER WHAT JAKE REID SAYS) AEPi managed to send two buggies around the course, one of which didn't even need to be pushed until after the chute. Great job guys! Happy Easter! Oh, wait...

CIA: Pulling a page from their past as the Carnegie Intoxication Association, CIA took a novel approach to driver qualifications. Rumor has it that they filled Orca with beer last week and fully immersed their drivers in it. While the drivers didn't actually consume any alcohol (let's not get DUIs folks), the smell of hoppy goodness motivated their pushers to run faster than they ever have. Rumor has it that CIA might actually be able to outrun somebody this year who's not Apex. Orca isn't rolling while she is attending a twelve step program. Good luck Orca: It works if you work it.

Fringe: As reported earlier, Fringe pulled out two buggies this season in an unprecedented move. One of the buggies was either the best or worst engineering idea ever to grace buggy. Looking at it, one wonders if their mechanics were divinely inspired or simply took too much DMT. The other buggy has 9 wheels and is basically unremarkable. I guess Fringe probably rolled, did anyone see anything? Does Fringe even have any new buggies that aren't broken?

SigEp:

SigNu: To be honest I forgot about SigNu. I'm pretty sure they didn't show up, so all good right?

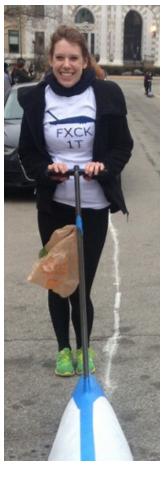
PhiDelt: WHO THE FUCK IS PHIDELT?

Pika: When attempting to find something to write about Pika two of their brothers told me to fuck off and one told me that "it feels nice, like a prairie." They went around the course pretty fast. It's weird what happens when you combine good buggies and good pushers.

SDC: SDC managed to turn a rainbow of emotions into a vortex of spins. Although the buggies that did get through the course rolled impressively as always, something tells me that SDC may want to recalibrate their geared flywheels.

Spirit: Having successfully recalibrated their geared flywheels Spirit has actually managed an entire season with few spins. Some say that if you find a freshman and tell him "rolls are on hold, it's spirit, again" merely produces a blank stare. While this new development has undoubtedly saved Spirit money on Dramamine, it may have an unseen adverse effect come raceday as Spirit can no longer count on having their entire team run back and forth from the chute 9 times a day as a form of endurance training.

Buggy Crash Test: Before rolls a buggy crash test project was conducted by a short redhead named Rachael. Yes, it's spelled R-A-C-H-A-E-L. No, I don't know why it's spelled that way. Yes, it's pronounced the exact same way as the normal Rachel. Unfortunately, not all attempts at science are always met with success. While setting up the test the crash test buggy unfortunately gained sentience and rebelled. While reports differ, most agree that the buggy was steered off target and that some variation of "you'll all be first against the wall when the revolution comes" was heard.



Meet an Alumni: Mark Estes ('87) Sig Nu

I am Mark Estes, I live in CA and work as the Chief Product Architect for Asante Solutions, a medical device company. You can see what I do for a living at Snappump.com

I was an undergrad in the 80s. Started in 81, Graduated in 87. BSME. I was a buggy chicken for Sigma Nu and became Zoo buggy chair in 86 and 87. the house was way into buggy in those days. We had been all about buggy for over a decade when I got there so I inherited a lot of knowledge, misinformation and zeal from the brothers who came before me. We often did well at



design and won the race in 82 and again in 85 against stiff competition from PKA, CIA, and Beta.

I was also a grad student at GSIA in the early 90s but stayed away from buggy as much as I could. This was mostly accomplished by having a full time job, a wike and being a grad student. I had no time for buggy fun but kept close tabs on the zoo and helped with the development of the small wheels they developed as an alternative to the 12 inch goodyear models.

