



FÉDÉRATION
INTERNATIONALE
DE MOTOCYCLISME



World Records
Records du Monde

Latest edition / Dernière édition 01.01.2004

World Records
Records du Monde

Contents / Sommaire

Appendix	018	World Records.....	2 - 16
<i>Annexe</i>	<i>018</i>	<i>Records du Monde.....</i>	<i>2 - 16</i>

APPENDIX 018 - WORLD RECORDS

018.1	Definition of a Record	2
018.2	Recognised World Records	2
018.3	Validity of Records	2
018.4	Three-wheeler Records made between 1952 and 1963	3
018.5	Establishment of a Record	3
018.6	Holder of a Record	3
018.7	Permanence of a Record	3
018.8	Recognised method of expression	3
018.9	Sites where record attempts can take place	4
018.10	Tracks	4
018.10.1	For short distance records	4
018.10.2	For long distance period records	4
018.11	Regulations for measuring tracks	4
018.12	Precision of measurement	5
018.13	Homologation of a permanent track	5
018.14	Licence for a permanent track	6
018.15	Issue of permit and documentation	6
018.16	Appointment of stewards and information.....	7
018.17	FIM Steward	7
018.18	Motorcycles	8
018.19	Time-keeping and time-keeping equipment	8
018.20	Starts	9
018.21	Refuelling and rider relays	9
018.22	Outside assistance and wind speed	10
018.23	Simultaneous attempts	10
018.24	Time limits and stoppages	11
018.25	Stops and re-starts during a record attempt	11
018.26	Change of parts	11
018.27	Final examination	11
018.28	Calculation of record results	12
018.29	Ratification of records	13
018.30	Publication of results and advertising	13
018.31	Documents required for record ratification	14
018.31.1	Certificate of engine characteristics	14
018.32	Duties of the FIM Steward	15

018.1 DEFINITION OF A RECORD

A record is the best result obtained over a certain distance or within an imposed time limit.

When the result has been ratified by the FIM it becomes a "WORLD RECORD", when it is ratified by an FMN it becomes a "NATIONAL RECORD".

018.2 RECOGNISED WORLD RECORDS

The world records recognised for each class of motorcycle are as follows :

Short Distance Records

1/4 mile	–	standing start
1 km	–	flying start
1 km	–	standing start
1 mile	–	flying start
1 mile	–	standing start

Long Distance Records

(all with standing start)

10 km
100 km
1000 km

Period Records

(all with standing start)

1 Hour
6 Hours
12 Hours
24 Hours

018.3 VALIDITY OF RECORDS

A record attempt for a given class can only be made with a motorcycle where the engine size is within the capacity limits for that class. A record is only valid for the class which corresponds to the capacity of the engine.

018.4 THREE-WHEELER RECORDS MADE BETWEEN 1952 AND 1963

Sidecar records registered from 1st January 1952 to 31st December 1963, were made under regulations which have since been modified. At that time, no passenger or ballast was carried (see Art. 19, Appendix 01, Road Racing Technical Rules).

Consequently, these records are definite and cannot be broken. They are included in a separate section of the World Records Book (1979 Publication) for historical purposes only.

018.5 ESTABLISHMENT OF A RECORD

A record is considered as having been established when the first best official result has been obtained by a motorcycle of a given class.

018.6 HOLDER OF A RECORD

A record is registered jointly in the names of the rider(s) and the motorcycle(s) used in the attempt. They are the "Record Holders".

018.7 PERMANENCE OF A RECORD

A world record is valid until it is bettered by another attempt. In order to break a record, the latter must be bettered based upon the prescribed form of expression (see below).

018.8 RECOGNISED METHOD OF EXPRESSION

The result of a record attempt must be expressed and published according to the degree of accuracy of the time-keeping apparatus used and calculated on actual distance.

Long Distance records must be expressed in times, and period records in distances. The speed must also be given in km/h, to the nearest metre without any rounding off of the calculated figures.

For the purposes of conversion, one mile is calculated as 1.609344 km and one kilometre as 0.6213712 miles.

018.9 SITES WHERE RECORD ATTEMPTS CAN TAKE PLACE

Record attempts can be made on a permanent track, on an autodrome or on a temporary track, provided that the sites conform with the conditions stated below and that they are certified or homologated by the FIM.

018.10 TRACKS

To reduce to a maximum all natural assistance, the track used for a record attempt must conform to the following requirements:

018.10.1 For Short Distance Records

A straight course between two points not having a gradient of more than 1% be used. It must be covered once in each direction with a maximum time interval of two hours between each run.

