



RoboCupJunior Rescue A Rules (2011)

Note: Changes from 2010 rules are highlighted in red.

Translated by RoboCupJunior Hong Kong

RoboCupJunior Rescue Technical Committee

Damien Kee (Australia), damien@domabotics.com

Kate Sim (UK), kateasim@btinternet.com

Katsunori Mizuno (Japan), mizuno@aitech.ac.jp

Tiago Docilio Caldeira (Portugal), docilio@gmail.com

Timothy Jump (USA), tjump@bsm-online.org

Xu (Alex) Kai (China), capixu@163.com

1. Arena. 場地

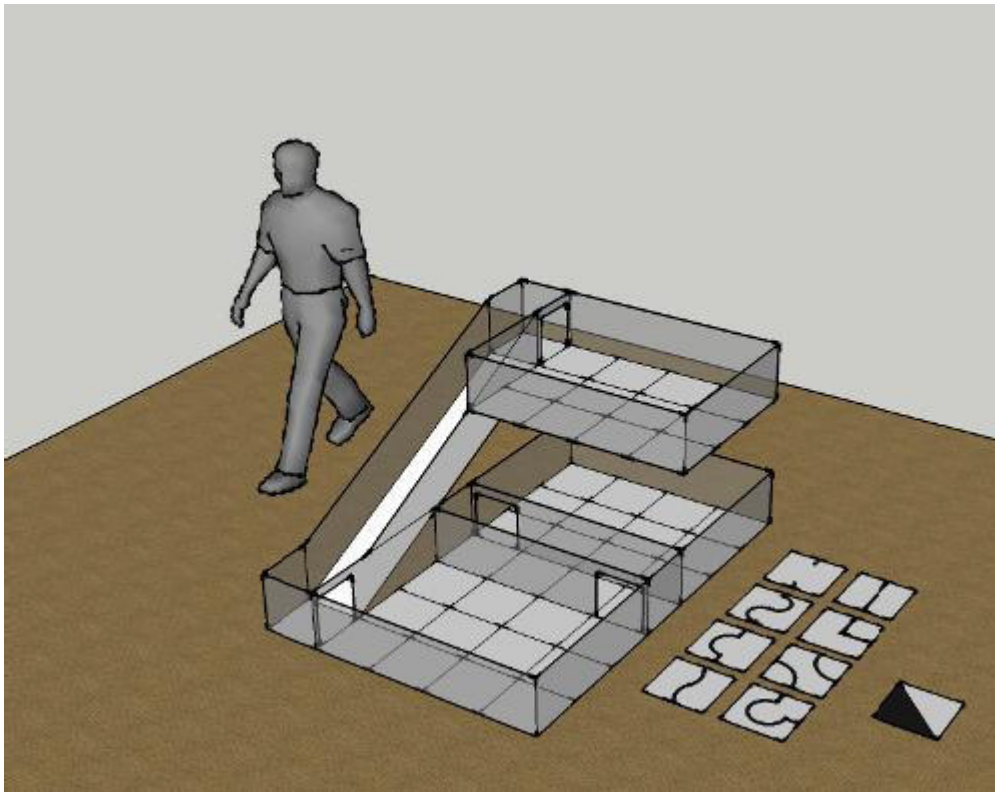
1.1. Description: 描述

1.1.1. The arena is modular. Each module can be thought of as a "room" in a building. Modules may be placed adjacent to each other (on the same level horizontally) or may be stacked vertically. Modules on the same level are connected by level hallways. Modules on different levels are connected by a sloping hallway or ramp. A ramp will not exceed an incline of 25 degrees from the horizontal, and must have walls at least 10 cm high. **The Ramp area (hereafter known as the Ramp) consists of the ramp itself and the top and bottom platforms that connect it to the other rooms.**

整個比賽場地為模塊化結構，單個模塊結構都可以被看成一個房間。房間可以水平連接（高度相同）或垂直疊加。相同高度的兩個房間通過一條水平走廊連接，不同高度的房間由傾斜的走廊或斜坡連接。斜坡水平傾斜度不超過25度，並且必須有至少10cm高的牆。斜坡區域由斜坡本身及上下端連接的兩個平臺共同組成。

Building plans are linked here: [Suggested Building Instructions](#)

搭建計劃連結如下：建議搭建指示





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1.2. Dimensions: 尺寸

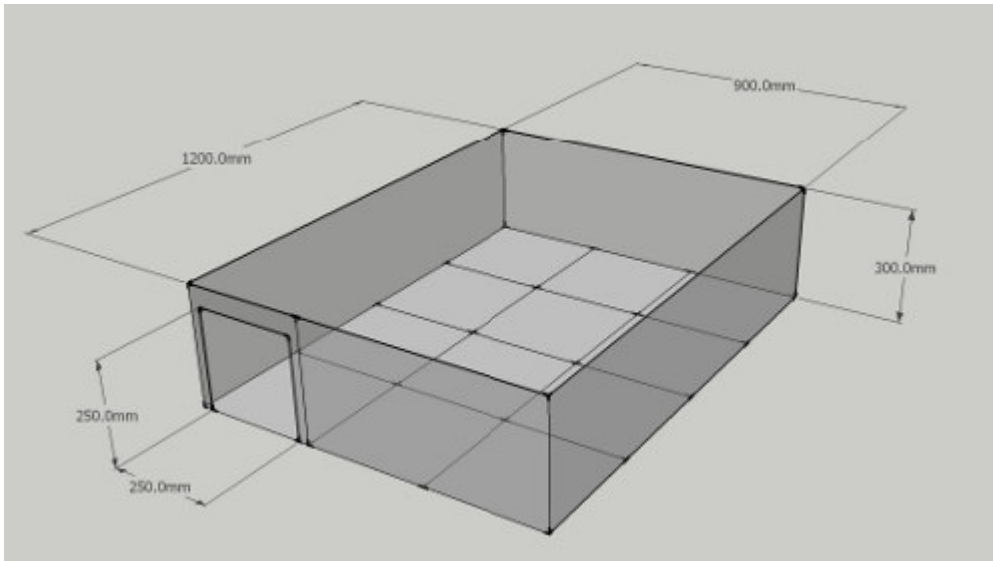
1.2.1. Each module is approximately 1200mm by 900mm (47 inches by 36 inches), with walls that are approximately 30 cm (12 inches) high.

