

Chairman's Award - Team 4401

Team Number

4401

Team Name, Corporate/University Sponsors

PEÑOLES S.A. DE C.V. & CETLAR A.C.

Briefly describe the impact of the *FIRST* program on team participants with special emphasis on the 2016/2017 year and the preceding two to five years

Since start our participation in 2012, As a rookie team, until now , in most of the students *FIRST* has changed the desire to be better ,continue to study , 80 % of the members team want to study some engineering, and working at the same time, Imagine students with limit in economical resources that only think in work as a farmer , Now they come to be engineers Actually we have a future vision ,to take the extraordinary opportunity that Peñoles group give us. to grow up

Describe the impact of the *FIRST* program on your community with special emphasis on the 2016/2017 year and the preceding two to five years

The team has worked with programs like "CETMOV in mining town" to inspire the entire student in our community , and we want to shared ,to communicate the *FIRST* Goals to new generations in more than 500 students to all levels, promoting the ; in 2017 starts a program "TRAINING"; with youth (Teens with hope), in Chulavista town. Another program is Learn and get funny! it was designed, in order to attend more than 1000 kids of 7 schools. Also we got LEGO kits to train children in FLL 2017

Team's innovative or creative method to spread the *FIRST* message

The 4401 to diffuse the *FIRST* philosophy. Since previous seasons we have been working to share our achievements and experiences to La Laguna community through exhibitions and social networks, our official media day where we engage with traditional media such as Multimedios TV, Televisa Laguna, TV Azteca Laguna, newspapers such as Siglo de Torreon and Sol de la Laguna, local radio broadcast (96.1) and finally, through the corporate network from Peñoles group with an approximate reach of 100,000.

Describe examples of how your team members act as role models and inspire other *FIRST* team members to emulate

CETLAR´s students are from mining communities of Mexico, they go far away home to get a job, when they finish. Some students from Tehuixtla Guerrero traveled almost three days to get into the school, so he couldn´t visit the family frequently because of time and money. When he started in *FIRST* program he only knew about Agriculture, then he learned a new technologies. youth of 2016 team, study mechatronics engineers at the same time he work in Peñoles, he self-financial the Engineering careers.

Describe the team's initiatives to help start or form other FRC teams

In 2017 in the current season, we attend the 5705 with technical support and component loans from Conalep, 4401 works as a consultant for other competing teams through robot assembling workshops where we guide the teams in different subjects like cabling and structures. Year by year we host such workshop sharing our knowledge and experience with approximately 9 teams and more than 140 people from the different *FIRST* teams where we can find 4400, 4403, 4355, 4735, 6199, 5526, 5312, 4603 and 5705.

Describe the team's initiatives to help start or form other *FIRST* teams (including Jr.FLL, FLL, & FTC)

In 2016 and 2017 season, we beginning negotiation with personnel from PLC FRESNILLO mining group and CONALEP management so that . help to started two teams FRC category ; one from Fresnillo Zacatecas and other from Caborca Sonora with Conalep too .Our dream is start another team, now about FLL kids from Laguna del Rey .We have a group 20 student of elementary school that Since the last season we work hard with this aspect . build the pieces of the game.

Describe the team's initiatives on assisting other *FIRST* teams (including Jr.FLL, FLL, FTC, & FRC) with progressing through the *FIRST* program

Some mentors with student member team, travel to Torreon city ,so that they give support to Laguna *FIRST* team, to solve some troubles in mechanical with rookie teams , share ideas in solve the challenge, we have been working with them mentoring on engineering and industrial security, sharing resources within the two teams 6199 E-HAWKS and

5705 . In 2012 and 2013, training in e-pneumatics with 4355 and share components. In 2016 and 2017 mentored the 6199 E-HAWKS it was a rookie team.

Describe how your team works with other *FIRST* teams to serve as mentors to younger or less experienced *FIRST* teams (includes Jr.FLL, FLL, FTC, & FRC teams)

One of our main objectives is to promote teamwork and sharing experiences we have gained over our holdings, precisely CETMOV 4401 mentoring team to keep the team in 5705 as part Coahuila first robotics project firsts FRC category, where they were taught a course on the topics of discussion on each workspace in addition to them about the primary basis of competition. The head coach Magda has a constantly communication in a question with us. And actually shared in some topics.

Describe your Corporate/University Sponsors

Peñoles, or main sponsor, is one of the most important metallurgical-mining companies in Mexico that, through their events, promotes culture, health and environmental development as well as having a strong relationship with collaborators and society in general. For CETMOV 4401 it is of utmost importance to be supported by Grupo Peñoles and adopt their institutional values (Trust, Responsibility, Integrity and Loyalty) in order to make a change and improve our country.