Back before CMU-TV, the only video was shot from the lead truck. I ran that camera a few times. It was the best seat in the house. I have been a fan ever since and have been a commentator on CMU-TV a few times over the recent years. The 80s and 90s were an interesting time for buggy. I got to enjoy:

- The Goodyear years
- The transition from 4 wheels to 3 wheels (trikes)
- The rise of Spirit
- The end of the bike era
- The horrible truck fire
- The development of the 'new' rules
- The rise and fall of the small pneumatic
- The rise of the reverse trike and then a mix as both design have become optimized
- The rise of the small wheel (PKA, Zoo, and beyond)



I, like many people, have fought buggy addiction ever since my first taste. I was almost 'clean' in the early 2000s but got sucked into a similar drug: ultimate speed racing at the all american soap box derby. Until this year, the ultimate speed race was similar to buggy in many ways. fairly open rules, few wheel restrictions (until this year), and plenty of fun. The differences: they are called "cars" not 'buggies'. There is no push and no intentional turning. NO lst minute prep allowed, no heating. Mandatory use of 4 wheels. Max weight of 300 lbs to play with, feet first. The finish is determined by thousandths of a second not seconds.

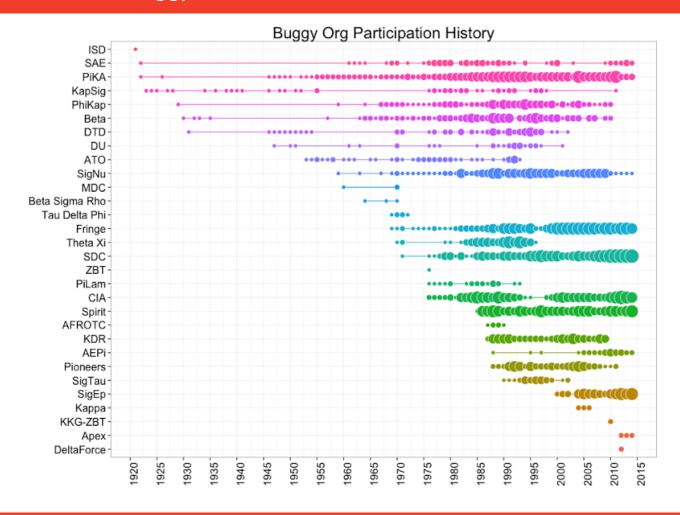
Long story short: my fellow Zoo buggy alum, Duane Delaney (AKA the cook) got hooked on a new version of the drug called buggy and had a hoot. We started by building wheels for the race and eventually ended up building a derby car of our own. Our team, Clean Sheet sigma Nu racing is the reigning ultimate speed champion team with a win streak of 5 consecutive AA-USC championships, the reigning NDR ultimate rally champions. we have won with both custom urethane and rubber wheels that we developed.



Duane has actually won the race 6 times in a row, having helped lead Zero Error to a win in 2009 with his rubber formula. Along the way, we crushed the All American track record. Is it buggy? No, but it gives the same buzz.

There is a fair amount of cross-over between the 2 sports. The white wheels used recently at CMU were developed for the derby race. Wheels described as "PKA" wheels dominated the derby race for a few years. The little wheels recently seen at the derby may or may not be close matches to the ones PKA buggies have been sporting. I am fairly sure that there is speed technology from derby that has yet to be tried at CMU.

Sam Swift's Buggy Showcase Talk Teaser





Preliminary Heats for Friday, April 19

	Women						
		Lane 1	Lane 2	Lane 3			
7:45 AM	Timing		Robo Buggy				
8:00 AM	Heat 1	SDC C	CIA D	Fringe D			
8:10 AM	Heat 2	Spirit A	Fringe B	Phi Delt A			
8:20 AM	Heat 3	SigEp A	Apex B	CIA B			
8:30 AM	Heat 4	SDC B	PiKA A	Fringe C			
8:40 AM	Heat 5	CIA A	Sig Ep B	SAE A			
8:50 AM	Heat 6	Fringe A	Spirit B	CIA C			
9:00 AM	Heat 7	SDC A	AEPi A	Apex A			
9:10 AM	Re Roll						
9:20 AM	Re Roll						