For flying start attempts, where speeds do not exceed 500 km/h, the track shall extend for 750 m at each end of the timing zone. For speeds exceeding 500 km/h, the track shall extend for 1 km at each end of the timing zone. These extensions of the track must not have a gradient of more than 1%.

018.10.2 For Long Distance and Period Records

A straight course between two points of the same altitude may be used or a closed circuit if possible of a maximum length of 10 km the road surface of which must be of a modern type ensuring good grip.

018.11 REGULATIONS FOR MEASURING TRACKS

All permanent tracks must have a "record line" of 15 cm width marked with indelible anti-skid paint. It must be marked along the whole length of the track in the following way:

Between two successive bends in the same direction which are separated by a straight, the record line will be marked out parallel to the inside edge of the track, between its mid-point and 90 cm from the inside edge.

Between two successive bends in opposite directions separated by a straight, the record line shall continue as it leaves the first bend, diagonally across the straight and enter the second bend on the inside.

Between two successive bends in opposite directions without a straight separating them, the record line of the two bends must be joined by a tangent common to the two curves.

Temporary tracks, whether or not they are closed circuits with bends, must be measured out as indicated above.

018.12 PRECISION OF MEASUREMENT

The length of a track will be expressed using the metric system and to the nearest centimetre. It will be measured by a qualified expert or person holding qualifications of a recognised Institute (Engineering Firm, Civil Engineer etc.). All other measurements must be accurate to one centimetre.

On permanent tracks, relevant distances must be indicated by means of painted figures across the track, near to the start and finish lines. The figures must be painted onto the track surface itself with indelible paint.

The measurement of other relevant distances on the track must also be of a permanent nature.

On temporary tracks, the distances may be indicated by small signs placed on the side of the track.

For all tracks, the start and finish lines of a record attempt will also serve as points at which timing commences and ends. They must therefore be clearly marked by means of signs placed at the side of the track.

018.13 HOMOLOGATION OF A PERMANENT TRACK

To obtain registration, a detailed plan of the course must be sent to the FIM Executive Secretariat. This plan must be to a scale no greater than 1/2000 and must indicate the characteristics (straights, bends) and total length (see Articles 018.10 and 018.11). The camber of the bends (if applicable), the type of road surface, the location of services and safety installations must also be shown.

Registration will be made after a satisfactory inspection has been carried out by experts appointed by the FIM at the cost of the applicant. The FMNR must certify that the measured characteristics of the track requiring homologation are correct (see Articles 018.10, 018.11 and 018.12).

018.14 LICENCE FOR A PERMANENT TRACK

This is a document certifying the homologation by the FIM of a permanent track or "Autodrome". When homologated, the track and its licence holder are under FIM regulations.

018.15 ISSUE OF PERMIT AND DOCUMENTATION

Persons wishing to make a world record attempt must make the application through their FMN, (i.e. sponsors, teams, manufacturers, blue, yellow or green licence holders).

Application shall be made to the applicant's FMN (National Motorcycle Federation) no matter where the attempt takes place.

If the attempt is to be held on the territory of another FMN (which then becomes the FMNR) it is necessary to obtain its authorisation as well as that of the FMN of the entrant. If the attempt is to be held in a country not having an FMN, permission must be applied for from the FIM directly.

Riders taking part in the attempt must hold an international licence issued by an FMN.

The Applicant's FMN concerned must apply for authorisation to the FIM Executive Secretariat at least 2 MONTHS before the date set for the attempt. In making this application the FMN must ensure that the applicant, through the FMNR, has made the necessary arrangements for essential services and has obtained any necessary authorisations from local authorities, etc.

At the same time, a technical steward, holder of an appropriate official's licence issued by the applicant's FMN must send a written report with photos certifying the condition of the machine (4 photos with fairing and 4 without), the effectiveness of the safety points (photos of each point), the brand and type of tyres and the quality of the rider's clothes and helmet (photos and brand).

In making an application for an attempt the applicant and the riders agree to free the FIM and the FMNR from all responsibility and to give assurances that the conditions as set out will be observed.

By obtaining FIM authorisation the applicant undertakes to guarantee payment of the fees detailed in the FIM Annuaire.

018.16 APPOINTMENT OF STEWARDS AND INFORMATION

When an authorisation for an attempt is issued, the FMNR shall appoint supervising Stewards to control the attempt.