每個模塊的尺寸為約1200mm x 900mm(47寸 x 36寸)，牆高為約30cm (12寸)。

1.2.2. Each room will have two doorways in standard locations (see building plans). Robots will enter through one doorway and exit through the other. Doorways will be 250mm x 250mm in size.

標準場地每個房間有兩個門(看結構圖)，機械人將從一個門口進入，再經另一個門口出去。門的尺寸為250mm x 250mm。

1.2.3 The First room in the maze may or may not have an entrance doorway. The Final room in the maze will not have an exit door.



1.3. Floor: 地板

1.3.1. The floor of each room will be a light colour (white, or close to white). The floor may be either smooth or textured (like linoleum or carpet), and may have steps of up to 3 mm in height at joints between modules.

每個房間的地板都將是亮色(白色、或接近白色)。地板將是平坦的，或是略微有些粗糙的(像油毯或地毯)，在房間之間的接合處可能有不超過3mm 的高差。

1.3.2. The arena should be placed so that the floors are level.

比賽場地應平放，以確保地面平整。

1.4. Line: 軌跡線

1.4.1. On the floor, there will be a black line for the robots to follow, composed of 300mm x 300mm tiles. The black line may be made with standard electrical (insulating) tape, 1 - 2 cm wide or printed onto paper or other material. The black line traces a maze on the floor. (The gridlines indicated in the drawings are for reference only, and will not physically be on the arena)

地板上有一條黑色軌跡線，機械人沿此黑色軌跡線運動，地板由 300mm x 300mm 的磚塊組成。黑線可能由寬 1-2cm 標準電線膠布(絕緣)製成，或列印於紙張或其他物料上。迷宮地板上的黑色軌跡線(規則 1.1.1 比賽場模擬圖中的格子(方塊)板顯示的刻劃路線指供參考，並非真實反映於比賽場。)

1.4.2. Where the black line is used, it will enter and exit each room through the standard doorways. Any straight section of the black line running alongside a wall (in a room or on a ramp) may have gaps of up to 20 cm in it.

黑線將會經由標準的門口進入和退出各個房間。黑線在走廊和斜坡將繼續延伸，以便在賽場的所有模塊中形成單一的一條路徑。任何走向沿著牆邊(於房間或斜坡上)的黑線，在其直線區段可包含寬20cm 的縫隙，其中每個縫隙可存在一個遇難者。



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1.4.3. The arrangement of the tiles within each room may vary between different rounds.

各個房間內的磚塊編排於不同回合間可能會有不同。

1.4.4. Due to the nature of the tiles, there may be steps or gaps of up to 3mm between each tile. These are not intentional and will be minimised when possible by the organizers.

由於磚塊的特性，磚塊之間可能有不超過 3mm 的梯級或隙縫。這不是大會故意的，並將會盡可能減至最少。

1.5. Debris and Obstacles: 碎片及障礙物

1.5.1 Debris may consist of speed bumps (made from 10 mm plastic pipe or wooden dowel painted white) or wooden sticks less than 3 mm in diameter (e.g. cocktail sticks or kebab skewers) and may be located in the Orange or Red Zones or in Hallways and the Ramp. Robots may drive over or push aside debris as needed.

碎片可能為減速坡(由10mm的膠管或木釘製、塗成白色)或直徑小於3mm的木棒(如雞尾酒攪棒或烤肉叉)。碎片可能出現在橙區、紅區、走廊或斜坡。機械人可按需要越過碎片或推開碎片。

1.5.2 Obstacles may consist of bricks, blocks, weights and other large, heavy items. Obstacles may be located anywhere in the Orange and Red Zones (but NOT in hallways or on the ramp). Robots are to navigate around Obstacles without significantly moving them from their location.

障礙物可能為磚塊、積木、重物及其他大而重物品。障礙物將被放置在橙區或紅區的任何位置(但不會出現在走廊和斜坡)。機械人須在不移動障礙物的前提下繞行。

1.6. Red Zones: 紅色區域

1.6.1. The black line may end at the entrance to the last room (the "Red Zone") or the bottom of the ramp, so that robots are required to utilise some form of search strategy to locate the victim and the exit and finishing line in the last room. The Victim may be located anywhere on the floor of the Red Zone, but must be at least 10 cm from the nearest wall.