	Men					
		Lane 1	Lane 2	Lane 3		
9:40 AM	Heat 1	SigNu A	Fringe B	AEPi A		
9:50 AM	Heat 2	SDC C	Sig Ep B			
10:00 AM	Heat 3	CIA A	PiKA B			
10:10 AM	Heat 4	Spirit A	Sig Ep C	Apex B		
10:20 AM	Heat 5	Fringe A	CIA B	Phi Delt A		
10:30 AM	Heat 6	SDC B	Spirit B	CIA D		
10:40 AM	Heat 7	SigEp A	Apex A	Fringe D		
10:50 AM	Heat 8	PiKA A	Spirit C	CIA C		
11:00 AM	Heat 9	SDC A	Fringe C	SAE A		
11:10 AM	Re Roll					
11:20 AM	Re Roll					
11:30 AM	Re Roll					

Ben's Picks

After the mess that was last year's raceday, it's hard to gauge where teams really are. Throw in some extra short practice time and we've got another recipe for potential disaster. The one saving grace is that the teams seem much more evenly matched this year than most all with significantly less depth. With only a few teams even hinting at having a competitive B-team we'll be looking at a few upsets this year, and potentially a few new players in the field.

For Women's, SDC's buggy advantage will carry them through to the top spot again, but that gap will be significantly closed with a returning CIA women's team that is still hungry from their 2013 2nd place finish that slipped away from them. Fringe will edge into third with no help from their crazy new buggies but Pike will fight for that third place spot (and they might just get it too). SigEp will follow close behind with Spirit filling in a few seconds behind them. Dropping significantly, SDC B will sneak into the top 8 just ahead of SigEp's B team.

Men's gets much more difficult, and despite rumors of SDC losing their push team, it's hard not to put them at the top of the charts given their incredible performance through last year's cold. Pike will claim the second place slot with an impressive freeroll ahead of SigEp's stronger push team. With a very veteran push team, and dramatically enhanced buggies, CIA will take the 4th place spot ahead of Spirit, (who is arguably more deserving of a higher placement) who will roll in at 5th barely beating out SigEp B. The second Sig Ep squad will make it into the top 10 as the highest placed B-team. Apex will be coming on strong after being unable to properly race their A-team last year, finding the 7th spot ahead of a waning Fringe. Bissa will still manage to get a clean smooth roll into day 2, but their pushers are weak. With SDC's B team hitting the bales, PiKA B moves into 9th place. With their impressive new wheels and a strong new buggy to match, CIA B will barely sneak into the top 10 making them the dark horse this year to finish out the finals heats.

	Men:	Women:
P Si (S Si A Fr	DC A PiKA A g Ep A CIA A pirit A g Ep B pex A inge A Pika B CIA B	SDC A CIA A Fringe A PiKA A Sig Ep A Spirit A SDC B SigEp B

Best result of last 5: Men 12th (2014), Women 8th (2013) Org records: Men 2:21.49 (2009), Women 3:04.91 (2013)



Turning over a new leaf this year, AEPi has been making more frequent appearances at rolls and this couldn't be a better year for them to do so. With a plentiful fall season, they set themselves up well for the scarce spring that is now challenging everyone. Despite year after year of getting people excited for a theoretical new build, this year they seem to have gone backwards and are now rolling two drivers in a single buggy. The good news here is that one of those new drivers is new for this year showing that the team clearly still desires to exist. Even with the added challenge of qualifying both a new and veteran driver in the same buggy, they rallied hard and have proven that they're not out yet. We just hope to see them improve a bit on last year's performance putting them squarely on the potential cusp of breaking into

finals, assuming the other teams continue to crash and DQ like they have over the last few years.

With a busy truck weekend, the brothers of AEPi managed to get both Kamikaze drivers qualified. The only incident is one that no alumni could explain as it seems the tail end of the driver's harness got entagled in the rear wheel, locking it and throwing the buggy into a spin early in the chute. Miraculously, because the buggy was now rolling backwards, the wheel spat the harness back out and allowed the driver to recover albeit quite slowly.



We expect them to split the drivers between men's and women's to give both drivers more experience with full Raceday prep and from our view, we can't see any reason for them to choose one or the other. Right now we expect them

to finish in the middle of the field as they have in recent history. Their push team showed a little bit of life over truck placing them squarely in the middle of the pack with teams such as Sig Nu A, SDC B and Spirit B. With no new buggy on the course in the last few years, they are lacking the modern tech that most other orgs are now showing off. This will hurt them for sure in the free rolls, even if they break out their ZE wheels. Success for this team will be a raceday without any drops or spot safety DQ's and a new build in 2016.