30 days before the record attempt, the applicant's FMN must send to the appointed stewards an official schedule mentioning amongst others:

- the date, time and venue of the meeting with the timekeeper;
- the date, time and venue of the meeting regarding the fire-fighting equipment and procedure;
- the date, time and venue of the meeting with the medical officer;
- the date and time of the first track inspection;
- the date and time of the first attempt.

The FIM Executive Secretariat (CCR) will appoint a FIM Steward and in certain cases a probationary Steward under the orders of the FIM Steward to enable the latter to benefit from training. The costs of the probationary Steward, if appointed, shall be covered by the FIM.

The inscription fee for a World Record attempt is CHF 5'000.–. and includes the fee for the attendance of a FIM Steward/Technical Delegate.

018.17 FIM STEWARD

The FIM Steward must supervise the attempt; he may delegate some of his duties to a probationary Steward or to an FMNR Steward or Stewards. He must meet the following qualifications:

- be nominated by the CCR
- must not belong to the organising country
- must not be of the same nationality as the manufacturer of the motorcycle

Under exceptional circumstances, such as the FIM Steward being late or absent, the record attempts shall take place under the supervision of the Technical Steward of the FMNR holding a valid international licence.

The FIM Steward is not responsible for the organisation of the attempt but he must see that all the necessary requirements have been met. He can, in case of danger (weather conditions, state of the course, condition of the machines or riders, etc.) order a postponement of the start, or interrupt an attempt.

018.18 MOTORCYCLES

Categories and groups of motorcycles can be found in Appendix 01, Road Racing Technical rules. The rules concerning the capacity of the engine (Art. 01.07), the position of the ballast for three-wheelers (Art. 19.04) and riders' clothing (Arts. 01.65 to 01.71) must be observed. All other details are the responsibility of the rider and/or the persons attempting the record.

There is no restriction on the tyres used at World Record attempts.

For World Record attempts where motorcycle speed and weight fall within commercial tyre speed categories, it is compulsory to adopt tyres of a suitable category.

When continuous speed and weight exceed commercial or racing tyre maximum performance, the entrant must send the FIM a declaration where the tyre manufacturer indicates the motorcycle speed, weight and type of record attempts and declare that his tyres are suitable for the attempt.

018.19 TIME-KEEPING AND TIME-KEEPING EQUIPMENT

Since 1.1.1993, the responsibility for Timekeeping (other than World Records) has been transferred to the Road Racing Commission.

In order to carry out their duties, during competition, the time keeping services must use the following:

For all record attempts, one or more automatic chronometer(s) with a precision of 1/1000th second activated by the passage of a motorcycle crossing the time-keeping line must be used. All apparatus must be synchronised no more than 30' before the beginning of the record attempt by an automatic synchroniser or by a single electrical contact with the time of day registering time to 1/1000th second.

For a long distance attempt carried out on a closed circuit, times must be recorded for each lap.

For attempts at world records reaching speeds in excess of 1000 km/h, instantaneous measurements may be taken provided that the apparatus used has a certified accuracy of 1/10,000th of a second.

A timekeeper officiating at a meeting must have at his disposal a reserve chronometer (as described in the second paragraph of this article) to check the readings of instruments being used.

The Instruments detailed above must have a first class certificate of accuracy issued by an official National Observatory or Institute of Horology.

Documents certifying the accuracy of time-keeping equipment must not be more than two years old.

018.20 STARTS

- **Standing Starts**

The forward-most part of the motorcycle must be placed no further than 10 cm behind the timing line with the engine running.

When the Steward indicates that he is satisfied the rider can start in his own time. To assist the position of the motorcycles the use of a wedge behind the rear wheel is authorised.

- **Flying Starts**

The rider can take his place behind the time-keeping line using as great a distance as he requires within the limits of the track at his disposal. When ready, he drives towards and across the starting line and continues across the finish line.

018.21 REFUELLING AND RIDER RELAYS

To the rear of the start and parallel to the time-keeping line, at a distance of approximately 10 metres, a "refuelling line" must be clearly marked on the track. During refuelling or whilst relaying riders, the motorcycle must stop in the zone between these two lines.

Outside assistance will be allowed to re-start the motorcycle, only in the event that a motorcycle must be 'push' started by the mechanics up to (but not beyond) the refuelling line. At this point the motorcycle must continue under its own power or be started by its own onboard starting devices.

In the event that a motorcycle should be 'push-started', the motorcycle must be placed in front of the refuelling line, using as much distance as necessary to start the engine. If a machine is equipped with a kick- or electric starter, the machine can start direct from the refuelling position.