黑線會於賽事中最後的房間(「紅色區域」)入口或斜坡底部結束，所以機械人需要應用一些搜索策略來確定遇難者的位置及最後房間的終點線。遇難者可能被放置在紅色區域地板的任何位置，但每個遇難者必須最少與最近的牆壁有10cm距離。

1.6.2 At the entrance to the Red Zone, there will be a 25mm x 250mm strip of reflective silver tape on the floor.

在紅色區域入口處的地板上將會有一條25mm x 250mm的反射銀帶。

1.6.3 An 'Evacuation Point' tile will be used within one corner of the Red Zone. It will take the form of a rightangled triangle, with sides of 300mm x 300mm and a black floor.

“撤離點”磚塊位於紅色區域的一個角落。“撤離點”為直角三角形，其邊為300mm x 300mm，黑色地板。

1.6.4 For the Secondary competition, the 'Evacuation Point' tile will consist of a Rightangled triangle, sides of 300mm x 300mm and a height of 60mm, painted black.

對中學組而言，“撤離點”磚塊由一個直角三角形組成，其邊為300mm x 300mm，高60mm，塗上黑色。(即撤離點為直角三角形柱體)

1.6.5 The Red Zone will have an entrance door only. The mission will be considered complete once the victim is successfully moved to the evacuation area.

紅色區域只會有入口。要將一個遇難者成功送至避難地區方視為完成任務。

1.7. Victims: 遇難者

1.7.1. A Victim will be placed in the Red Zone.

遇難者將被放置在紅色區域內。



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1.7.2 Victims will take the form of a soft drink can, internally weighted to approximately 150g. The dimensions of the can will be similar to those readily available in the country in which the competition is being held (ie Australia 375ml, US 12fl oz, Europe 330ml etc). Teams need to be prepared for minor variations.

遇難者將採用汽水罐的形式，總重約150g。汽水罐尺寸以比賽承辦方當地的標準為準（如澳大利亞375ml,美國12fl oz, 歐洲330ml）。參賽隊伍須作好準備以應付輕微的變化。

1.7.3. Victims will be covered in aluminium foil.

遇難者將被鋁箔所覆蓋。

1.8. Lighting and magnetic conditions: 照明及磁場

1.8.1. Teams must come prepared to calibrate their robots based on the lighting conditions at the venue.

參賽隊伍到達賽場後要調試好自己的機械人，為使它能適應場內的照明做好準備。

1.8.2. Lighting conditions may vary along the course in the rescue arena.

在拯救賽場上，照明情況可隨比賽過程有所變化。

1.8.3. Every effort will be made by the organizers to locate the rescue arena away from magnetic fields such as underfloor wiring and metallic objects. However, sometimes this cannot be avoided.

大會將盡一切努力使拯救賽場遠離磁場（地板下的導線和磁性物體）。不過，這種情況難免會間中發生。

1.8.4 Spectators take pictures, and cameras will introduce IR and Visible light into the arena and to the robots. Whilst efforts will be made to limit this, it is not possible for organisers to strictly control factors outside of the competition arena. Teams are strongly encouraged to build and program their robots so that sudden changes (eg. camera flash) do not cause major problems. This is good practice in all robotics, both in competitions and in real life situations.

觀眾進行照相，及攝像機產生的紅外線(IR)及賽場內的可見光可能對機械人造成干擾，主辦方將盡最大努力避免該類狀況，但不可能杜絕所有干擾因素。強烈建議隊伍搭建及編程他們的機械人做到對突發改善(如閃光燈)也不致引起重大問題。這是好的習慣於所有的機械人學中，不論比賽及現實生活情況。

Hint: It is recommended that teams design their robots to cope with variations in lighting and magnetic conditions, as these vary from venue to venue. Teams should come prepared to calibrate their robots based on the conditions at the venue.

提示：鑒於各個場地的條件不同，建議各隊設計好自己的機械人使其能夠適應各種照明和磁場情況。各隊到場後應準備好調試其機械人以適應場地條件。

2. Robot. 機械人

2.1. Control: 尺寸

2.1.1. Robots must be controlled autonomously.

機械人必須是自主控制的。

2.1.2. Robots must be started manually by humans.

機械人必須由隊員啟動。

2.1.3. The use of a remote control to manually control the robot is not allowed.

禁止使用以遙控人為控制機械人。

2.1.4. BlueTooth Class 2 communication **within/between** robots on the same field is permitted. No other form of radio communication is allowed. Robots that have radio communications on board, whether they are used during the duration of the competition or not, will be immediately disqualified

允許同一賽場上機械人**在內/之間**以藍芽Class2通訊。其他無線電通訊是不容許。機械人的線路板上有無線電通訊設備，不論比賽期間是否有使用，都會立即被取消資格。



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2.2. Construction: 構造

2.2.1. Any robot kit or building blocks, either available on the market or built from raw hardware, may be used, as long as the robot fits the above specifications and as long as the design and construction are primarily and substantially the original work of the students (see section 2.5. below).

任何的機械人套裝或積木，不管是市場上銷售的，還是用原材料搭建而成的，只要符合上述規格，並且其實質的設計和建構工作主要是由學生完成的，都允許其參賽。（見以下部分2.5）

2.2.2. Any commercially produced robot kits that are specifically marketed as 'line followers' or 'rescue' robots will likely to be disqualified unless *significant* modifications to both the mechanical design and provided software. If there is any doubt as to the legitimacy of a particular commercial product, participants must contact the International RoboCupJunior Rescue Technical Committee several months prior to any competition to confirm. Organizers will treat all inquiries with the utmost privacy, and will not release details to any 3rd parties.

