

# **FRC 2014 Season**

**Team 4488 – Shockwave**

**What a second year!!!!**

Alex Tenca

May 2014

# Oregon City District Event

- Record: 17-2-0
- Ranked #1 in quals → Winners!
- Pit Safety Award
- District Chairman's Award
  - History of PNW Chairman's Award winners
    - 2003 – Team 957 – Albany
    - 2004 – Team 847 – Phred
    - 2005 – Team 957 – Albany
    - 2006 – Team 492 – WA
    - 2007 – Team 1540 – Flaming Chickens
    - 2008 – Team 1318 – WA
    - 2009 – Team 1566 – ID
    - 2010 – Team 1540 – Flaming Chickens
    - 2011 – Team 1510 – Wildcats
    - 2012 – Team 2517 – WA
    - 2013 – Team 1540 – Flaming Chickens
    - **2014**  
Team 1540 – Flaming Chickens

# Wilsonville District Event

- Record: 16-2-0
- Ranked #1 in quals → Winner!
- Industrial Design Award by General Motors
  - *The Industrial Design Award celebrates form and function in an efficiently designed machine that effectively addresses the game challenge.*
- Safety Buttons

After all the district events:

Finished #1 in the district ranking system  
(out of 153 teams)!

# PNW District Championship

- Much tougher competition
  - 63 best teams in the district
  - Only 16 teams from Oregon (25%)
- Record 14-5-0
- Ranked #3 in quals → Finalists!
- Quality Award by Motorola
  - The Quality Award celebrates machine robustness in concept and fabrication.
- Average score of our matches
  - Qualification round: 177
  - Elimination rounds: 163
  - All matches: 172
- Oregon teams qualified for Worlds: 4 (18% of PNW slots)
  - 4488, 997, 955 and 1540 (Chairman's Award, not by ranking)

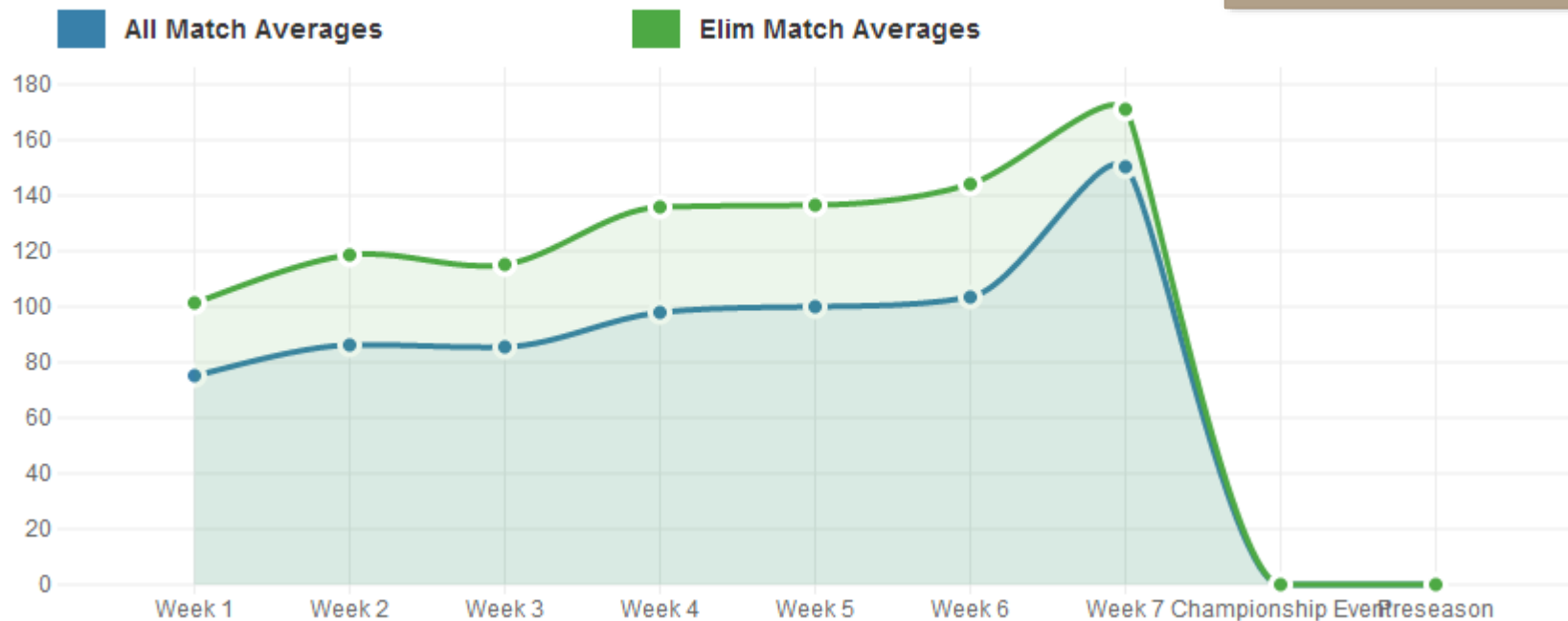
FirstWA teams:

- 47 teams (75%)
- Going to Worlds: 18
- 82% of the PNW slots

# Blue Alliance Insights (before Worlds)

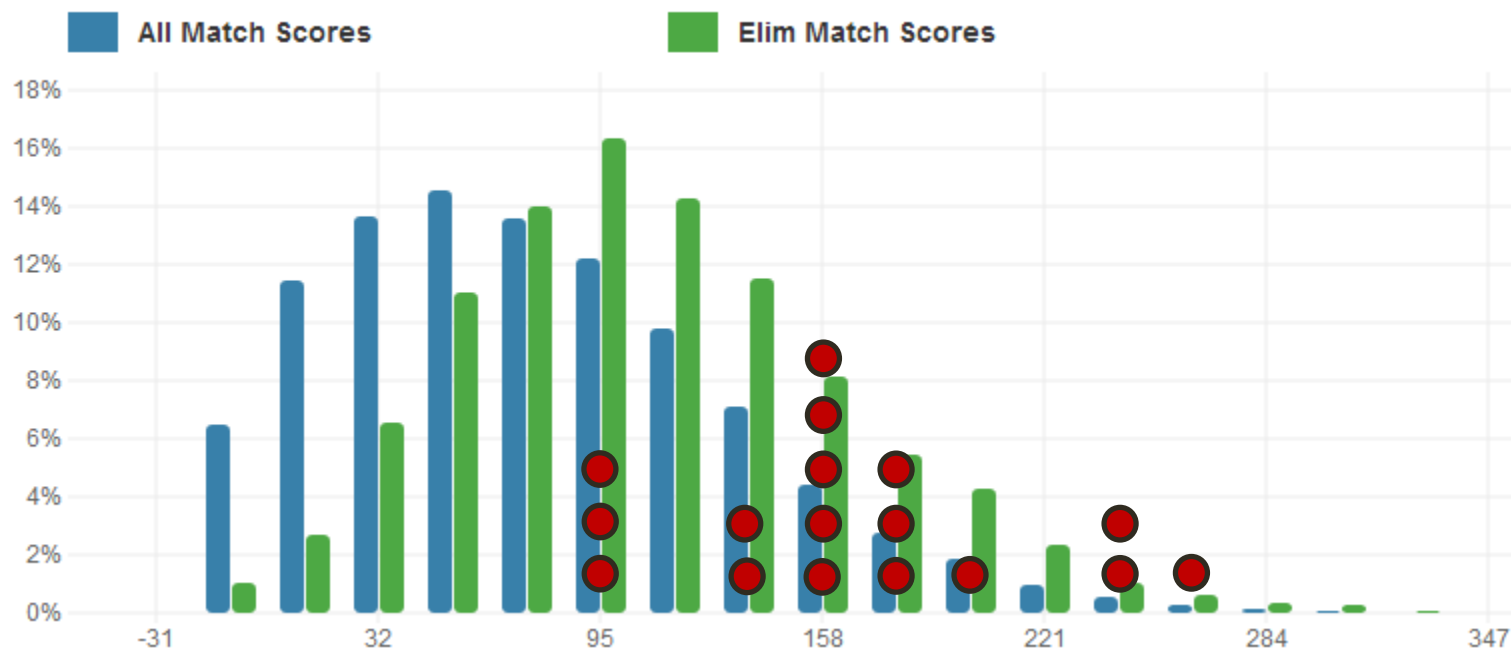
4488 Averages:  
Quals= 177  
Elims=163  
Overall=172

