

STRATEGY AND SCOUTING

THE MIDKNIGHT INVENTORS

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OVERVIEW



WHAT IS SCOUTING?

- Expectations
- Why Scout?

WHAT HAPPENS TO THE DATA? 2017 GAME OVERVIEW

- Scouting Practice



OVERVIEW



- ❑ Observation and study of robots at competitions
- ❑ Data collection during matches

The key to our competition success!



WHO SCOUTS?



EVERYONE!

- ❑ Part of your responsibility as a MidKnight Inventor during our competition events is to be involved in our scouting, data collection, and robot analysis
- ❑ If you create a pattern of scouting improperly or not respecting our Strategy team's instructions, you will not be permitted to travel from that point forward.



WHY SCOUT?



WEIGH STRENGTHS AND WEAKNESSES

- Compare, contrast & track robots; including our own
- Create optimal partnerships for alliances and form match strategy that allows every team to reach their goals.

SELECT ALLIANCES FOR PLAYOFFS

- Pick List: Priorities for ideal partners
- 3-Robot Draft, permanent alliance through the bracket.
 - What information do we need? Are we complimentary?



STRATEGY SUBTEAM



WORKS WITHIN THE TEAM TO:

- ❑ Develop strategic choices during build season and at competitions
- ❑ Analyze match play
- ❑ Track match data for all events
- ❑ Work with Drive Team/other teams to optimize alliances
 - ❑ All students on the team are involved with scouting, but the strategy subteam takes on even more responsibility!



WHAT HAPPENS TO DATA?



COLLECTED & COMPILED

- ❑ Our data spreadsheet will allow us to look up a team number and see their effectiveness at each task within the gameplay

MAKING A PICK LIST

- ❑ Analyze data
- ❑ Find robots with abilities that complement ours
- ❑ Determine best choices for selection
 - ❑ We may not get our first choice; we make a 24+ team list



MATCH SCOUTING



3-ON-3 MATCHES | RED VS BLUE

SIX TEAM MEMBERS WITH SCOUTING SHEETS

- 1 team member per each robot robot (assigned by Strategy Director)
- Robot actions recorded on sheet
 - Actions attempted vs. completed; demonstra

TWO TEAM MEMBERS FOR DATA ENTRY

- Enter the collected data into the spreadsheet
 - This lets us look up information on a team later!



2017 GAME ANIMATION



<https://www.youtube.com/watch?v=EMiNmJW7enI>



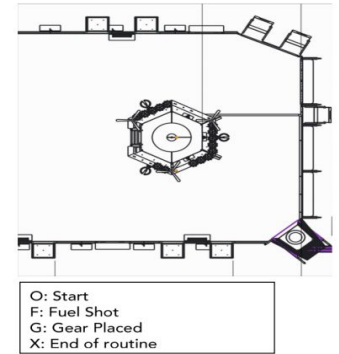
2017 SCOUTING SHEET

Team 1923: The MidKnight Inventors Scouting Sheet

Name: _____ Match #: _____ Team #: _____ Alliance: _____

Autonomous:

Does Nothing	Y / N	N/A
Cross Line	Y / N	N/A
# of Hoppers	Tally Completed	Tally Failed
Fuel: HG	Tally Completed	Tally Failed
Fuel: LG	Tally Completed	Tally Failed
Gears	Tally Completed	Tally Failed
Rotors (Alliance)		N/A



Tele-Op:

Dead?	Defense	# of Hoppers	Fuel: HG	Fuel: LG	Gears	Climbing	Rotors (Alliance)	40kpa (Alliance)
Y / N	Y / N	Tally Completed	Tally Completed	Tally Completed	Tally Completed	Y / N / F		Y / N
N/A	N/A	Tally Failed	Tally Failed	Tally Failed	Tally Failed	N/A	N/A	N/A

Comments:



2017 PRACTICE



<https://www.youtube.com/watch?v=g2vJBcx-VrQ&feature=youtu.be&t=15431>



ANSWER KEY

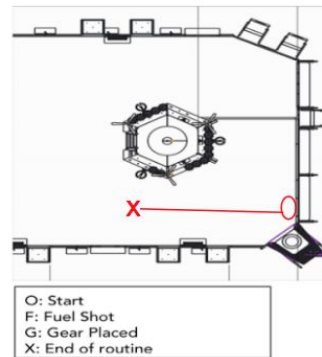
Team 1923: The MidKnight Inventors Scouting Sheet

Name: Answer Key Match #: 52 Team #: 1923 Alliance: Red



Autonomous:

Does Nothing	Y / N	N/A
Cross Line	Y / N	N/A
# of Hoppers	Tally Completed 0	Tally Failed 0
Fuel: HG	Tally Completed 0	Tally Failed 0
Fuel: LG	Tally Completed 0	Tally Failed 0
Gears	Tally Completed 0	Tally Failed 0
Rotors (Alliance)	0	N/A



90 - 222 Blue wins

Tele-Op:

Dead?	Defense	# of Hoppers	Fuel: HG	Fuel: LG	Gears	Climbing	Rotors (Alliance)	40kpa (Alliance)
Y / N	Y / N	Tally Completed 0	Tally Completed 0	Tally Completed 0	Tally Completed 3	Y / N / E	2	Y / N
N/A	N/A	Tally Failed 0	Tally Failed 0	Tally Failed 0	Tally Failed 0	N/A	N/A	N/A

Comments:

- Avoided gears on the ground, only retrieved gears from the feeder station
- Cycled between the feeder station and the airship

QUESTIONS?

CONTACT US:

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