Describe the strength of your partnership with your sponsors with special emphasis on the 2016/2017 year and the preceding two to five years

Some of our student, when finish their technical carrer will work in mining process of Peñoles. Now we work with project to make safe work in main with vision system of our ROBOT. They will participate improve projects whit skills obtained in FIRST. SIGRAMA have been an important part of the project development, providing tools needed and counseling sessions, not just on the technical side but also personal, values we have adopted as a team in the FIRST ROBOTICS COMPETITION.

Describe how your team would explain what *FIRST* is to someone who has never heard of it

The FIRST program is a nonprofit organization to bring the young students and create in them a love of science and technology, also helps you to have imagination , and skills for life , you learn about engineering ,safety and administration values such as honesty Solidarity and work team. FIRST program is in the four categories from elementary school children to young high school It is more than build a robot, is learning, is fun healthy, is discipline is hard work, is live , is to lead.

Briefly describe other matters of interest to the *FIRST* judges, if any

The CETMOV 4401 are integrated by 30 students and 8 mentors from Guerrero, Sonora, Zacatecas, Mexico City, Chihuahua, Durango and Coahuila. The priority of the institution is help young people to finish their academic studies and unify them considering that most of the students have left their hometowns to fulfill the dream of having a degree and look for a better future. CETMOV also changes the culture of the members through different programs like CETMOV GREEN, save energy , TRAINING.

Team Captain/Student Representative that has double-checked this submission.

Jorge Hernán Piedra Velázquez

Essay

4401 is an extraordinary team that has overcome many challenges over the seasons, challenges like the distance from their home place to the nearest city (Torreon Coahuila) where FIRST Laguna activities take place and the distance of the team members from there family because they are from different parts of the republic of Mexico. It's a team that honors the FIRST culture at the regional events where they are present, taking advantage of the abilities and technical knowledge, we count with an extra team that supports the other teams: programing their robot or solving electrical errors, lending components and tools, to teams in need principally to rookie teams or teams that wish to form an alliance. In 2014 we were awarded with the Gracious Professionalism Award for our abilities, in demonstrating a collaborative attitude like we mentioned. Also our team stand outs every season for their availability for team members to be volunteers, in the 2016 Stronghold season Gustavo Negrete, a mentor, participated like a volunteer robot inspector at the regional event that took place in Mexico City, in 2017 alongside Gerardo Serrano will participate once again as safety inspectors at the regional Laguna, also five team members as technical volunteers. The 4401 team has great strengths to out stand like a team that has technical skills that are of great help in support of other teams giving those hours of training so they can develop the same skills. Throughout three seasons our team has

been a host in their community helping teams from the Laguna like: 4400 Cerbotics, 4403 Roul, 4355 CP. BOTS, 4735 DEROF, 6199 E-HAWKS, 5526 TCATS, 5312 Lobotics, 4603 Leones Frances and 5705 Desert Eagles on subjects like the robot basic build sharing knowledge on how to build the robot (chassis and transmission) and electrical components of the control system.

Our team has participated in events like EXPOCIENCIAS COAHUILA in the 2015 season, we participated with the project "Tele operated system to lift boxes with recycle rush". Five team members spread the FIRST message with more than 45 projects around of 200 people were present from schools of several educative levels from Coahuila and Chihuahua, later they obtained the pass to the national fase in the city of Tampico with more than 200 projects of several states of Mexico. In the 2016 season we also participated en the same exposition in Torreon with the "Vision System" project with Stronghold season robot obtaining the pass to the national fase in Villahermosa City Tabasco where the main goal was to show the work done in the FIRST program round 500 national and international, assisted more than 1500 people.

The team counts with programs to inspire children and teenagers in a change of culture where they adopt new tools they can use in their daily activities like the use of new technologies and scientific methods, in 2016 we were distinguished with the Rookie Inspiration Award for our work and performance in this scope. Continuing with the inspiration initiative in children and teenagers, we incorporated in the community of Chulavista with the program "Teenagers with hope" where the goal of this project is that team members in the electrical and administrative area, share electrical abilities, electrical safety, involving them in dynamic activities with our administrative mentor. In the present day, we count with an enlistment of 8 teenagers that we will work with in a personal matter during twelve weeks we will donate material and work equipment so they can develop abilities that are taught throughout the program. We also work with children teaching them about new technologies through courses with Legos throughout three seasons we have taught them how to build and configure them. In the present day, we count with an enlist of twenty kids that are learning day to day with the use of science and technology, the final objective is to count with a team to represent Laguna del Rey in the FLL regional event, initiated by 4401.