## Average Match Score By Week



# Blue Alliance Insights (before Worlds)

Match Score Distribution Percent of Matches vs. Match Score



● Our match scores in PNW Championship

# Ranked #1 in district points

Rank	District Points	Team	Event 1	Event 2	District Championship	FRC Championship	Rookie Bonus
1	337	4488 - ShockWave	78 🏆	71 🏆	183 🏆	Qualified	5
2	305	1983 - Skunk Works Robotics	40 🏆	67 🏆	198 🏆	Qualified	0
3	291	1318 - Issaquah Robotics Society	47 🏆	58 🏆	186 🏆	Qualified	0
4	284	3393 - Horns of Havoc	63 🏆	32 🏆	189 🏆	Qualified	0
5	276	4911 - CyberKnights	67 🏆	40 🏆	159 🏆	Qualified	10
6	235	2907 - Lion Robotics	70 🏆	39 🏆	126 🏆	Qualified	0
7	225	488 - Team XBot	58 🏆	29 🏆	138 🏆	Qualified	0
8	218	1595 - Dragons	28 🏆	61 🏆	129 🏆	Qualified	0
9	210	2522 - Royal Robotics	65 🏆	73 🏆	72 🏆	Qualified	0
10	205	4061 - SciBorgs	69 🏆	61 🏆	75 🏆	Qualified	0
11	193	3588 - the Talon	39 🏆	67 🏆	87 🏆	DI	0
12	188	4077 - M*A*S*H	47 🏆	63 🏆	78 🏆	Qualified	0
13	188	2928 - Viking Robotics	25 🏆	70 🏆	93 🏆	Qualified	0
14	185	3812 - Bits & Bots	23 🏆	48 🏆	114 🏆	Qualified	0
15	182	2557 - SOTAbots	59 🏆	60 🏆	63 🏆	Qualified	0
16	178	4915 - Spartronics	48 🏆	57 🏆	63 🏆	Qualified	10
17	175	997 - Spartan Robotics	45 🏆	52 🏆	78 🏆	Qualified	0
18	174	955 - CV Robotics	52 🏆	47 🏆	75 🏆	Qualified	0
19	166	3238 - Cyborg Ferrets	49 🏆	72 🏆	45 🏆	Qualified	0
20	166	2471 - Team Mean Machine	71 🏆	41 🏆	54 🏆	Qualified	0
21	164	4125 - Confidential	74 🏆	39 🏆	51 🏆	Qualified	0
22	162	1294 - Top Gun	36 🏆	27 🏆	99 🏆	Qualified	0

32 points above the second place  
2x more points than 22<sup>nd</sup> place (cutoff)



# Blue Alliance Insights (before Worlds)

## Awards

### Top Blue Banner Winners

Number	Teams
5	33
4	125, 314, 1983
3	68, 78, 118, 177, 254, 359, 503, 558, 1023, 1318, 1986, 2337, 2522, 2590, 3467, 4488
2	11, 16, 20, 27, 67, 75, 107, 135, 148, 180, 225, 230, 303, 316, 341, 399, 610, 624, 811, 910, 971, 1108, 1218, 1425, 1540, 1629, 1678, 1718, 1732, 2046, 2052, 2054, 2056, 2067, 2283, 2468, 2486, 2614, 2648, 2907, 2996, 3313, 3937, 4125, 4334



### Top Regional & District Winners

Number	Teams
3	33, 118, 125, 177, 254, 314, 359
2	16, 20, 67, 107, 135, 148, 180, 225, 230, 316, 341, 558, 610, 910, 971, 1023, 1318, 1425, 1678, 1983, 1986, 2052, 2054, 2056, 2283, 2337, 2590, 2907, 3467, 3937, 4488





# OPR – Offensive Power Ratings

- Oregon City:
  - 74.53 (highest at the event)
- Wilsonville:
  - 75.55 (highest at the event)
- PWN Championship:
  - 100.08 (highest at the event)
  - Second largest OPR was 81.77 (Team 488)
- Average across all events in the world:
  - 82
  - Ranked 43 out of 2,729 teams in the competition (globally)

## Trivia:

Do you know the OPRs of Team 254 (Cheesy Poofs)?