Driven by Erica Green & Rachel Sniffen

position.

Best result of last 5: Men 20th (2012), Women 10th (2013)

Org records: Men 2:27.59 (2014 B), Women 3:10.29 (2013)

2014 saw hard luck fall on Apex for the first time since their founding. After having 2 strong racedays, where things went relatively smooth, everything was thrown into chaos last year. A structural issue was found in the floor pan of Ember, their impressive new buggy, during final preparations, rendering it unrollable until the necessary repairs could be made. Everyone was disappointed to learn of the bad news the morning of prelims that Apex's shiny new buggy Ember got benched. Of course we were glad that they chose to stay safe, but due to some errors in roster planning, their surprising A team had to be dropped with the buggy. We got to see them push in an exhibition with Phoenix, and that only made us yearn for more. The team managed a 2:20, which would have been good for 6h place last year, the final trophy

This year things seemed to have leveled out, and though they started the year with 5 drivers vying for a single buggy, they've managed to fix up Ember and whittle down their drivers to just their vet and a couple rookies to keep the team going into the future. They also have a potential King of the Hill pusher on Hill 1 this year in Jeff Chen. Returning as Hill 1 for the second year, he looks to improve upon his 16 second hill one from 2014. The rest of their lineup is made up of 3 and 4 year vets who should be well versed in transitions and hill 3 rollouts. Apex's women's team should be no slouch this year either. We did

not get a chance to see their A team last year, but we can assume it would have been their fastest women's team ever as Apex's B team was only 3 seconds behind their A team time from the year before.

The biggest question mark surrounding Apex will be which buggy rolls A and which one rolls B, and this



decision doesn't look like it'll be any easier given how Truck Weekend went. Ember definitely picked up the pace, but Phoenix looked strong as well. Ember would give them a huge advantage over Phoenix on the hills due to how much lighter the buggy is, but it has yet to show us the top speed that Phoenix always seems to find when those bright orange wheels are thrown on. Their head driver, Rachael Schmitt has a good grasp in Phoenix and was mighty impressive when thrust into the spotlight last year as Apex's only driver. She had a few rolls in Ember on its first weekend back out, but was switched back to Phoenix. This could indicate which direction they will go for 2015. If they do go with Ember, will their driver Palak Pujara, who missed

raceday last year with the buggy, be able to handle the raceday speeds? Lets hope they wont regret their choice like Sig Ep did last year.



Driven by Palak Pujara

Driven by Rachael Schmitt

CIA Carnegie Involvement Association

Best result of last 5: Men 4th (2013), Women 4th (2014) Org records: Men 2:10.42 (1986), Women 2:41.48 (1986)

CIA's 2014 raceday was one of mis-matched fronthills where both their men's and women's teams met their opposition at the top of the hill time and time again, including the rerolls. These made for some unintended collisions with both the other buggies on the course and the curb a few times. Despite these set-backs, CIA was able to put up impressive finishes for both their men's and women's teams with no run ending crashes, nor any DQ's. This year they have learned from their mistakes and having paid attention to the rest of the field throughout the year they are making much more prudent choices in their competition given that they are finally putting some top level pusher talent behind their ever-improving buggies. They have been showing a steady upward trend over the years and if teams slide out like they did last year and throughout this year, they could be looking even higher than last year.



This year we got to see CIA show some incredible improvement with their rollout as they have added some bright neon wheels to their buggies joining the rest of the top teams. However, it seems like they haven't gone the traditional route of ZE's and have instead found something else that is very comparable. This improvement in rollout also shows in their times with an incredibly competitive 53 second freeroll recorded over the weekends. CIA has almost a full returning roster from last year for both their men's and women's teams and seem to have only gained more in depth. With competitive Front hills and now a potentially competitive freeroll, it will come down to the backhills and their ability to avoid those mis-matched lane selections of last year.