任何商業生產的機械人套件，為專門銷售作“循線車”或“拯救”的機械人將有可能被取消資格，除非在機械部分的设计及提供的程式都經重要的修改。如對特定商業產品的符合性有任何疑問，參加者必須於比賽前的幾個月，聯絡國際RCJ拯救技術委員會以作確定。主辦單位將處理所有查詢，並絕對保密和不會向第三者透過有關詳情。

2.3. Team: 隊伍

2.3.1. In each round, a single robot is deployed which must perform its tasks autonomously. (In certain international competitions, this rule can be modified such that two or more robots are deployed together and have to cooperate in fulfilling the task. Check the bylaws for the competition.)

於每回合機械人都是自主地執行其任務。（該規則於國際賽可能被修改，例如兩個或以上的機械人一起開始並合作完成任務，請檢閱國際賽規則。）

2.4. Inspection: 檢查

2.4.1. The robots will be examined by a panel of referees before the start of the tournament and at other times during the competition to ensure that they meet the constraints described above.

為確保機械人符合上述要求，賽前將由一組裁判檢查機械人。

2.4.2. It is the responsibility of teams to have their robots re-inspected if their robots are modified at any time during the tournament.

比賽期間機械人若有修改，參賽隊伍必須讓其再次接受檢查。

2.4.3. Students will be asked to explain the operation of their robot in order to verify that the construction and programming of the robot are their own work.

學生將會被要求講解其機械人的操作，以證實機械人的構建和編程是由他們自己完成的。

2.4.4. Students will be asked questions about their preparation efforts, and may be requested to answer surveys and participate in video-taped interviews for research purposes.

學生將會被問及其賽前準備事宜，並需要回答統計表及參與錄影訪問，以便賽會作紀錄之用。

2.5. Violations: 違規

2.5.1. Any violations of the inspection rules will prevent that robot competing until modifications are effected.

違反檢查要求的機械人不得參賽；只有進行更改使其符合要求後才可參賽。

2.5.2. However, modifications must be made within the time schedule of the tournament and teams must not delay tournament play while making modifications.

然而，修改必須在大賽規定時間內完成，修改不得延誤比賽時間。

2.5.3. If a robot fails to meet all specifications (even with modification), it will be disqualified from that round (but not from the tournament).

若機械人不能符合所有的規定（即使已作修正），將被取消其該輪比賽資格（但非整場比賽）。



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2.5.4. If there is excessive mentor assistance or the work on the robots is not substantially original work by the students, then the team will be disqualified from the tournament.

如果教練過多協助，或者機械人的製作並非主要由學生完成，該隊伍便會被取消參賽資格。

3. Play. 比賽

3.1. Pre-round Practice: 賽前練習

3.1.1. Where possible, competitors will have access to practice arenas for calibration, testing and tuning throughout the competition.

如果可以，整個比賽參賽者將於練習場區進行調試。

3.1.2. Where there are dedicated 'competition' and 'practice' fields, it will be at the organizers discretion if testing is allowed on the competition fields.

如果有專門的“比賽”及“練習”場，將由主辦單位自行決定是否允許在比賽場進行調試。

3.2. Humans: 隊員

3.2.1. **Teams should designate one human who will act as captain** and be allowed to move the robot, based on the stated rules and as directed by the referee.

隊伍應委派一人作為隊長及僅隊長被允許可移動機械人，根據既定的規則和裁判作指示。

3.2.2. **The captain** can move robots only when told to do so by the referee.

只是當裁判作出要求時，隊長才可移動機械人。

3.4.4. Other team members (and any spectators) within the vicinity of the rescue arena are to stand at least 150 cm (approximately 60 inches) away from the arena while their robot is active, unless otherwise directed by the referee.

在機械人運動期間，若非裁判同意，該隊在賽場附近的其他隊員(任何觀眾)需要與場地保持最少150cm(約60寸)的距離。

3.3. Start of play: 開始比賽

3.3.1 **The round begins at the scheduled starting time whether or not the team is present/ready. Start times will be posted prominently around the venue.**

不管參賽隊伍是否準備完畢，每輪比賽將按照預先通知的開始。開始時間將張貼在賽場周圍多眼處。

3.3.2 **Once the round has begun, Robots are not permitted to leave the competition area for any reason.**

每輪比賽一旦開始，不論任何理由機械人不得離開比賽場區。

3.3.3 **Robots will be given a maximum time of 8 minutes to calibrate their robot and complete the course. The time for each round will be kept by the referee.**

參賽隊伍將有 8 分鐘時間進行調試和完成比賽。每一輪的時間將由裁判負責計時。

3.3.4 **Calibration is defined as the taking of sensor readings and modifying robot program to accommodate such sensor readings. Once the clock has started, teams may calibrate their robot in as many locations as desired on the arena, but the clock will continue to count down. Robots are not permitted to move under power while calibrating and no points are scored while a team is calibrating.**

校準的定義是取得傳感器讀數，並修改機械人程式以容納這些傳感器的讀數。計時一旦開始，隊伍可以在場地任何位置校準機械人，但時鐘繼續倒數。當校準時不允許在場地上啟動機械人移動及隊伍校準時是不計分。

3.3.5 **Once teams are ready to perform a scoring run, they must notify the referee. To begin a scoring run, the robot is placed on the starting tile in the first room as indicated by the referee. Once a scoring run has begun, no more calibration is permitted.**

隊伍已就緒得分賽時，他們必須通知裁判。得分賽開始時，根據裁判指示機械人被放置在首間房間的起點方格上。得分賽開始後不再允許任何調試。



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3.4. Scoring: 計分

3.4.1. The robot must attempt to follow the black line where it is present.

機械人必須嘗試按照黑線行走。

3.4.2. Robots are rewarded 10 points for successfully negotiating each gap in the black line.

機械人順利通過黑線上的縫隙可獲加10分。

3.4.3. Robots are rewarded 10 points for successfully avoiding each large item of debris blocking the black line.

機械人成功避開黑線上的大塊碎片可獲加10分。

3.4.4. Robots are rewarded 5 points for successfully completing a tile that has one or many speed bumps on the black line.