Refuelling must always be carried out with the engine dead. The relaying of riders on the same motorcycle may be done with the engine running but any new starts must conform with the above rules.

For long distance records, a preliminary refuelling test may be required by an FIM Delegate. All personnel in connection with the refuelling operation must wear eye protection and suitable fire retardant clothing.

018.22 OUTSIDE ASSISTANCE AND WIND SPEED

During the whole time that an attempt is taking place and during the run-up to a flying start attempt the machine can only be driven by its own engine, the physical force of the rider (and passenger is applicable) and by the natural forces of gravity. No outside assistance will be tolerated. The wind speed in the direction of a run must not exceed 9 m/s for record ratification.

For a non-wheel driven machine and at the absolute discretion of the supervising steward(s), this rule may be varied in respect of run up only, to allow assistance up to maximum speed of 70 km/hour.

018.23 SIMULTANEOUS ATTEMPTS

Several attempts can be made simultaneously on the same course or circuit provided that there are independent time-keeping arrangements for each.

A rider must not ride continuously in the slip-stream of another machine. A distance of at least 50 metres must separate machines on the track at the same time.

018.24 TIME LIMITS AND STOPPAGES

During a record attempt over 1000 km, 6 hours or more, the machine must not be stopped for more than 1 hr in all.

During 1 hr or a 100 km attempt, the machine must not be stopped for more than 5 minutes. After 5 minutes of stoppage, the motorcycle must complete one lap of the course (if a closed circuit is used) or one run (if the attempt is over a course using two directions) before being able to stop again. If this is not done, the attempt will be considered as having failed.

During a 1 hr record attempt, even if the distance necessary to establish a new record has already been reached, the record can only be registered if the machine has been running for at least 55 minutes.

018.25 STOPS AND RE-STARTS DURING A RECORD ATTEMPT

If for any reason whatsoever a motorcycle stops outside the refuelling zone, the place where it stops shall serve as the re-start point under the supervision of the FIM Steward or another Steward.

018.26 CHANGE OF PARTS

For a short distance record attempt no change of parts is permitted, with the exception of spark plugs, wheels and tyres, and this can only be done if the new parts are identical to those replaced.

For long distance or period record attempts, the following parts cannot be changed: frame, cylinder, cylinder head and crankcase.

Electrical vehicles may recharge their batteries during the record attempt, but may not replace their batteries. Batteries with fuel cells are not allowed.

018.27 FINAL EXAMINATION

Immediately after the completion of an attempt the FIM Steward must ensure that the motorcycle's identity is checked, that the capacity of the engine is checked and that the ballast (if any), is weighed.

018.28 CALCULATION OF RECORD RESULTS

- **Short distance records**

Short distance records are expressed in kilometres per hour (km/h). Since the attempt is made over two runs, the speed will be calculated by using the average mean speed recorded over the two consecutive runs. The number of attempts is not limited but the time between the start and finish of a complete attempt must not exceed two hours.

Due to the new method of calculation, introduced by the FIM TECHNICAL COMMISSION in JANUARY 1978, short distance records made prior to this date are absolute and therefore cannot be broken.

- **Long distance or Period records**

These record attempts are generally held on closed circuits. The rider will not be stopped until he has completed the final lap of the attempt.

Long distance records are expressed in times and period records in distances. Results will be calculated using the system known as interpolation.

Example :

On a closed circuit of 3 km in length, the 1000 km record is being attempted. In this attempt, 333.333 laps must be run (1000:3). Therefore, the rider must complete at least 334 laps. The time taken for 1000 km is then calculated by adding the time taken over 333 laps to 0.333 of the time taken over the 334th lap.

For a period record (1, 6, 12 and 24 hours), the result will be expressed as a distance covered in the time imposed. This distance will be calculated by adding the total distance covered when the motorcycle crosses the finish line for the last time (before the timing is stopped) to the remaining fraction of the lap which will make up the total time.

Example :

On a circuit 3 km in length, a rider is attempting to beat the 6 hour record. He has covered 300 laps of the circuit in 5 hours, 59 minutes and 7 seconds. He is therefore 53 seconds short of 6 hours. He must cover one more lap of the circuit. This lap takes him 72 seconds. The distance covered during these remaining 53 seconds is calculated on this last lap.

Result :

In 6 hours he has covered $300 \times 3 \text{ km} + 53/72$ nds of 3 km (one lap). This gives a total of 902.208 km. In this example, the remaining 53 seconds are expressed as a fraction of 72.

