

# **FAI Sporting Code**

Fédération Aéronautique Internationale

# **Section 9 – Rotorcraft**

**CLASS E** 

May 2004 Edition

Approved by the FAI Rotorcraft Commission

Web: www.fai.org

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<sup>&</sup>lt;sup>1</sup> FAI Statutes, Chapter 1, para. 1.6

<sup>&</sup>lt;sup>2</sup> FAI Sporting Code, General Section, Chapter 3, para 3.1.3.

<sup>&</sup>lt;sup>3</sup> FAI Statutes, Chapter 1, para 1.8.1

<sup>&</sup>lt;sup>4</sup> FAI Statutes, Chapter 5, para 2.1.1; 2.4.2; 2.5.2 and 2.7.2

<sup>&</sup>lt;sup>5</sup> FAI Bylaws, Chapter 1, para 1.2.1

<sup>&</sup>lt;sup>6</sup> FAI Statutes, Chapter 2, para 2.4.2.2.5,

<sup>&</sup>lt;sup>7</sup> FAI Bylaws, Chapter 1, para 1.2.3

<sup>&</sup>lt;sup>8</sup> FAI Statutes, Chapter 5, para 5.1.1; 5.5 and 5.6

<sup>&</sup>lt;sup>9</sup> FAI Sporting Code, General Section, Chapter 3, para 3.1.7

<sup>&</sup>lt;sup>10</sup> FAI Sporting Code, General Section, Chapter 1, paras 1.2. and 1.4

<sup>11</sup> FAI Statutes, Chapter 5, para 5.6.3

<sup>&</sup>lt;sup>12</sup> FAI Bylaws, Chapter 1, para 1.2.2

# **SECTION 9**

# **2004 EDITION**

# **AMENDMENT RECORD**

This records the paragraphs added, deleted or amended between 2001 and 2004, effective 01 May 2004 and incorporated in this version.

#### Paragraphs amended

3.1.8 added

3.2.3.6 added

former paragraphs 3.2.3.6 and 3.2.3.7 renumbered

5.3.6 and sub-paragraphs added

former paragraph 5.3.6 renumbered as 5.3.7

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#### **PRINCIPLES**

#### 1.1 <u>Introduction</u>

This Section provides for the international encouragement and control of sporting activities involving aeroplanes.

#### 1.2 <u>General Section of the Sporting Code</u>

The General Section contains the rules and regulations that apply to all FAI recognised activities.

#### 1.3 <u>Development and Amendment</u>

The responsibility for the development and maintenance of Section 9 rests with the FAI General Aviation Commission.

# **DEFINITIONS AND CLASSIFICATIONS**

2.1	<u>Definitions</u>
	The following definitions and classifications apply:
2.1.1	General Definitions
2.1.1.1	AIRCRAFT: A vehicle that can be sustained in the atmosphere by forces exerted upon it by the air.
2.1.1.2	AERODYNE: An aircraft, heavier than air, that can be dynamically sustained in the air by the reaction of the air upon surfaces in relative movement.
2.1.1.3	ROTORCRAFT: An aerofyne that derives the whole or a substantial part of its lift from a rotary wing system.
2.1.1.4	AUTOGYRO: A rotorcraft which, in its flight, derives most os its lift from an autorotating rotar system not provided with any form of direct power drive.
2.1.1.5	HELICOPTER: A rotorcraft which, in flight, derives substantially the whole of its lift from a power-driven rotor system whose axis (axes) is (are) fixed and substantially perpendicaular to the longitudinal axis of the rotorcraft.
2.1.2	Flight Definitions
2.1.2.1	A FLIGHT: A flight by an aircraft starting and take-off and ending with the landing.
2.1.2.2	<ul><li>UNCOMPLETED FLIGHT: A Flight is deemed to be uncompleted if:</li><li>a) an accident occurs during the flight resulting in the death of any member of the crew within 48 hours or any person leaves the rotorcraft during the flight;;</li><li>b) any part of the rotorcraft or its equipment is shed or jettisoned other than permitted jettisonable equipment, ballast or fuel declared in advance.</li></ul>
2.1.3	Types of Flight
2.1.3.1	DISTANCE FLIGHT: A flight measured for distance between the take-off place or a departure point and a finish point.
2.1.3.2	POINT TO POINT: A flight from a departure point to a landing place specified in writing before take-off. A flight may be measured for distance or speed.
2.1.3.3	ALTITUDE FLIGHT: A flight measured for altitude achieved or maintained. Altitude is defined as the vertical distance from mean sea level.
2.1.3.4	TIME TO CLIMB FLIGHT: A flight timed from a standing start to the time at which a designated height is achieved.
2.1.3.5	SPEED FLIGHT: A flight timed for speed between a departure point and a finish point.
2.1.4	Courses
2.1.4.1	A course consists of the straight line(s) between a departure point and a finish point via any turn or control point in the designed or predeclared sequence.
2.1.4.2	APPROVED COURSE: A course measured in advance and approved by an NAC FAI shall be notified of the details of the course.
2143	DECLARED COLIRSE: A course declared in advance by an NAC

