

## **Rescue Simulation SuperTeams**

## Prolog

The SuperTeam competition will be held in a different environment that differs from the normal working branch and has some additional features.

The environment can be downloaded here:

https://gitlab.com/rcj-rescue-tc/erebus/erebus/-/archive/superteams 2022/erebus-superteams2022.zip (\*This environment is exclusive for SuperTeams competition. The regular competition is still based on regular Erebus.)

Unzip the folder and use it like the normal Erebus installation.

## **General Setup**

- 1. There will be 2 nearly identical fields next to each other, e.g. wall layout will be the same.
- 2. On each field, a robot will be placed that will have to perform tasks depending on each other.
- 3. For both robots, there is a start and an exit tile.
  - a. Exit tiles will be normal checkpoints.
  - b. Robot 1/ Field 1: Starts on the starting tile and exits anywhere in the field.
  - c. Robot 2/ Field 2: Start is at the position of Field 1 exit tile. Exit is at the equivalent location of Field 1 starting tile.
- 4. Both fields will have swamp tiles that are placed at the same locations.
- 5. In Field 1 there will be additional black tiles, which are not present in Field 2
- 6. There won't be a division of areas 1/2/3 like in the normal competition. Half-walls and curved walls can be placed anywhere.



7. Neither lettered victims nor hazard maps will be used in either field.

## The Game

- Robot 1/ Field 1 will start the game by traversing the field as usual.
- Robot 1 can traverse the field as long as it wants.
- Robot 1 sends the map to Robot 2.
- Robot 1 sends exit code to the supervisor.
- Robot 1 signals Robot 2 to start.
- Robot 2/ Field 2 can't move till Robot 1 has sent the exit code and the signal to start.
- Robot 2 has to use the provided map data to traverse through the maze in Field 2 and get to the exit tile.
- The run ends, when Robot 2 successfully reaches the Field 2 exit tile or when the time runs out.
  - The total time is 8min.
- Winner will be who can complete Field 2 the fastest.