Truck weekend showed us just how much their tech has improved with Ascension and Equinox trading wheels and rollouts and matching or even beating other top teams that we have come to expect. CIA had one crash this weekend



with their rookie driver in Orca slamming into the outside bales with a much-too-wide line for her speed. The driver was OK but did not return for Sunday and will not be rolling on raceday. From what we hear, the driver had her first experience on new wheels and also had her first real shove off of hill 2. These two things make for an enormous difference when you're not expecting them and she wasn't able to anticipate the new line she needed to take. Fortunately, CIA is large enough that they will STILL have 4 buggies qualified for raceday. Given that Ascension's Driver is also on their Women's A team, we will probably see Equinox and Ascension sharing the A and B slots for both men's and Women's and Icarus and Impulse filling out the C and D teams respectively.



Fringe

Best result of last 5: Men 1st (2011), Women 2nd (2014) Org records: Men 2:05.08 (2011), Women 2:34.70 (2001)

During Raceday last year, Fringe had one of the worst crashes in both recent and all-time history. Banyan, rolling for their Women's C, had a steering malfunction while attempting the chute turn. Without slowing down, she was unable to find the haybales and hit squarely on the bare curb smashing the first 5" or more of the buggy's nose and hit with such force that the driver's harness detached from the buggy allowing her to slide forward towards the curb. After being hospitalized for a day, the driver came back with some serious injuries, but thankfully nothing that couldn't be healed with time.

This year we saw Fringe open up the year taking things very slow and steady, clearly with an intent to not repeat last year's incident. Until about halfway through the fall it seemed as though they were having trouble finding the right buggy for their drivers. Come the spring, they were forced to quickly decide who would be driving what. This decision was made only slightly more difficult as they came out with two new buggies for the year. Their first, everyone thought would not see more than one day as it rolled with a full set of 9 wheels



and understandably dubbed X1 (Experiment 1). Their second looked more like we expected as their typical reverse trike and lacking fairings like any newborn Fringe buggy. As a surprise to everyone, X1 (aka Milibuggy), continued to roll and will be a part of their Raceday fleet which is notably missing their new buggy from last year, Bolt.

Over truck weekend we got to see them finish out a crashless year and qualify completely with no need for exemption with 4 buggies. With Bissa

back out and rolling with their only veteran driver she will take the A-team spot for

both Men's and Women's. From there, NBXV takes both B-team slots.

Beacon, surpringly will be the D-team buggy. We can only assume this is a pride based decision and not a time based one for their lower end teams. Push times so far are not putting them too far ahead of the midpack like we started to expect when Bonsai hit the course a few years ago. Their free rolls are also a bit lacking, which is surprising given the strength Fringe showed here from 2006-2013 We will likely not see them hitting the top spots this year, but they will still put up a fight for a trophy.





Driven by Christina Flores



Driven by Madison Scott



Driven by Gillie Rosen



Driven by Helen Kim

Phi Delt

Best result of last 5: N/A

Org records: N/A

Over the last decade we have seen new Greeks come and go with only Sig Ep lasting and growing into a competitor. This year PhiDelt is the latest greek organization to join the fray. As a Frat that only colonized in 2013 they are getting into buggy early in their existance and are off to a smooth start. They've managed to strike a deal to put KDR's old buggy Perun back onto the course. Many of you will remember this buggy as Moby Dick from when Delta Force rolled it in 2011. It is a solid buggy that performs somewhere between Apex's Phoenix and SAE's Lucy. Wanting to add a little of their own flair to the buggy, PhiKap has Plasti-Dipped Perun in Blue. It's raceday paint makes it look much like SAE's Rubicon with two white racing stripes down the top.

Phi Delt seems to have the drive to exist beyond this one season. Their chairman Alex Russell has been reaching out to alumni for advice on everything from build secrets to raceday planning. Wisely they seem to be taking a similar approach to Apex in their first year; make it around the course with a respectable time. Beyond that they want to plan for a build and get it finished in the fall. Hopefully their passion builds through the summer and they can come out next fall with the first of the Phi Delta fleet.

Since they only started during the spring semester and missed the first rolls of 2015, they impressively rallied together and squeaked out all 15 rolls they needed to qualify their new driver Sarah Deluty. She picked up the course quickly and looks to be a safe bet to make it through the chute unscathed. With this being their first truck weekend, we got to see them close out a solid prep with little error and so much enthusiasm. They've put in some amazing effort, but having missed the fall and only having 4 days of rolls under their belt, we will likely see them around the middle or upper middle of the pack, short of a day 2 finish. This is very similar to where Apex finished in their first year, and that team has flourished into a day 2 contender.