2.1.5	Closed Circuit Courses
2.1.5.1	OUT-AND-RETURN COURSE: A flight to a turn point with return along the reciprocal course to the departure point.
2.1.5.2	TRIANGULAR COURSE: A flight around two turn points with return to the departure point.
2.1.5.3	POLYGON COURSE: A flight around a course with three or more turn or control points and with return to the departure point.
2.1.5.4	LAP : A single completed flight around a closed circuit course. A flight may include more than one lap of a course.
2.1.6.	Start of a Flight
2.1.6.1	TAKE-OFF: The point and/or time at which all parts of a rotorcraft or its crew cease to be in contact with or connected to the ground or water.
2.1.6.2	TAKE-OFF PLACE : The centre of the airfield or precise place from which the take-off is made.
2.1.6.3	DEPARTURE POINT : Either the take-off place or the crossing of a start line.
2.1.6.4	START TIME: The time of an aircraft at the departure point.
21.6.5	START ALTITUDE : The altitude of an rotorcraft above sea level at the departure point.
2.1.6.6	START LINE: A gateway of a designated width and height, the base being specified on the surface.
2.1.7	Types of Start
2.1.7.1	FLYING START: The rotorcraft is airborne when crossing the start point.
2.1.7.2	RUNNING START : The rotorcraft is still in contact with ground or water when crossing the start point.
2.1.7.3	STANDING START : A start by a stationary rotorcraft timed from the giving of a "go" signal.
2.1.8	Turn Point
2.1.8.1	A clearly defined feature on the surface which is precisely specified before take-off.
2.1.8.2	ROUNDING THE TURN POINT: A turn point is rounded when the entire rotorcraft is observed to pass outside the vertical projection of the centre of the turn point feature or pylon or when the entire rotorcraft is proved to have entered a designated sector outside the angle made by the adjacent legs of the course.
2.1.9	Control Point
2.1.9.1	A control point is a point which an rotorcraft is required to overfly or to land at during the flight along a course.
2.1.9.2	REACHING THE CONTROL POINT : A control point is reached when the rotorcraft is proved to have overflown it or lands at the point.
2.1.9.3	${\sf DESIGNATED}$ SEQUENCE : The order in which the turn or control points shall be flown.
2.1.9.4	POSITION CHECK POINT: A position check point is a point which the pilot proves to have overflown during a flight of which the route has not been declared in advance.

#### 2.2.0 Finish of Flight

- 2.2.0.1 THE LANDING: The point and/or time at which any part of an rotorcraft or its crew
  - a) first touches the ground, or
  - b) comes to rest after landing.
- 2.2.0.2 LANDING PLACE : Either the precise place at which the landing is made.
- 2.2.0.3 FINISH POINT: Either the landing place or the crossing of a finish line.
- 2.2.0.4 FINISH LINE: A gateway of designated width and height, the base being specified on the surface.
- 2.2.0.5 CROSSING THE FINISH LINE: The finish line is considered to be crossed when the nose of the rotorcraft cuts the finish line unassisted.
- 2.2.0.6 FINISH TIME: Either the time at which the rotorcraft crosses the finish line or the time at which it lands.

#### 2.2.1 Weight Classification - Class e E

In selecting the correct sub-class weight the rotorcraft must weigh less than sub-class above at take-off or its greatest weight during the record attempt.

