

# 2018 INDONESIA DRONE RACING WORLD CUP



**April 6<sup>th</sup> – April 8<sup>th</sup>, 2018  
Bali, INDONESIA**

## **BULLETIN**



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(updated on March 19<sup>th</sup>, 2018)

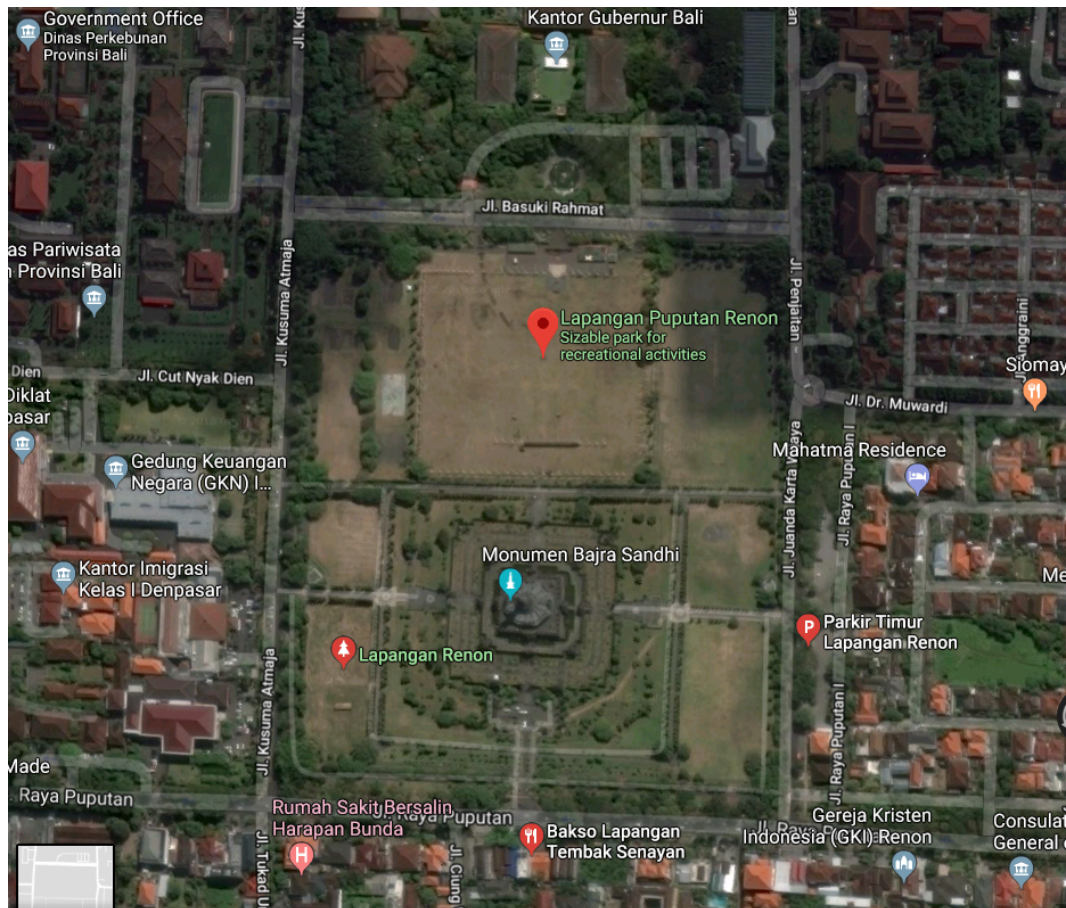
### 1. LOCATION

Bali is an Indonesian island known for its forested volcanic mountains, iconic rice paddies, beaches and coral reefs. The island is home to religious sites such as Cliffside Uluwatu Temple. To the south, the beachside city of Kuta has lively bars, while Seminyak, Sanur and Nusa Dua are popular resort towns. The island is also known for its yoga and meditation retreats.