Org records: Men 2:04.35 (2008), Women 2:29.83 (2004)

Now that they've had a few years to recover after losing their house on the quad, PiKA has been going all-out this year and is reminding us of the kings of the course they once were. After rolling for raceday last year, Chimera is nowhere to be seen this year, being replaced by Raptor in the second buggy slot. The switch should boost their performance of their B squad as Raptor has been faster than Chimera was last year. Banshee is still receiveing all of the effort though from the former dynasty. Banshee has been one of if not the fastest rolling buggy all year long. The first year Banshee driver hasnt had many incidents, but given that buggies often go just a bit quicker come raceday, we hope she is prepared for raceday. The brothers would be very dissapointed to repeat last year's slide into the bales and force their men's A onto the less prepped B-team driver.



Truck weekend for PiKA looked to be like every other weekend for them and they continued to show off their incredible freerolls. On the other side, their front hills did not seem to match the speed of their freeroll with some sluggish looking pushers taking her up the hill on Saturday. On Sunday they forgot to send pushers to their backhills in time letting Spirit step in and push her up on their behalf. We feel confident that this behavior will change for the big day, but with limited practice this Spring, now is not the time to keep your speed hidden. With Banshee taking the A spot and Raptor filling out the B team, Pike will be going another year without a C squad which we likely won't see again until they are able to put together a new build.

Considering the speed at which Banshee has been rolling, PiKA will likely be holding that top spot at some point during the day. Their front hill push team on truck weekend was steadily in the top 3 or four throughout the day. Their back hills could give a little bit back, but it may not matter if they can build a large lead through hill 3. They should be competing for one of the top three spots in 2015 though as we know with Pike, anything less than 1st is a loss. Their Women's squad will be boosted by the switch to Banshee after not rolling their fastest buggy last year. Expect them in the top 5 as well.





Driven by Anna Zhang



Driven by Alicia Lott

Org records: Men 2:14.74 (1991), Women 2:54.50 (2010)

Now that SAE has been racing consistently for a few years, we have been hoping to see them come out with a bit more regularity and improvement. Last year saw them rolling two buggies with both Lucy and Rubicon. Even though they didn't make a stellar performance, they still managed to show us that they were willing to rally together and compete. 2014's crashes and spins knocked out enough competitors to put them in 10th place. Unfortunately, this year seems to be a bit of a back-tracking for them as they decided to almost entirely skip fall rolls and exclusively train in the spring. Throughout the year we saw them only roll Lucy who had some scary wheel camber and looks ready to break off any minute. We are all wondering what happened to Rubicon with the teams downsizing this year.

Over Truck weekend they nearly doubled their total rolls for the year giving you an idea of just how little they chose to practice this year. We did get a chance to see them fix up Lucy's wheels a little bit as they now were only cambered about 20 degrees as opposed to the 45 degrees we had been seeing the rest of the year. Lucy still has some energy in her and rolls smoothly, but don't expect her to put up much competition as their A team buggy.

Even though they managed to put up a second-day time last year with a 2:27.201, this year should see them fall out of the competition during prelims unless they get as much help as last year. Lucy is incredibly light,



but this strive to save weight has definitely hindered its performance as it has aged. Hopefully they will build a new buggy next year to give them a chance at competing for the top 10. They are at the lower end of A team push speeds and will likely be competing with AEPi and Phi Delt for the bottom 3 fraternity spots. SAE didn't compete with a women's team last year though this year they have entered a roster for a womens team. Their women weren't overly strong their last roll in 2013, but they weren't uncompetetive either.