#### 2.2.1.1 <u>SUB-CLASS E-1 HELICOPTERS</u>

E-1-a	Take-of	f weight le	ess tha	n	500.00 kgs
E-1 b	"	"	"	"	1 000.00 kgs
E-1 c	"	"	"	"	1 750.00 kgs
E-1 d	"	"	"	"	3 000.00 kgs
E-1 e	"	"	"	"	4 500.00 kgs
E-1 f	"	"	"	"	6 000.00 kgs
E-1 g	"	"	"	"	10 000.00 kgs
E-1 h	"	"	"	"	20 000.00 kgs
E-1 i	"	"	"	"	30 000.00 kgs
E-1 j	"	"	"	"	40 000.00 kgs
E-1 k	"	"	"	"	50 000.00 kgs
E1I	II .	"	"	"	60 000.00 kgs

#### 2.2.1.2 SUB-CLASS E-3 AUTOGYROS

E 3 a	Take	-off weigh	it less t	than	500 kgs
E 3 b	"	"	"	"	1 000 kgs
E3c	"	"	"	"	1 750 kgs
E 3 d	"	II	"	II .	3 000 kgs

#### 2.2.2 Method of Propulsion

Rotorcraft shall be divided into two grooups ccording to type of power plant.

Group 1 Piston Engine
Group 2 Turbine

Where a rotorcraft has mixed propulsion, it wioo be classified in the higher group number.

# RECORDS IN CLASSES E

3.1	Absolute Records
3.1.1	Great Circle Distance without landing
3.1.2	Distance over a closed circuit without landing.
3.1.3	Altitude.
3.1.4	Speed over straight 3 kilometre course.
3.1.5	Speed over straight 15/25 kilometre course.
3.1.6	Speed over a closed circuit.
3.1.7	Speed around the world
3.1.8	Speed over both Earth's Poles
3.2	Class Records
3.2.1	DISTANCE RECORDS
3.2.1.1	Distance without landing.
3.2.1.2	Distance over closed circuit without landing.
3.2.2	ALTITUDE RECORDS
3.2.2.1	Altitude without payload.
3.2.2.2	Altitude with payload.
3.2.2.3	Greatest mass carried to height of 2 000 metres.
3.2.2.4	Time to climb to various heights.
3.2.2.5	Highest take-off
3.2.3	SPEED RECORDS
3.2.3.1	Speed over a straight 3 kilometre course at restricted altitude.
3.2.3.2	Speed over straight course with minimum length 15 kilometres and maximum length 25 kilometres.
3.2.3.3	Speed over closed circuit, without landing. Course lengths are 100, 500, 1'000, 2'000, kilometreswithout payload.
3.2.3.4	Speed over closed circuit, without landing. Course lengths are 100, 500, 1'000, 2'000, kilometres with payload.
3.2.3.5	Speed around the world, eastbound and westbound.
3.2.3.6	Speed over both Earth's Poles.
3.2.3.7	Speed over commercial air route.
3.2.3.8	Speed over recognised courses.

# **GENERAL RULES**

4.1	World Class Records
4.1.1	In the table "World Class and sub-class Records (Annex 1) the "x" indicates which records exist in the classes and sub-classes recognised.
4.2	Feminine Records
4.2.1	Feminine records may be established provided that during the entire record attempt all persons on board the rotorcraft arre female.
4.3	Improvement In Consecutive Records
4.3.1	A new record must constitute an improvement over the preceding record of at least :  - 1% in distance records (3.2.1.)  - 3% in altitude records (3.2.2.)  - 1% in speed records (3.2.3.)
4.3.2	A record that is established with a rotorcraft carrying a payload will be broken in its category when a rotorcraft carrying an equal or superior payload accomplishes a better performance.
4.4	Accuracy of Measurement
4.4.1	Measurements involved in a record claim shall be the subject of a detailed report on their accuracy certified by a qualified person or body approved by the NAC concerned.
4.4.2	Distance records (3.2.1.) : in the measurement of the record distance the error must not exceed 0.02%.
4.4.3	Altitude records (3.2.2.) : in the measurement of the record altitude the error must not exceed 1%.
4.4.4	Speed records (3.2.3.) : in the measurement of the record speed the error must not exceed 0.25%.
4.5	Refuelling
	Special conditions as to refuelling in flight
4.5.1	Rotorcraft attempting records under the provisions of 5.3.5 except sub-class E3 may conduct the record flight under either of the following conditions:
	Category A – Without refuelling in flight Category B – With refuelling in flight
4.5.2	In the case of a rotorcraft having the capacity of refuelling in flight and attempting a record under Category A, adequate evidence must be provided that refuelling in flight did not occur at any time during flight.