#### a. Venue

Place : Puputan Renon Park (Bajra Sandhi Monument)

Address : Panjer, South Denpasar, Denpasar City, Bali 80234





Bajra Sandhi Monument is a monument to the struggles of the Balinese people throughout history. The monument is located in front of the Bali Governor's Office in Denpasar, Indonesia, on the island of Bali. Coordinates: 8°40'18"S 115°14'2"E. The monument was built in 1987, inaugurated by president Megawati Sukarnoputri on June 14, 2003.

**b. Weather**

The month of April in Bali sees temperatures continuing to climb, almost to the hottest they are for the entire year. The average temperature this month is 27°C (81°F), while the average low is 22°C (72°F), and the average high is a stifling 32°C (90°F). The beginning of April starts with a decent chance of rain, although not nearly as much as in the months coming before it, as well as a mixture of overcast and sunny days, and a daily average temperature of about 26°C (79°F).

**c. Languages**

Official contest languages are English and Indonesian.

**2. PARTICIPANTS**

All pilots who have a valid FAI license will be able to register. The FAI license can be issued through the NAC in your country. If your country's NAC is not active, you can get it directly through FAI Drone Permission website (<http://www.droneracing.aero>). FAI license validity will be checked prior to validating registration.

**a. Registration**

Registration and can be completed through <http://aeromodelling.or.id/f3uworldcup>

- b. **Registration fee** will be charged IDR 1.000.000 (approx. €60) for International Pilot including 3-days lunch and race pack. Payment details will be announce in Bulletin-2.

### **3. REGULATION**

This is a summary for technical terms & regulation summarized from [https://www.fai.org/sites/default/files/documents/sc4\\_vol\\_f3\\_droneracing\\_15-3-2018.pdf](https://www.fai.org/sites/default/files/documents/sc4_vol_f3_droneracing_15-3-2018.pdf).

#### **A. Model General Specification**

- I. Only multi-rotors corresponding to the following specifications are allowed:
  - a. A multicopter unit with max 330mm Diameter MTM.
  - b. The total weight of the model including all equipment necessary for flight (including batteries) shall not exceed 1 kg.
  - c. Motorization only electric motors with a maximum voltage of 17.0 volts (4S) are allowed. The voltage measurement is done before the flight.
  - d. Any system for automatic positioning and/or path rectification in longitude, latitude or height is forbidden.
  - e. Propellers maximum diameter: 6 inches (15.2 cm).
  - f. Strictly 2.4ghz Radio Control System.
  - g. Strictly 5.8ghz Video Transmission System operating on specific frequency and band.
- II. 1 % tolerance is applicable for inaccuracy of the measurement devices for size, weight and batteries tension.
- III. The organiser may also require the competitors to add on their model a LED light unit.
- IV. The model must be equipped with a fail-safe device, the triggering of which stops the motorization
- V. It is forbidden to use a pre-programmed manoeuvring device.
- VI. Permitted video transmitter for the event: TBS Unify Pro HV - RACE, ImmersionRC Tramp HV, Furious FPV Stealth Race (Allowed VTX Power Gain: 25mw).

## **B. Contest Organization**

The contest is organized on the basis of three stages: Qualification stage; Elimination stage & Final stage.

### **I. General Racing Technical From The Committee**

- a. Each Pilots are allowed to submit up to 3 Quads within the competition to be deposited at the Pre-Race area.
- b. Any form of repair, parts swapping and adjustment of the quad by the pilots / technician must be done at the Pre-Race provided area.
- c. Apart from the description of the Model general Specification described above, the committee strongly encouraged all competitors to:
  - Make sure that access to changing video transmitter frequency channels / bands are easily accesible without the needs of opening up / dis-assemble canopy or plate unit.
  - All VTX Antenna Connectors are easily unpluggable and using standard SMA / RP-SMA female connector format, in case of any random Quad checking scenario by the racing committee.