機械人成功完成一個磚塊內的一個或多個黑線上的減速坡可獲加5分。

3.4.5. Robots are rewarded 50 points for successfully entering a room through one doorway and exiting through the other doorway without incurring a touch penalty. Robots that do incur the touch penalty may restart that particular room (see rule 3.6.2) and still be eligible for the room completion points. **The hallway, ramp and RedZone are not considered rooms for scoring purposes!**

機械人順利通過一個房間（由一門入另一門出），而未遭到接觸處罰可獲加50分。機械人遭到接觸處罰將於特定房間重新開始(參閱規則3.6.2)及仍有資格獲完成房間的分數。**走廊、斜坡及紅區域不視作房間不計分。**

3.4.6. Robots are rewarded 20 points for successfully negotiating a ramp without any assistance.

機械人在無任何協助情況下成功通過斜坡可獲加20分。走廊、斜坡及紅色

3.4.7. Robots are penalized 15 points for each lack of progress (see section 3.6 below).

機械人進展中斷時會被扣15分（見以下部分3.6）。

3.4.8 Robots are awarded 50 points for a successful 'Rescue' - **See figure below for graphical representation**

機械人成功完成拯救可獲加50分 - **見下圖的圖像表述**

Primary - A rescue is completed when the victim is moved completely within the evacuation zone, in its original upright orientation. The victim must be released so that no part of the robot remains in contact with the victim - 50 points

小學組- 當遇難者被完全移至撤離區域(黑色三角形)內即完成拯救，並保持著原本直立朝向(沒有顛倒汽水罐)。同時機械人與遇難者沒有任何接觸的話方可獲50分。

Secondary - A rescue is comprised of two parts

- **lifting the victim (no part of the victim is touching the floor) - 20 points**

- **releasing the victim on the evacuation platform in its original upright orientation. - 50 points (No part of the victim can be touching either the robot or the floor of the arena)**

中學組 - 拯救賽A 包含兩部分

- **舉起遇難者(遇難者沒有接觸地板) 獲20點**

- **放置遇難者於撤離平台並保持原本的直站朝向方可獲50點(遇難者沒有接觸機械人或場地地板)**

3.4.9. Ties in scoring will be resolved on the basis of the time taken by each robot (or team of robots) to complete the course. This includes calibration time.

如出現平分現象，將參考各個機械人(或隊伍的機械人)完成任務的時間分出優劣。這包括機械人校準時間。

3.4.10. **No team shall receive a score below zero for any round. If a team successfully completes at least one room during a round their minimum score for the round is 50.**

任何一輪比賽沒有隊伍會得到負分。如隊伍該回合成功完成最少一個房間，將最少獲得50分。



RoboCupJunior Rescue A Rules (2011)

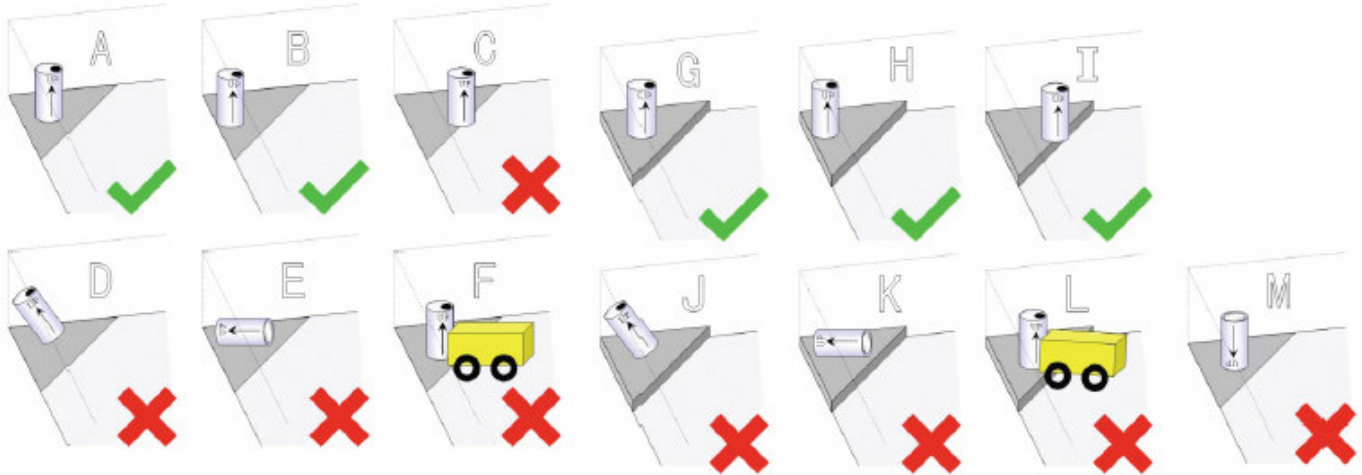
Note: Changes from 2010 rules are highlighted in red.