#### 4.6 <u>Determination of Weight and/or Weight Classification</u>

- 4.6.1 The maximum weight of the rotorcraft will determine its weight classification. In cases where refuelling in flight occurs the rotorcraft must be weighed prior to take-off with all fuel tanks filled and sealed.
- 4.6.2 Except for payload records the certified maximum take-off weight may be accepted instead of weighing, provided that adequae and acceptable evidence is given that the actual weight did not exceed the maximum take-off weight
- 4.6.3 No fuel, ballast or other disposable matter may be jettisoned after take-off and prior to the completion of the record attempt. No person may parachute from the rotorcraft during a record attempt.

#### 4.7 <u>Measuring Equipment</u>

- 4.7.1 Unless FAI Rotorcraft Commission has determined otherwise any measuring device previously used in any other FAI Air Sport or record may be used in support of record attempts under Class E.
- 4.7.2 FAI Rotorcraft Commission will, from time to time, authorize new measuring equipment or procedures to be adopted. Details of this will be available from FAI.

# SPECIAL RULES FOR WORLD RECORDS

5.1	DISTANCE RECORDS
5.1.1	GREAT CIRCLE DISTANCE WITHOUT LANDING
5.1.1.1	Distances shall be meadured as a straight line between the departure point and finish point.
5.1.1.2	The course shall be approved or declared.
5.1.1.3	Turn points must be overflown
5.1.1.4	The course shall not be a closed circuit.
5.1.2	DISTANCE OVER A CLOSED CIRCUIT WITHOUT LANDING
5.1.2.1	The course shall be an approved or declared course measured from the departure point with a return to the departure point.
5.1.2.2	The take-off place and landing place shall be within a maximum of 10 kilometres of the separture point and will be outside the perimeter of the closed circuit.
5.2	ALTITUDE RECORDS
5.2.1	ALTITUDE WITHOUT PAYLOAD
5.2.1.1	The altitude achieved shall be the true altitude measured from mean sea level as defined in the relevant country by the national survey.
5.2.2	ALTITUDE WITH PAYLOAD
5.2.2.1	As in 5.2.1.1 above
5.2.2.2	Payload may include any disposable matter or material which is not part of the structure of the rotorcraft and which does not contribute to its performance or efficiency on take-off or in flight and any person or persons who are not part of the flight crew and who do not contribute to the flight performance.
5.2.2.3	The payload shall be determined at take-off
5.2.2.4	No part of the payload may be disposed of or jettisoned the record attempt has been completed.
5.2.3	GREATEST MASS CARRIED TO A HEIGHT OF 2'000 METRES
5.2.3.1	In the take-off place is palce is situated below sea level, a minimum altitude of 2'000 metres above sea level shall be reached.
5.2.3.2	As in 5.2.2.2 above.
5.2.3.3	No fuel, or any equipment or apparatus may be jettisoned before the rotorcraft reaches a height of 2000 metres which must be reached within 20 minutes of take-off.
5.2.3.4	No external or auxiliary source of power shall be utilised on take-off or at any time during the record attempt.
5.2.4	TIME TO CLIMB TO VARIOUS HEIGHTS WITH OR WITHOUT PAYLOAD
5.2.4.1	The time measured must be that from a standing start to reaaching the designated height
5.2.4.2	As in 5.2.2.2, 5.2.2.3 and 5.2.2.4 above