### **II. Practice Flight Session**

- a. Practice Flights Session will be Held At 6<sup>th</sup> April 2018 (one day before the Qualifying Round) for all registered pilots.
- b. Practice Flights will be done In groups of 4 pilots.
- c. The arrangements of practice groups consisting pilots is managed by First Come First Serve Policy.
- d. The allocated practice flights session for each groups will be 4 simultaneous run on a fully / partially assembled race course without any time limits on each run but battery usage.
- e. This means, each pilots in a practice groups can only complete 4 practice flights session using 4 packs of lipos.
- f. However, prior considering to time schedule, a 20 minutes time limit will be applied on every Practice groups to complete their total practice flights session (Which condition that will be completed first will be taken as).

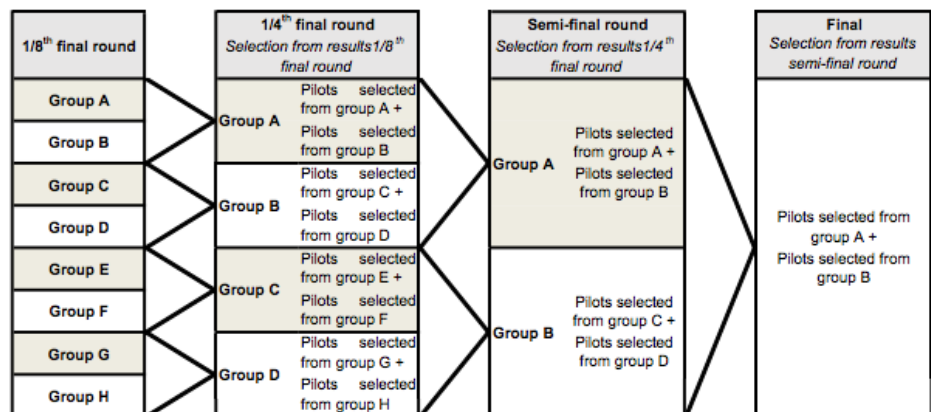


### III. Qualification Stage

- Each Qualification Groups consists of 4 pilots and the order & VTX channel numbering will be determined by a draw.
- Wherever possible, the draw will be done so that one competitor only per country may be in the same group.
- The general order of pilot groups numbering and VTX channels are as follow:
  - Racer 1 : Raceband 1 = 5658 Mhz -- Red LED
  - Racer 2 : Raceband 3 = 5732 Mhz -- Yellow LED
  - Racer 3 : Raceband 6 = 5843 Mhz -- Green LED
  - Racer 4 : Raceband 8 = 5917 Mhz -- Blue LED
- A race is run for each group on a 3 circuit laps defined by the organiser.
- There will be a practice run prior to the Qualification Rounds.
- The result for each competitor corresponds to his registered time to complete the 3 circuit laps.
- Each Group will have a total of 3 Qualification run, to determine the best timing he can get to complete those 3 circuit laps.
- A provisional ranking will be established at the end of the qualifying stage.