Translated by RoboCupJunior Hong Kong

Primary Rescue A - A,B,C,D,E,F 小學拯救A - A,B,C,D,E,F

Secondary Rescue A - G,H,I,J,K,L 中學拯救A - G,H,I,J,K,L

Both - M (Can must be in the original upright orientation 必須為原本直立朝向)



進展中斷發生在機械人卡住在同一處，或走線時脫離軌跡且難以找回軌跡的時候。機械人脫線後最遠應在下一個模塊內找回軌跡並繼續走線，否則仍然判定為程序中斷。

3.5. Lack of Progress: 進展中斷

3.5.1. Lack of progress occurs if the robot is stuck in the same place or loses the **black line without an obvious attempt to regain it. The line must be regained by the next tile in sequence.**

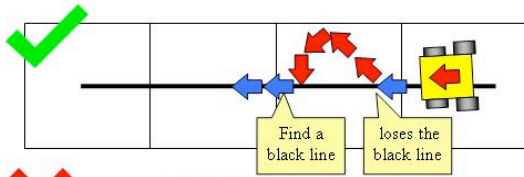
進展中斷發生在機械人卡住在同一處，或走線時脫離黑線(軌跡)且難以找回軌跡的時候。機械人脫線後最遠應在下一個模塊內找回軌跡並繼續走線，否則仍然判定為程序中斷。

3.5.2. If a robot loses the line or fails to appropriately negotiate a piece of debris it must be returned to the start of the room, **hallway or ramp** (and in the process incur a 15 point touch penalty). If after the third attempt at a room, there is a lack of progress, the team captain can choose to move the robot to the end of the room to continue on.

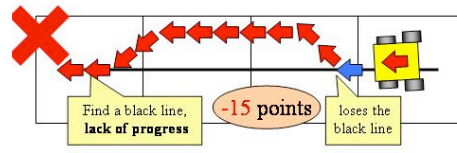
如機械人脫離了軌跡線或未能適當地順利通過碎片，機械人必須被放回該房間、**走廊或斜坡**的起點(及遭到扣除15點的接觸處罰)。如同一房間發現此情況三次後，視作進展中斷。隊伍的隊長可選擇將機械人放到房間終點繼續賽事。

3.5.3. A team may elect to stop the round early **at any time**. In this case, the team captain must indicate to the referee the team's desire to terminate. The team will be awarded all points achieved thus far.

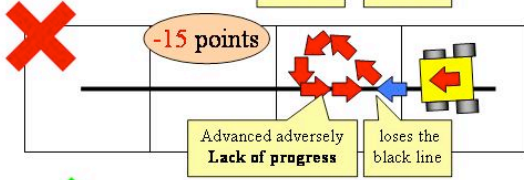
該隊可選擇在**任何時間**停止該輪比賽。在這種情況下，該隊隊長必須向裁判示意提出終止比賽。該隊伍可以得到已獲得的分數。



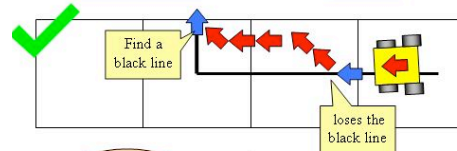
The robot loses the black line. But, the robot finds the black line in same tile.



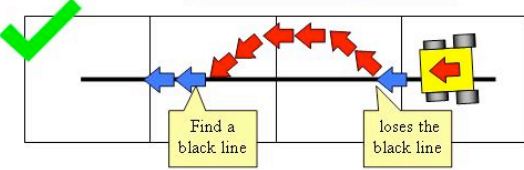
The robot loses the black line. But, the robot finds the black line in next next tile. It is **Lack of progress**. And return the entrance.



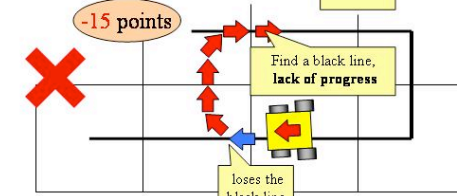
The robot loses the black line. And the robot advanced adversely. It is **lack of progress**. And return the entrance.



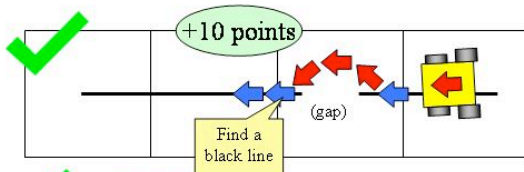
The robot loses the black line. But, the robot finds the black line in next tile.



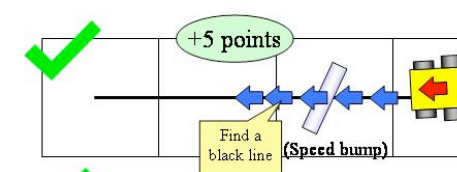
The robot loses the black line. But, the robot finds the black line in next tile.



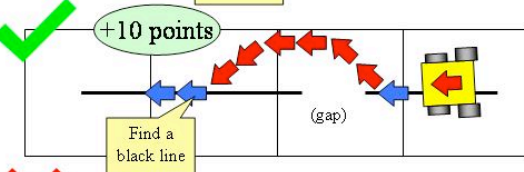
The robot loses the black line. But, the robot finds the black line where robot went. It is **Lack of progress**. And return the entrance.



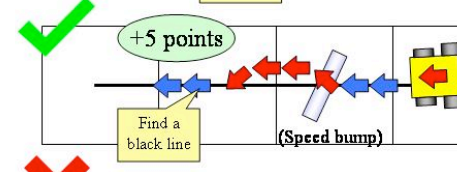
The robot came to a gap. And, the robot finds the black line in same tile.



