

Speech for US First Competition/Lee Drake, CEO – OS-Cubed, Inc.

Thank you, Kim, for inviting me to speak today. I'd like to thank Harris for sponsoring Team 1511, and all the other corporate team sponsors here today. The sponsors play an important part in FIRST. As Kim mentioned, my name is Lee Drake and I'm CEO of OS-Cubed, Inc a computer support and software development company located here in Rochester. Truth be told – I'm a serial entrepreneur. I've been starting up companies and building them up since I was in high school. I think I may have finally gotten it right with OS-Cubed. ☺

When I was in high school, we were just entering the world of computers. It was truly the dark ages when you used paper tape to store your programs and a 300 bit per second acoustically coupled modem to tie into the one computer that all the schools in the area shared at BOCES. There were two social groups – the jocks and everyone else. If you weren't a jock – you weren't anyone – no matter what other skills you had.

Even at college at Cornell University our computer resources mostly were just the beginning dumb terminals and we coded our programs on paper cards that we fed into a batch reader. I was one of the first people to get a personal computer in our dorm – there were 4 of us by the time I graduated college. Two of the 4 were visionary guys who thought that they could build a very cool game using the almost “unlimited computing power” that an Apple II and the PASCAL programming language had. They surmised that it wouldn't be possible to use up the entire 64 Kilobytes of RAM and 143K of floppy drive space that those state of the art home computers offered – that they could write a game with almost unlimited capability and complexity. The game they wrote (and my wife and I play tested) was a game called Wizardry. The first version for the Apple II was a blockbuster out of the gate and they quickly went on to create some dynamite follow-on products and eventually sold their business. That was my first exposure to working in a team on a software application – and really it was the genesis product of today's first person shooters, and Character Point of View adventure games.

I was Quality Assurance and playtester – working with Andrew Greenberg and his partner on developing a saleable product. I did it out of friendship with Andrew, for no pay, and little benefit other than seeing it created before the rest of the public saw it – but in the end Andrew taught me a lot about building software, working in a team and the satisfying thrill of creating something with your name on it. I went on to work with another friend who had a computer, building software to track parachute manufacturing – and this time I made some money – enough to buy my own systems instead of borrowing other people's.

Since then I've helped bring 4 companies into being – either as an employee or an owner. One of the ones I owned made the Rochester Top 100 of fastest growing companies. I've worked virtually every job in the company that exists – which gives me a pretty broad base to draw on and a certain sympathy for the challenges that each and every one of my team members have faced.

Along the way I've learned a few things about what makes a great team. A great team needs –first and foremost – to have great people. People at all levels who are positive, bright, can mentor others and who put the goals of the team at the top of their priority list while they're working. A team must have a deliberately positive culture, which allows people to flourish within their comfort zone, while supporting them when they reach outside their zones. A team must have great communications – both individually between team members, and overall between the leaders and the team members. They must have respect for each other, and appreciation of each other's talents, and must always emphasize the positive and learn from the negatives.

When my son Calvin began to get involved in FIRST I thought – oh cool – a robot club. I'd SO have joined a club like that if they'd had it when I was a high school student. I figured he'd hang out with other robot fans, learn a few things along the way, and it would be like most of the clubs I've been in – a couple hours a week after school for the year.

As I learned more about FIRST though – I realized that this view of a “robot club” was in error. This was a team – a dedicated set of adults and kids, united under the common purpose of having fun, celebrating science, technology and engineering, and teaching kids what successful teams in the real world can do in a short amount of time with limited resources. I looked over the “team requirements” and realized this was more like the commitment that a part-time job after school would require, and less like a club, or even a team sport. I also became fascinated with the process of the FIRST philosophy and began to chat with the mentors about what their goals and lives were like, why they were in FIRST and what they believed.

The dedication of the parents involved also took me by surprise. It seems I'm not the only parent who twigged to the fact that FIRST robotics was probably teaching their kids more valuable life lessons than they were learning between 8 and 3 in the classroom. So for all you parents who have volunteered to supply meals, dropped off your kids and picked them up at ungodly hours, and contributed time, materials, financial assistance and support – I think you all deserve a huge round of applause. [pause for applause]

And the dedication of the mentors and the companies that support them astounds me. I've never seen a sport, team, or other endeavor where the mentors are day in and day out dedicating a significant portion of their private lives and time, as well as company time and resources, to help the kids achieve success. They – every one of them – has shown a huge amount of compassion, understanding, leadership and vision in their ongoing effort to make FIRST a successful experience for them and for the kids. I'd be proud to have any of them as my employee – and am a bit envious of the companies that do employ them. They are a shining example of “gracious professionalism” in all parts of their lives. Again – a round of applause for the Mentors.

The thing that really blows me away though – and it does every single time I drop off Calvin, come in to pick him up, or participate and help with the team activities – is how awesome you students are. Every time I come in I see a group of positive, cheerful, enthusiastic, respectful and helpful kids – united in a common goal and having a BLAST doing it. I see kids spreading their wings as leaders, learning how to

manage, working as both mentors and learners – and doing it every day, day in and day out, with enthusiasm. Most importantly I see kids with skills in math, science, engineering, electronics, and human resource and management skills being celebrated every single day. You all honor and cheer each other for your individual skills, and help show the community that science and technology leaders are just as awesome as a great basketball player or a fantastic soccer goalie. You kids both blow me away with your attitudes and impress me every day with your dedication. It's you who truly deserve the round of applause. [Pause]

So in the past few months I've been converted. I'm now both a financial supporter – and a passionate advocate of a program that is doing great things for our youth – in a time when the educational system doesn't always seem to be stepping up to the modern world's requirements. I find myself talking to everyone about FIRST, and comparing it to the kind of practical experience you get at a technical school like RIT, which requires internships. I can't help myself – it's that inspiring. So I want you all to stand up – and repeat after me [pause, encourage people to stand]....

I [exhort crowd for loud! – repeat if necessary]

I Believe

I Believe that

I Believe that robots Rock!

I believe that robots Rock!

I believe that robots Rock!

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Thank you!