### IV. Elimination Stage

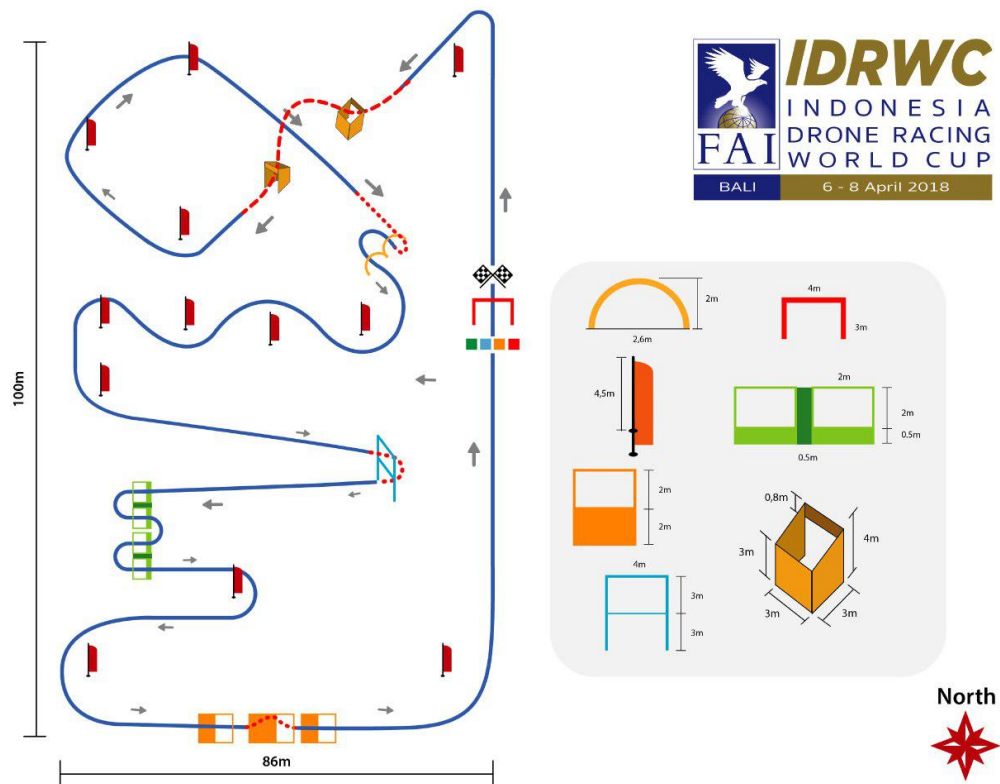
- Elimination Stage will be using a Single Elimination System consisting of 16 pilots based from the provisional rankings from Qualification Stage.
- Selection method for the next rounds = the two best placed in each race in case of 4 pilots per group.
- Numberings of Elimination Stage pilots order and groups is arranged on Annex 3 Scenario on Sporting Code Document



The flight order of the groups will be group A, then group B and so on.

The positioning on the start line for each group can be defined by a draw. When the start is done using a grid pattern, the positioning will be done taking in account the scores in the previous round (top score in front and so on).

#### 4. TRACK DESIGN



#### 5. SCHEDULE

Apr. 6<sup>th</sup> (Friday) : practice (01.00 PM – 06.00 PM)

Apr. 7<sup>th</sup> (Saturday) : qualification (09.00 AM – 04.00 PM)

Apr. 8<sup>th</sup> (Sunday) : qualification & Final (09.00 PM – 04.00 PM)

\* Please note schedule may be subject to change due to inclement situation.

#### 6. ACCOMMODATION

All participants can make a room reservation directly via online booking or calling the hotel. All rooms being subject to availability please make the reservation earliest as possible.

- **Mahatma residence** (3-stars standard)

Jl. Raya Puputan II B No. 1 Nitimandala, Denpasar 80361, Bali

(0.37 km from venue, 11 km from Ngurah Rai International Airport)

- **Praja Hotel** (2-stars standard)

Jl. Mohamad Yamin IV No 2A, Renon, Denpasar 80235, Bali

(0.6 km from venue, 18 km from Ngurah Rai International Airport)

- **Puri Ayu Hotel** (3-stars standard)  
Jl. Jendral Sudirman No. 14A, Denpasar 80113, Bali  
(3.3 km from venue, 25 km from Ngurah Rai International Airport)
- **Grand Santhi Hotel** (3-stars standard)  
Jl. Patih Jelantik No. 1 Denpasar 80113, Bali  
(3.5 km from venue, 15 km from Ngurah Rai International Airport)

## **7. TRANSPORTATION**

Upon arrival at Ngurah Rai International Airport you can take an airport official taxi to your hotel.

## **8. PAYMENT DETAILS**

On-site payment should be made in Indonesian Rupiah only (cash) at registration desk.

## **9. INFORMATION**

If you need further information, please contact Mr. Yodha (f3u@aeromodelling.or.id)