We also incorporated CETMOV GREEN, a program that season after season fulfills with the objective to influence the community in doing activities related with taking care of the environment and ecology, participating the local Science Fair exposing this season with the theme "Global Warming" and showing projects of energy saving and products made with recycled material like metals, wood, and plastic.

"Safety is our priority" our slogan makes reference to the great importance that we give to safety in our activities that made us creditors in 2015 for the Industrial Safety Award that highlights the safest team in the pit area and during the elaboration season and trips to the events. That's why season after season the team continues with programs that are led by "KIMI" (Safety Promotor Mascot) that's in charge with other team members to make daily inspection and make observations related with the correct use of PPE and to make sure there aren't insecure conditions, also organizing RITS where the main points are: Impulse a culture of safety in every team member, obtain the well-being of every team integrant, low impact exercises are done, feedback of activities, and finally we end it with a motivational cheer where the goal of the day is? ZERO ACCIDENTES!

With the mentioned before, one of our greatest achievements of the team, was to be awarded with the Engineer Inspiration Award in the 2016 Stronghold season, award the granted the team pass to participate in the FIRST world competition that took place in the city St. Louis Missouri.

In this season, 4401 is in talks with Fresnillo PLC (Mining Company) about the start of new first teams in the cities of Caborca, Sonora and Fresnillo, Zacatecas in the CONALEP institutions. Sponsored by Fresnillo PLC and mentored by our team, sharing with them knowledge and the bases about the competition and providing support in preparation in their starting season, achieving the registration of the teams in 2017 to participate in the next regional.

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The team has worked since the 2012 season with programs towards the community of Laguna del Rey expanding them to other places like the city of Gómez Palacio, Durango and other states with the program "Mining Towns". In the city of Gómez Palacio in 2013 we started with CRIT spreading joy through robots and snacks, in the current season the objective of the team is not just to spread joy and presents with the program "Christmas with Robots" but to face the great ergonomic necessity of the children with different disabilities of this organization, for example making them more automatize wheelchairs.

A motor that moves our team is that every integrant share their knowledge, technical abilities, innovation towards proportions in need in the community. The team has traveled to other nearby places to promote the FIRST message with hundreds of students through recreational activities like ralys..

Our school (CETLAR) is located in Laguna del Rey Coahuila to 137miles to Torreon Coahuila, toward the Coahuila desert. is a small village located in the desert, it has approximately 6000 inhabitants, Our students are from little town near the mine most of them are from low economical resource, sponsored by Peñoles, provides a total cost of education.

Expanded programs for sustainable development training young people in the community Let us to talk about a beautiful and challenge program in community near to our school, little town ejido Chula vista named "TRAINING", Our Electrical and management team. Have a commitment to help a young people whose nor study, neither work. The desire is to

transmit the knowledge and training in electrical skill, work keep installation, give maintenance electrical home devices, so that they can to insert in a productive life. With emphasis work with safe culture ,safe in electrical installations. The effort is to invite ant encourage to learn and have nice time with them , in this season prepare eight work places.The member team of CETMOV prepare a TRAINING BUSS with practices , manuals , tools , material and get sponsor with DIF in community , to offer a coffee brake and snacks .We hope the teenagers can be better to entire life .Prepare too some moments were the students from different places shared his experiences and life projects. And comment them, why they stay in Laguna del Rey. to get the great opportunity 100 % sponsorship by PEÑOLES to study.

The work in the community is with ten social programs We had benefited six communities , Velar dena Dgo. Sierra Mojada Esmeralda, Gómez Palacio Dgo. , Laguna del Rey, Salinas del Rey. Our community programs are : "TRAINING ", "PLAY , FUN AND LEARN WITH ROBOTS ", "CETMOV GREEN ", "MEDAIA DAY ",ROBOT BASIC BUILT , "SAFETY CULTURE "

"RALY ROBOTS"."CHRISTMAS WITH ROBOT".

An important activity with our sponsors is to create a culture of mutual gain, win - win We make presentations in Torreon to the children of the sponsors play are the drivers and we gave them souvenirs made by our students.

In this season we looking for another sponsor ,We have project in 2016 -2017 ,prepare with personnel of Fresnillo PLC group to get that they sponsor two new FRC teams, initiated by us like a FIRST FRC , the goal is they aport the payment of inscription cost for two team of FRC and one of FLL .

We want to talk about the eigh mentors, some teachers of our school have been mentors , they donate a lot of time to do couching with the students and travel to help the teams of Laguna community FIRST LAGUNA .

They spend more than 1400 hours of extra time ,each season.