Passport FRC 4607, C.I.S.

Over the last number of weeks/months and at numerous events I have had people ask about our Passport. In order to understand our Passport, I think that you need to understand the team itself...

Backstory

For those that don't really know 4607, we are a team out of Becker, Minnesota. When the team was first founded, we wanted to create a team based on access and opportunities for the students - not just be on a robotics team. We live our motto - "Innovation cannot happen in isolation" to its fullest. We like to work with other teams, provide great community events, and network with organizations outside of the FIRST realm. Like most teams we have our areas of struggles and other areas that we like to highlight. Last season (2017) was one of those years we would like to have back... We had a great senior class with incredible talent - but we suffered when it came to robot design and then execution at our events in most aspects of our team.

The 2017 team had 50 students on the team with 17 seniors. When we started this season, another 17 students decided to not come back out. So when we looked at last year's roster we saw huge holes in our team - we were down to 16 returning students to lead another 32 rookies.

The mentor corps questioned 'what happened?' It would be easy to assign blame, and there are enough of us mentors to share the load. However, we realized that this had to be due to dysfunction in our process and/or organization. And so we started down the path of a reset year.

Not rebuild, a hard reset

We retained all of the students we were grooming for lead positions. We came to the realization that we were not building good robots - and no one wants to go to a robotics competition and watch a robot perform badly. It is especially painful to do this over four events in a FIRST season and then four more in the off-season. The best tool in our arsenal from years past was our exit interviews that we conduct with our students. We saw some troubling trends in these interviews. First and foremost was the frustration with our engineering processes.

We tackled those issues first as they were the most apparent from the exit interviews and robot performance over the last number of seasons. I will address how we formulated and executed our program's work on **5S**, our work with **5 whys**, and our **FMEA** process (Failure modes and effects analysis) in future white papers.

We realized that not only did we have problems with our engineering aspects of the organization, we had a problem with our culture. As any team that finds success it runs the risk of gaining members that are there for the success and not much else. When these people are not engaged in the process, they lose interest quickly and weigh down the team. That is where we found ourselves after the 2017 season, unable to effectively manage the new blood we had on the team; we relied too much on our leadership to not only lead, but also do the work in order to succeed the previous season's accolades. We had lost our investment in our team's core values. When succeeding the previous year's accomplishments drives the team's success, then it leads to dysfunction within the organization.

The Passport

We looked at how we could inspire our new students to get more involved. It was a spark (from somewhere lost on me now) that I wanted to institute the Passport. When I introduced this to the mentors and the leadership team it caught on like wildfire.

However, over the course of many meetings I realized that what we were formulating was a list of checks to limit students from attending our events, not inspiring the students as I first desired. We had things on our list such as dedicated amount of hours, mandatory events, fundraising requirements, safety infractions, meetings missed, etc. The list was too long and it was all supposed to fit on a bifold sheet of paper that was to be 3"x4". However, it wasn't inclusive at all; in fact it looked more like a demerit document rather than what I first envisioned. We could put this information spreadsheet; it wasn't what we wanted.

We went back to our core values for our team. We want to create leaders in our school; to provide opportunities for students and give them access to our partners so that they can hone their skills; to give them a road map to success. We wanted them to desire to attain the passport - not carry it around like a scarlet letter.

The epiphany was why not create this passport as a living document that the students can use as a cheat sheet when talking about our team? It only made sense to give our students a tool, a script that they can rely on when talking to other teams, judges, coaches from other teams, partners (some call them sponsors), community members, etc. This then became our guide on how to design the passport.

But we also realized that this needed to be a part of the 4607 branding. We wanted it to be as striking as our logo, as emblematic as our black jackets, as powerful as our motto, and as flashy as our team badges. So we created them with a full black background and emblazoned it with our white logo with our motto just beneath it. We made certain to put our mission statement on the backside so that the students can show the passport to the audience - all the while able to peek at the mission statement for a cue.

Then we put in our contact info (Social media outlets including Instagram, Twitter, and Facebook) on the inside fold of the Passport. We realized that other people would want to take a picture of these to archive and contact us later - so we kept it black and white to make it easy to snap a picture quickly. We also realized that the person snapping the pic would want to know the person that they were interacting with so as to make that connection when contacting us - so we put the student info (picture, department, first name) just above the media contact information.

We finally got down to the brass tacks: 'how to help our students get engaged into the process without it feeling like just a checklist'. We decided against many terms and fell upon 'contributions'. Meaning the student was to contribute to the team in the areas that we want our members to excel in - not be punished for. So we included our outreach events, attending an off-season event, attending a training event (JUMPSTART or Splash), etc.

Another note was to include FRC 4607's Programming Helpline information. The great thing about this programming helpline is that it grew from what we were already doing in 2016 and '17 into the Minnesota Mentors on Call which was formally adopted into practice statewide this past season.

The final item of concern is how would our team members carry this Passport. We wanted to keep it inexpensive so it would need to be printed in house on normal printer paper. That meant that the Passports would not travel or age well. So we again had to get creative - and this took more thinking than it should have once we came to a conclusion - put it on our lanyards with our team badges. We recognized that these Passports would have to hang along with our badges - so we printed them to fit just behind the badges - 3"x4".

And that is about it. There are details I left out, but this is the gist of how the FRC 4607 Passport came into being. If you want to know more or have questions, let me know. What follows is one of our final renditions before it went into print (the small Logo was in place of the student picture).

Name:	Contributions Signature
Dent:	MMR: Kickoff:
	Outreach:
	Jumpstart:
Social Media	Sponsor:
@CIS4607	Fundraising:
O@cis_4607robotics	Programming Help Desk
GBeckerRobotics4607	The Programming Help Desk offers programming assistance for FRC teams. Google Hangout Contact Email: cis.help.desk.4607@gmail.com
"Innovation Cannot Happen In Isolation"	to build future success
	concepts are widely celebrated, and builds solid foundation of opportunities students upon which
4607	experience, act as a catalyst for a culture in which STEM
	providing young adults with valuable engineering and business
	robotics team that strives to produce tomorrow's leaders by
	FRC 4607 CIS is a student-run
PASSPORT	CIS Mission Statement