Driven by Eileen Wu

Best result of last 5: Men 1st (2014), Women 1st (2014) Org records: Men 2:03.30 (2009), Women 2:25.60 (2009)

Succeeding in their threepeet, SDC remained the dominant force on the course in 2014. Pushing the limits of speed cost them dearly though with both their B and C teams crashing during the races. This allowed several other teams to jump up a few places. Unfortunately, this was not a one-time occurance as their spinning issues continued into the new season. SDC had trouble all year keeping their drivers out of the bales and their buggies 3-wheeled. Even with practice, things only seemed to get worse as their drivers picked up speed. Suffice to say, this incredibly short spring has not helped this team. The only buggy that seems unaffected is Malice, being driven by their only veteran driver. Jing Xiao has managed to stay clean all season showing

impressive poise in the lead dog role.



When SDC did succeed in making it through the chute, their rollout never reached what they were just a couple years ago. Malice was the only minor exception as she managed to meet, but never surpass, competitors rollouts. This is likely due in part to a weaker push team getting them over the hill. It's well rumored that SDC has graduated much of their push talent over the last few years. Last year they managed to put up an unbelievable 2:04 time in cold weather, and finished far ahead of second place. Due to this performance superiority last year, we can't count them out of something in-

credible even with all signs pointing to the opposite.

Truck weekend for SDC was a coming to terms. They had been trying all season to qualify Vice and Avarice who's drivers weren't able to find a chute line that kept them out of the bales without spinning. As both of these drivers are rookies, it's not too surprising they struggled with the subtle nuances needed to steer and drift a modern SDC buggy through the chute. Bane had a minor spin and bale tap on Saturday, but by Sunday, both Rage and Bane (replacing Avarice and Vice) were picking up speed and successfully passing through the chute. We hope they are able to keep it together through Raceday, and it's likely that we could see their A teams placed



highly again, though they are not a guaranteed win like last year. Without times for their B and C teams from last year, we can't confirm if they had a depth drop off last year, but with Rage rolling B and a large group of graduated pushers, we should expect their depth to be reduced.



Driven by Anna Black



Driven by Jing Xiao



Driven by Elizeth Ji

Sig Ep

Best result of last 5: Men 2nd (2014), Women 3rd (2012) Org records: Men 2:08.55 (2009), Women 2:33.95 (2009)

For the last few years now, SigEp has managed to unseat the former king of the frats PiKA regardless of their spins and DQ's. Starting a decade and a half ago, the brothers of SigEp slowly progressed into the top 5 contender through the late 2000's. Even though they have continued to build and improve their org over the years their times have leveled out right around 2:10 and they can't seem to reliably break into the single digits. Since they first reached and broke the 2:10 barrier in 2009, they haven't been able to push themselves just that little bit more to really compete for the title.





Going another year without a new build, Kraken instead got a new steering, switching from an ackerman to a wagon steering buggy. The new steering seems to have solved the stability ills that plagued the buggy on raceday 2014. Their consistent Raceday times over the last 4 years has Sig Ep looking like they'll hold strong again this year. On the pusher side of things, they are claiming impressive hill 1 times for both mens A and B making for some potentially hard choices for heat selection.

Our normal expectation for truck weekend seemed to fall a bit flat this year as SigEp didn't turn heads with their speed down the hill as they

have in past years. They still managed some improvement, but not nearly as much as we saw over the last couple years. This lack of increase could be from them going faster overall through the year, giving them less speed to pick up, but their lackluster rollouts has us concerned for the reigning Frat Kings. Given their lack of rollout, and Pike's incredible freeroll dominance, look for SigEp to lose their title as top frat this year, handing it back over to the former powerhouse. Their Women's team is looking strong and hopes to avenge a close loss to CIA A last year for 4th place.



Driven by Sushma Narayan & Madeline Finn



Driven by Kristina Williams



Driven by Nazli Uzgur

Sig Nu

Best result of last 5: Men 12th (2012), Women (no time) Org records: Men 2:09.05 (1985), Women 2:40.55 (2009)

Now that SigNu has moved to a smaller house in the Maggie Mo Quad, they've been showing some signs of renewal. This team that used to nip at the heels of the top contenders, are starting to recover from their deep slump with a much more enthusiastic team. They were consistently making it out to rolls in both fall and spring. Their speed is impressive, but they haven't yet managed to properly train their driver with a wider, softer line. This tight line worked at lower speeds but at her first taste of raceday speed, she spun. It was very similar to the spin they've performed the last 2 years on raceday.