- Central Valley: 91.31
- Waterloo: 126.39
- Silicon Valley: 95.11

# World Ranking 2014 (before Worlds)

*Chief Delphi - Combined district ranking*

Code:

Rank	Team	Points	District	DRank
1	33	339	MI	1
2	4488	337	PNW	1
3	27	330	MI	2
4	2590	326	MAR	1
5	1983	305	PNW	2
6	67	304	MI	3
7	177	303	NE	1
7	195	303	NE	2
9	1718	296	MI	4
10	2337	294	MI	5
11	1318	291	PNW	3
12	230	289	NE	3
13	558	284	NE	4
13	3393	284	PNW	4
15	4911	276	PNW	5
16	314	272	MI	6
17	78	259	NE	5
18	3467	256	NE	6
19	341	253	MAR	2
20	1218	249	MAR	3
21	225	246	MAR	4
22	2137	240	MI	7
23	469	237	MI	8
24	1089	236	MAR	5
25	11	235	MAR	6
25	2907	235	PNW	6

## ***Districts***

PNW – Pacific Northwest

Oregon

Washington

MI – Michigan

MAR – Mid-Atlantic Robotics

Pennsylvania and

New Jersey

NE – New England

Connecticut,

Rhode Island,

Massachusetts,

Vermont,

Maine and

New Hampshire

# We qualified for Worlds



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# CHAMPIONSHIP

April 23 - 26, 2014 | Edward Jones Dome, St. Louis MO

**FIRST** 25 years

**FRC** Championship

FIRST® Robotics Competition



and we were looking so good...

# Galileo landscape

- 98 teams
- Classified teams according to:
  - finalists or winners (F/W)
  - district championship or regional event (D/R)
- 2/3 of the teams matched the criteria
- 1/2 of the teams were DW or RW
- Very strong competition

# Championship results

- Record: 8-2-0
- Ranked 11 in qualification round
- More teleop points than any other team in the Division
- OPR: 79.2 - #11 in the division (Blue Alliance)
- Final OPR: #42 in the world (Chief Delphi)
- Qualification points: #6 in the world (Chief Delphi)
- Division finalists:
  - Second time a PNW team plays in Division Finals at Worlds
  - First Oregon team to reach Division Finals was 1510 in 2005
- *Pit Safety Award!*

The results are great!

# Indiana Robotics Invitational (IRI)

- <http://www.indianaroboticsinvitational.org/>
- YouTube: search for “IRI 2013”
- Event started in 2000
- Mission:

**Host an enjoyable, high quality, and well-organized *FIRST* Robotics Competition event, bringing together top competitive and strong character teams from across the *FIRST* community.**

- In 2014:
  - 135 applicants
  - 76 invitations – Our team is in the list!
    - Only two other PNW teams are in the list: 1318 and 2928
    - No PNW team was ever invited for this event

# Indiana Robotics Invitational (IRI)

## List of invited teams

11MORT

**16Bomb Squad**

20The Rocketeers

27Team RUSH

33Killer Bees

45TechnoKats Robotics

51Wings of Fire

**67The HOT Team**

71Team Hammond

74Team C.H.A.O.S.

107Team ROBOTICS

108SigmaC@T

118Robonauts

125NUTRONS

148Robowranglers

**175Buzz Robotics**

179The Children of the  
Swamp

195Cyber Knights

225TechFire

233The Pink Team

234Cyber Blue

**254The Cheesy Poofs**

330The Beach Bots

334TechKnights

340G.R.R. (Greater  
Rochester Robotics)

**359Hawaiian Kids**

368Team Kika Mana

384Sparky 384

399Eagle Robotics

447Team Roboto

469Las Guerrillas

494Martians

503Frog Force

573Mech Warriors

610The Coyotes

624CRyptonite

862Lightning Robotics

868TechHOUNDS

910The Foley Freeze

1023Bedford Express

1024Kil-A-Bytes

1108Panther Robotics

**1114Simbotics**

1126SPARX

1241THEORY6

1310RUNNYMEDE  
ROBOTICS

1318Issaquah Robotics  
Society

1477Texas Torque

1619Up-A-Creek  
Robotics

1625Winnovation

1640Sab-BOT-age

1718The Fighting Pi

1732Hilltoppers

1741Red Alert

1817Llano Estacado  
RoboRaiders

2013Cybergnomes

2056OP Robotics

2175The Fighting  
Calculators

2337EngiNERDs

2451PWNAGE

2468Team Appreciate

2481Roboteers

2590Nemesis

2614MARS

2848The All Sparks

2867ElkLogics

2928Viking Robotics

3098The Captains

3147Munster  
HorsePower

3467The Windham  
Windup

3478LamBot

3683Team Dave

4039MakeShift Robotics

4265Secret City  
Wildbots

4334Alberta Tech  
Alliance (ATA)

**4488ShockWave**

# 4488 SHOCKWAVE 2014



***#1 Ranked in the PNW!***

**THANK YOU FOR BEING A PART OF OUR  
WINNING TEAM!**