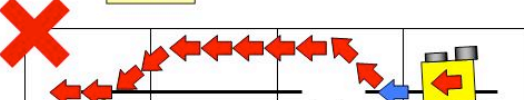
The robot found the Speed bump. The robots complete a tile that has one or many speed bumps on the black line.



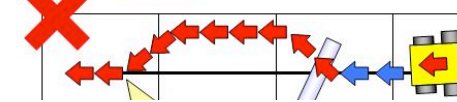
The robot came to a gap. And, the robot finds the black line in next tile.



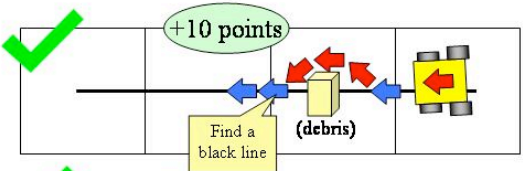
The robot found the Speed bump. The robot lost the black line. And, the robot finds the black line in next tile.



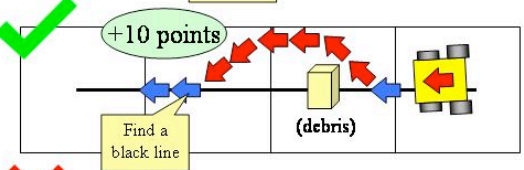
The robot came to a gap. And, the robot finds the black line in next next



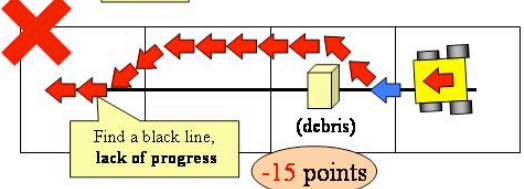
The robot found the Speed bump. The robot lost the black line. And, the robot finds the black



The robot found the debris. And, the robot finds the black line in same tile.



The robot found the debris. And, the robot finds the black line in next tile.



The robot found the debris. And, the robot finds the black line in next next tile. It is **Lack of progress**. And return the entrance.



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Translated by RoboCupJunior Hong Kong

3.6 Victim Placement. 遇難者擺放

3.6.1 Six different victim Placement Areas in the Red Zone, each approximately 300mm x 300mm in size, will be designated **on the day of the competition**.

比賽當天會將指定紅色區域的6個不同遇難者擺放區，每個擺放區大小為300mm x 300mm。

3.6.2 The location of each area will be made known on the day of the competition but will not be marked on the field. No Placement Area will come within 100mm of a wall.

每個擺放區域會公佈但不會在場地上做記號，遇難者不會擺在靠近牆100mm之內。

3.6.3 Only 1 victim will be used in a round.

每輪比賽只有一個遇難者。

3.6.4 Once a robot begins its scoring round and has entered the Arena, the referee will roll a standard 6 sided dice to determine which Placement Area the victim will be located. The referee will place the victim randomly within the chosen 300mm x 300mm Placement Area. **The victim placement will occur after the robot has begun its scoring round**

一旦機械人開始得分賽及已進入賽場，裁判擲一枚六面骰以決定放置遇難者的擺放區。裁判將遇難者隨意放置在已選重的300mm x 300mm擺放區內。**於機械人已開始得分賽後遇難者才會被擺放。**

3.6.5 If the victim is moved from its spot by a robot attempting a rescue, and the robot subsequently requires a restart, the victim will remain where it moved to. If it has been knocked over, it will remain knocked over.

如機械人搬動遇難者任務中，機械人其後需要重新開始，遇難者將保持在已搬動的位置，如遇難者已經打翻，將保持打翻。

3.6.6 If the robot has grabbed the victim and subsequently requires a restart, the victim will be placed upright, at the location where the robot requested a restart.

如機械人已夾持著遇難者及其後要度重新開始，遇難者將會直立放置在要求重新開始時的位置。

4. Conflict resolution. 衝突的解決

4.1. Referee: 裁判

4.1.1. During game play, the referee's decisions are final.

比賽期間，裁判享有最終裁定權。

4.2. Rule clarification: 規則解釋

4.2.1. Rule clarification may be made by members of the International RoboCupJunior Rescue Technical Committee.

RCJ 國際拯救技術委員享有規則解釋權。

4.3. Special circumstances: 特殊情況

4.3.1. Specific modifications to the rules to allow for special circumstances, such as unforeseen problems and/or capabilities of a team's robot, may be agreed to at the time of the tournament, provided a majority of the contestants agree.

在大多數參賽隊伍同意的前提下，針對特殊情況（例如一些無法預料的問題和／或機械人的性能問題等），規則可作特殊修改。

5. Documentation. 文件

5.1. Reporting: 報告

5.1.1. Each team must bring an electronic presentation (e.g., in PowerPoint, PDF or Flash format) and a poster (approximately A3 size) documenting the design, construction and programming of their robot.

每隊需要帶備電子簡報(例如：PowerPoint, PDF 或 Flash格式)及海報(約A3大小)描述機械人的設計、構造和程式。



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5.1.2. Presentations and/or posters are to be shown to the judges during the scheduled interview session before being put up for viewing by the judges, other teams and the visiting members of the public.