It could be that they've just been prac-

ticing for an anticipated pass, but if they aren't able to hold that line and keep it through the chute, they should have worked on a proper line first where she would have really been able to show her speed. Aside from the chute, their new driver was having some trouble in other areas of the course, swerving on the hill 2 push a couple times, and making some odd turns past the stop sign and through the transition. SigNu's Pushers are more enthusiastic than they've been in years, but look to be lacking an equal amount of training to their driver. Their alumni of yesteryear may have left them with some high functioning buggies, but they will be wasting it if they aren't able to make it around the course for the 3rd straight year.

Over Truck weekend we didn't see them change their highly irregular line, but they seem to be holding it together for now. This tight line of theirs does get them to the corner first, but they lose an incredible amount of speed after correcting through the hard turn. It's a crapshoot if it'll work for raceday, but it'll be "exciting" none-the-less. Having seen only a little from their pushers, we can tell they're going to stuggle on transitions and hill 3 pickups. Nevertheless we can expect them to put up a decent time that will be mostly a result of their freeroll, assuming they are able to keep it clean through the chute. Sig Nu will be the only team not rolling a womens team this year, though it's not unexpected. They havent rolled anything other than men's A in about 5 years.



Driven by Raisa Chowdhury

Spirit

Best result of last 5: Men 5th (2014), Women 4th (2012) Org records: Men 2:06.2 (1988), Women 2:33.03 (1995)

Having culled their spinning desires, Spirit is showing that they are able to work through any problem given enough time, even if that time requires them to build two new buggies. After many years without building, Spirit has been able to add three wholly new members to their fleet, each looking a little more disappointing than the last. After the introduction of Zuke with her rear window, Spirit seems to have given up completely on their sleek tail and have chosen to lop it off entirely making their last two buggies (which look eerily similar, and have never rolled the same day together), look like a strange mix between AEPi's Kamikaze and their former fleet.





Sleekness issues aside, Spirit looks to have been able to maintain their chute speeds and have solved their issue of spinning. After a few minor cases of oversteer, Spirit was well on their way to recovery by truck weekend and might finally have a buggy to handle the speeds that their pushers can give to them. Even though they've graduated a few of their monster pushers from a few years ago, Spirit still seems to dominate the field on overall pusher strength boasting some top tier front hill times for even their C team on truck.

Spirit worked hard to pick up as much speed as they could over truck weekend and their drivers seemed to be mostly able to handle it. The more speed they picked up, the more controlled oversteer slides we saw until they ran out of road to slide across landing Seraph in the outside bales with an axle bent at a right angle. The buggy was quickly cleared off the road and the follow car moved on before they realized the extraction tools were in the follow car. They raced after it as it made it's way up the backhills eventually catching up toward the end of hill 3. Besides that one blip Spirit has proven that they have some handle on their chute turns now. Spirit has been seen on the most diverse portfolio of wheels this year with different colors, rims and sizes. The weekend before truck saw the introduction of PiKA sized wheels, showing that there may be a trend towards little wheels in the coming years after Fringe tried them out last year. Unfortunately this experimentation has not resulted in significant progress on their rollouts. Their chute turn power slides aren't helping keep their speed through the chute much at all. Once again, their free roll will hold them back, as they are normally 7-10 seconds down from the top teams in the free roll.



Driven by Shaleena Jeeawoody



Driven by Feyi Quadri



Driven by Sussy Romoleroux

Robo Buggy



Over the last few years, Robobuggy has been doing their damnedest to get on the course for raceday to show the world what they've been working on. They've been pushed out year after year due to weather and some kind of preference to these "human" teams. Well this year they will finally get their time to shine and won't have the chance to get bumped out as they take this year's timing heat to open the Friday races. This year has also been a banner year for the group as they have consistently been able to get in some rolls before daylight most mornings.

Starting with simple data-gathering course walks, Singularity and

its new sibling Transistor have actually been making it around the course without the need of extra pushes through the tough parts. The driverless buggy does however still have a remote-control driver who needs to follow close behind in a vehicle of their own. Even though it's remote controlled, we are still impressed at the progress they have made and can't wait to see how they perform on Raceday. We can only hope that full automation is right on the horizon and given a few years maybe see a full robotically driven heat.

