

# Team Update 14

## GENERAL

---

No changes.

## 2021 AT HOME CHALLENGES MANUAL

---

### Section 1.11 Deadlines

The following are the important deadlines for the 2021 At Home Challenges:

- Thursday, February 4<sup>th</sup> at noon ET – Submission portal/opt-in opens
- Thursday, March 4<sup>th</sup> 5<sup>th</sup> at 3pm ET – Submission portal/opt-in closes.
  - Submissions due for the following:
    - Game Design Challenge
    - INFINITE RECHARGE<sup>SM</sup> at Home (Judged Awards component)
    - *FIRST* Innovation Challenge presented by Qualcomm
  - INFINITE RECHARGE<sup>SM</sup> at Home (Skills Competition component) opt-in due

Please note that teams that have not submitted for the INFINITE RECHARGE<sup>SM</sup> at Home Judged Awards component by the March 4<sup>th</sup> 5<sup>th</sup> deadline are ineligible to compete in the Skills Competition component.

- Submissions temporarily closed
  - INFINITE RECHARGE<sup>SM</sup> at Home (Skills Competition)
- Monday, March 8<sup>th</sup> at 3pm ET – Submission portal reopens for Skills Competition only (~~only for teams that opted in by the March 4<sup>th</sup> deadline~~)
- Thursday, April 8<sup>th</sup> at 3pm ET – Submission portal closes. Submissions due for Skills Competition for teams that opted into INFINITE RECHARGE at Home.

The deadlines for the Traditional Submitted Awards can be found on the [Award Page](#).

### Section 2.2.1 Additional Requirements for Skills Competition

The Skills Competition requires submission of the Judged Awards component. Teams that opt into the Skills Competition are asked to provide scores and video proof of completion for each challenge. Teams that do not submit materials for the Judged Awards component by its deadline are ineligible for the Skills Competition awards (so do not interview), the official leaderboard, and any submitted scores originally submitted by March 5<sup>th</sup> will be discarded. Scores reported by teams that opt into the Skills Competition after March 5<sup>th</sup> are posted on the *FIRST* event website in the Samarium GROUP.

As noted in [Section 1.11 Deadlines](#), [frcathome.org](http://frcathome.org) is closed for submissions from March 4<sup>th</sup> 5<sup>th</sup> at 3pm to March 8<sup>th</sup> at 3pm ET. Teams participating in the Skills Competition may submit or update scores before or after that timeframe until the deadline.

See [Section 1.10 How to Submit](#) and [Section 1.11 Deadlines](#) for additional details on how to submit. The Skills Competition submission is entered independent of the Judged Awards component and does not need to be submitted at the same time. To participate in the Skills Competition part of INFINITE RECHARGE at Home, teams must provide the following:



- a score for each challenge in which they complete

Once a score is saved in the Entry Submission System, it's added to the public leaderboard at [FIRST Robotics Competition Events page](#) (updates are batched a few times per day, not instantly). Scores can be updated and saved as often as the team would like before the deadline. Once a team submits and locks their score (which must be done before the April 8<sup>th</sup>, 3pm Eastern deadline for the team to be eligible for awards), it cannot be changed.

- a video for each challenge in which they complete
  - accepted video formats include flv, m4v, mov, mp4, mpeg, mpeg4, mpg, ogm, ogx, swf, wmv. Most common codecs used in these containers are accepted, for a complete list of accepted container/codecs pairs [Supported Input Codecs and Containers](#).
  - Each video may not exceed six (6) minutes

Although the videos may be up to six (6) minutes, teams should only keep them as long as needed.

Submitted video may be used to check the accuracy of a reported score or for marketing purposes and will not be made publicly available. Teams are encouraged to make sure that the recorded score is clearly represented in the video, scores which cannot be verified (except where the reported score is less favorable than the score indicated in the video) may be discarded.

We recommend teams use a minimum resolution of 720p (1280x720px) when recording videos.

There is no technical / theoretical limit to supported file size, however, the user's upload bandwidth is likely the limiting factor. 5GB uploads work fine on high-speed internet connections but could take several hours on an average broadband connection. The longer it takes to upload a video, the more likely there could be an interruption to network connectivity, and difficulties completing an upload.

### Section 2.4.6.2 Rules

**GSC4.** The ROBOT must start in the Start Zone with any part of its BUMPERS breaking the vertical plane defined by B1/D1.

**GSC6.** Teams must stop their timer as soon as the ROBOT is in CONTROL of all three (3) POWER CELLS and any part of its BUMPERS breaks the vertical plane of the End Zone.

### Section 2.4.7.2 Rules

**ANC7.** Teams must stop their timer as soon as the ROBOT completes the prescribed path and any part of its BUMPERS breaks the vertical plane defined by the red dashed line on the path's layout diagram.

### Section 2.4.8.2 Rules

**HDC9.** Teams must stop their timer as soon as the ROBOT completes the prescribed path and any part of its BUMPERS breaks the vertical plane defined by the red dashed line on the path's layout diagram.

### Section 2.4.9.3 Scoring

If using a 2D POWER PORT representation, a POWER CELL is considered scored if at least 50% of the POWER CELL is inside the boundary. For shots that are indeterminately close to the 50% threshold, the team may consider the POWER CELL scored accordingly. **If using a 3D POWER PORT, a POWER CELL is considered scored if it**

passes completely through the plane defined by the respective opening. A POWER CELL that passes through the OUTER PORT opening and then the INNER PORT opening counts as an INNER PORT score only. A POWER CELL that passes completely through an opening and then bounces back out qualifies as having been scored.

### Section 2.4.10.3 Scoring

If using a 3D POWER PORT, a POWER CELL is considered scored if it passes completely through the vertical plane defined by the respective opening.

## INFINITE RECHARGE GAME MANUAL

---

No changes.