將向評審員展示的簡報及/或海報，需於預定的訪問環節前提交，以讓評審員、其他隊伍及來賓鑒賞。

5.1.3. The presentation should provide information about the team and how they prepared for RoboCupJunior. Areas that could be covered include: 展示時需提供有關隊伍的資料及隊員為 RoboCupJunior 作準備的情況。需包括的地方有：

Team name; 隊伍名字；

Division (primary or secondary);

組別(小學或中學)；

Team members' names and (perhaps) a picture of the team members;

隊員姓名及（可能）隊員合照一張；

Team's country and location within country;

隊伍所屬國家及地區；

Team's school and district;

隊伍所屬學校及地區；

Pictures of the robot under development;

製造機械人時的照片；

Information about the robot, including schematics, mechanical drawings and samples of code;

有關機械人及隊伍的資料；包括概要、機械部分的構圖、程式例子；

Any interesting or unusual features of the robot;

機械人的任何有趣或特別之處；

What the team hopes to achieve in robotics.

隊伍希望從機械人學中得到甚麼。

5.1.4. Judges will review the presentation and discuss the contents with team members.

裁判將察看展示而且可能與隊伍成員進行交流。

5.1.5. Competitors are requested to provide digital versions of their presentation and poster.

參賽者需要提供數碼版本的描述及海報。

5.1.6. Prizes may be awarded to teams with outstanding presentations.

展示整體表現最傑出的隊伍將獲得獎項。

5.2. Sharing: 分享

5.2.1. Teams are encouraged to view one another's posters and presentations.

鼓勵各隊參觀其他參賽隊伍的海報及展示。

6. Code of Conduct. 操行

6.1. Fair Play: 公平比賽

6.1.1. Robots that cause deliberate or repeated damage to the arena will be disqualified.

機械人故意或重複損壞比賽場地的，取消其比賽資格。

6.1.2. Humans that cause deliberate interference with robots or damage to the arena will be disqualified.

人為地故意干擾其他機械人或是故意損壞比賽場地的，取消肇事者比賽資格。



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6.1.3. It is expected that the aim of all teams is to participate fairly.
期望所有參賽隊伍的目標皆為公平的比賽。

6.2. Behavior: 行爲

6.2.1. Participants should be mindful of other people and their robots when moving around the tournament venue.

6.2.2. Participants are not to enter setup areas of other leagues or other teams, unless expressly invited to do so by team members.

未經該隊允許，其他參賽隊員不得進入該隊／團體的調試區域。

6.2.3. Participants who misbehave may be asked to leave the building and risk being disqualified from the tournament.
行爲不端的參賽隊員將被驅逐出場，還將可能被取消比賽資格。

6.2.4. These rules will be enforced at the discretion of the referees, officials, tournament organizers and local law enforcement authorities.

以上規則由裁判、工作人員、比賽主辦方和當地執法機構強制執行。

6.3. Mentors: 教練

6.3.1. Mentors (teachers, parents, chaperones and other adult team members) are not allowed in the student work area.

教練（教師、父母、同伴和其他的成人成員）不允許駐足於學生工作區域。

6.3.2. Sufficient seating will be supplied for mentors to remain in a supervisory capacity around the student work area.

在學生工作區周圍將提供足夠座位給教練，以起監護作用

6.3.3. Mentors are not to repair robots or be involved in programming of students' robots.

不允許教練修復機械人或是參與編寫程式。

6.3.4. Mentor interference with robots or referee decisions will result in a warning in the first instance. If this recurs, the team will risk being disqualified.

教練干擾機械人或裁判的決定，首犯給予警告處分，再犯則可取消該隊比賽資格。

6.4. Sharing: 分享

6.4.1. An understanding that has been a part of world RoboCup competitions is that any technological and curricular developments should be shared with other participants after the tournament.

作為世界 RoboCup 比賽的一部分，大家已達成共識，即賽後參賽者共享技術進步和課程開展情況。

6.4.2. Any developments may be published on the RoboCupJunior website after the event.

所有的進展情況賽後均可公佈於 RoboCup Junior 的網站上。

6.4.3. This furthers the mission of RoboCupJunior as an educational initiative.

提倡分享的做法進一步加強了 RoboCup Junior 作為一項具有教育意義的公開化活動。

6.5. Spirit: 精神

6.5.1. It is expected that all participants (students and mentors alike) will respect the RoboCupJunior mission.

期望所有的參與者、學生和教練能尊重 RoboCup Junior 的宗旨。

6.5.2. The referees and officials will act within the spirit of the event.

裁判和工作人員的行爲應遵守 RoboCup Junior 的活動精神。

6.5.3. It is not whether you win or lose, but how much you learn that counts!

比賽意義不在輸贏，重在學習。



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7. SuperTeams, Istanbul 2011 超級聯隊, 伊斯坦堡 2011

This competition is for the primary and secondary robots that perform best in the individual competition. The challenge will make use of the existing arenas and focus on team cooperation.

該比賽為獨立的比賽中，表現最佳的小學及中學組而設，該比賽將利用現有場地進行及重點考察隊伍間合作性。

A Superteam will be made up of 2 individual teams and the pairings will be decided by a draw once the results of the individual competition are known.

每支超級聯隊由兩支獨立隊伍組成。當獲得獨立比賽的成績時，將立即以抽籤決定組合。

The details of the challenge will be released in Istanbul 24 hours before the Superteam competition starts.

比賽詳情將於超級聯隊比賽開始前24小時公佈。

Note: The English version of these rules shall prevail wherever there is a discrepancy between the English and the Chinese versions.

注意：本賽規的中英文本如有歧義，概以英文本為準。