018.29 RATIFICATION OF RECORDS

When all the necessary documentation for a complete attempt has been received and checked by the FIM Executive Secretariat, the results shall be published in a "NOTICE OF RECORDS". The Notice of Records will also serve as an addendum to the FIM World Records Book (1979 Publication).

If any objections are made concerning a "NOTICE OF RECORDS", they must reach the FIM Executive Secretariat within one month after publication. If after one month no objection has been received or if an objection has been received, the results will be passed on to the International Technical Panel of the FIM for final approval.

This will be done at either the Conference Meetings or at the Congress or Biennial Session of the FIM.

After ratification of a record, a certificate will be issued upon the request of the record holder's FMN and all the relevant fees mentioned in the FIM Annuaire must be settled.

018.30 PUBLICATION OF RESULTS AND ADVERTISING

If a record is still in the process of being ratified, any advertising concerning the results of the attempt must clearly state, in sufficiently legible characters, "SUBJECT TO FIM RATIFICATION".

These requirements must be respected and infringement will entail a fine of TEN times the ratification fee and/or other penalties stated in the FIM regulations.

018.31 DOCUMENTS REQUIRED FOR RATIFICATION

The following documents must be sent to the FIM Executive Secretariat immediately after the record attempt with a copy to the FIM Steward and/or the FMNR (see Article 018.32).

- A certificate certifying the measurements and the gradients of the track or a copy of the homologation certificate of a permanent circuit.
- Timing sheets certified and signed by the Chief Time-keeper, if applicable, the time recorded on each lap.
- A copy of the certificate of accuracy of the time-keeping instruments used.
- Two photographs of the motorcycle used in the attempt taken from each side with the streamlining removed.
- A list of advertisers and sponsors of the motorcycle
- A list of any motorcycle parts changed during the attempt or after inspection of the motorcycle.
- For special vehicles, documented written proof must certify that the vehicle was in contact with the ground for at least 90% of the distance travelled.

018.31.1 Certificate of Engine Characteristics

A certificate must be supplied giving the following details according to the type of engine used:

- **For Piston Engines**

The cycle (2 or 4 stroke)

The fuel system (by carburettor or injection)

The ignition system (electrical or by compression)

The number of cylinders

The bore and stroke

The resulting total capacity and class

The record category (see Art. 018.2)

In addition to the above points, for rotary engines with a single capacity cylinder (geometric), the system of carburation and ignition must be stated. The measurement of the cylinder must be made by a qualified technical steward.

For reciprocate engines and turbines, measurements must be made in accordance with the established procedure prior to the start of the attempt.

In all record attempts, it must be stated whether or not the engine is supercharged. If a vehicle is supercharged, the type of compressor must be indicated.

018.32 DUTIES OF THE FIM STEWARD

Before the attempt he will :

- Check all necessary authorisations (FIM, FMNR, local authorities, etc.).
- Check the international licences of the riders and their medical certificates.
- Check the track and arrangements for the attempt.
- Collect and check over documents required by Article 018.31.
- Check the credentials of the international timekeepers
- Seal the motorcycle with lead or paint and check the ballast if applicable.
- Check that sufficient control and first aid staff are present.

During the attempt he will :

- Check that the wind speed does not exceed the authorised maximum of 9 m per second (measurement will be made at a height of 1 m in 3 to 4 places.
- Post another steward at the other end of the course for short distance records or records with a turn-around.
- Ensure that there is no outside assistance and that the engine is switched off and that the motorcycle is stationary when refuelling.
- Ensure that the motorcycle is under continuous observation by either himself or a steward throughout the duration of the record attempt.
- Ensure that only authorised parts are changed.
- Ensure that the timekeeper is informed of any possible changes of rider and that any such changes appear in the official results.
- If a motorcycle stops during a record attempt, the he must go with another steward to the exact point where the vehicle stopped and if necessary, order a new start.

After a successful attempt, he will :

- maintain strict control of the machine, but allow access for publicity, press, photographs, etc. No more than one hour may elapse before the motorcycle is checked.
- Identify the motorcycle and check the engine and ballast.
- Supervise the measurement of the engine by the technical steward.
- Collect reports from all his stewards
- Collect all the documents required by Article 018.31.

The FIM Steward must also prepare his own report and draw up the results on the official FIM forms. These documents must be sent to the FIM Executive Secretariat within 72 hours after the completion of the attempt.

Documents mentioned in Article 018.31 must be sent to the FIM Executive Secretariat by either the FIM Steward or by the FMNR, each of which will retain a copy for its files.