5.2.5	HIGHEST TAKE-OFF
5.2.5.1	As in 5.2.1.1.
5.2.5.2	The touch down/take-off must ensure that the rotorcraft maintains contact with the ground for at least two minutes.
5.3	Speed Records
5.3.1	SPEED OVER A STRAIGHT 3 KILOMETRE COURSE AT RESTRICTED ALTITUDE
5.3.1.1	Only An approved course measured in advance may be used.
5.3.1.2	The course shall have a clear approach at each end at least 1 000 metres in length. Both the course and the approach shall be clearly marked. The maximum height over the course and its approaches shall not exceed 150 metres and the maximum height at any time outside the course shall not exceed 500 metres.
5.3.1.3	The rotorcraft shall fly over the course twice in each direction and the speed adopted shall be the average of the four runs rounded down to the nearest whole km/h. If more than four runs are made in the same flight any four consecutive runs may count. The four runs selected must have been achieved within 30 minutes elapsed time and the rotorcraft may not land during the record attempt.
5.3.2	SPEED OVER A STRAIGHT COURSE WITH A MINIMUM LENGTH OF 15 KILOMETRES AND A MAXIMUM LENGTH OF 25 KILOMETRES
5.3.2.1	As in 5.3.1.1 above.
5.3.2.2	The course shall have a clear approach at each end of 1'000 metres. Both the course and the approaches shall be clearly marked. The altitude over the course is unlimited but should not be below 150 metres.  The height over the course and its approaches may not vary by more than 100 metres. The maximum height at any time during the flight shall not be greater than 2'000 metres above the mean height at which the course is flown.
5.3.2.3	The rotorcraft shall fly over the course once in each direction, and the speed adopted shall be the average of the two speeds calculated to the nearest km/h below the figure recorded. If more than one run is made during the course of the same flight, any two consecutive runs may be selected to count upon condition that they have been accomplished in opposite directions. The two runs selected must have been achieved within a maximum elapsed time of 45 minutes. No landing shall be permitted during the record attempt.
5.3.3	SPEED OVER A CLOSED CIRCUIT WITHOUT LANDING OF 100, 500, 1000 AND 2000 KILOMETRES WITHOUT PAYLOAD.
5.3.3.1	The distance may be achieved over one or more lapse of an approved or declared course.
5.3.3.2	Before crossing the start line the rotorcraft shall fly level for the last 1000 metres within a tolerance of 100 metres.
5.3.3.3	The altitude of the rotorcraft at the finish line shall not be less than its altitude at the start line.
5.3.4	SPEED OVER A CLOSED CIRCUIT WITHOUT LANDING OF 100, 500, 1000 AND 2000 KILOMETRES WITH PAYLOAD
5.3.4.1	As in 5.3.3 above
5.3.4.2	As in 5.2.2.1, 5.2.2.3 and 5.2.2.4 above

- 5.3.5 SPEED AROUND THE WORLD (EASTBOUND AND WESTBOUND)
- 5.3.5.1 The course, including the control points, shall be approved in advance by the NAC's concerned and must start and finish at the same place, crossing all meridians. The length of the course shall not be less than 36'787,559 kilometres (equal in length to the Tropic of Cancer).
- 5.3.5.2 All control points must be at a latitude of less than 66 degrees 33 minutes (outside the North and South Frigid Zones).
- 5.3.5.3 If due to circumstances the final landing cannot be made at the point of departure, the rotorcraft may be timed over the finish line on an alternate point lying beyong the original one (at a greater distance from which the start was made).
- 5.3.5.4 Intermediate landing places, turn or control points must be declared and agreed in advance with the NACs concerned.
- 5.3.5.5 Any time spent on the ground between start and finish shall be counted as flying time.
- 5.3.5.6 Refuelling on the ground or in flights is permitted.
- 5.3.5.7 Repair or replacements of parts of the rotorcrafts rotors and engine(s) are permitted except that the winglets and fuselage may not be changed.
- 5.3.5.8 Crew members may not be changed during the attempt. However, in the casse of an emergency a crew member, other than the pilot-in-command, may leave but must not be replaced.
  - Passengers may be changed during the attempt.

#### 5.3.6 SPEED OVER BOTH EARTH'S POLES

- 5.3.6.1. The course, including the control points, shall be agreed in advance with the NAC's concerned. It must start and finish at the same point. The rotorcraft must over fly both geographic poles. A GNSS Flight Recorder approved by the FAI Gliding Commission must be carried to prove overflight of the Poles, and the use of this flight recorder must be in accordance with the provisions of FAI Sporting Code Section 3 and its relevant Annexes.
- 5.3.6.2. There will be mandatory control points at a latitude of less than 63° 33" (outside the north and south frigid zones.) These will be on both outward and return legs from the geographic pole itself.
- 5.3.6.3. If due to unforeseen circumstances the final landing cannot be made at the point of departure the rotorcraft may be timed over the finish line on an alternative point lying beyond the original point and a greater distance from which the start was made but within 100 km
- 5.3.6.4. Any time spent on the ground between start and finish shall be counted as flying time.
- 5.3.6.5. Refuelling on the ground or in flight is permitted providing it has been certified by the relevant manufacturer and Air Safety Board.
- 5.3.6.6. Repairs or replacements of rotorcraft components and engines are permitted except that the fuselage may not be changed.
- 5.3.6.7. Crew members may not be changed during the attempt. In the case of an emergency a crew member, other than the pilot in command, may leave but must not be replaced. Passengers may be changed during the attempt.
- 5.3.6.8. Pilots shall conform strictly with all local and international operational and safety regulations in force concerning flight within the frigid zones.
- 5.3.6.9. This record category is not available to Class E1a, E1b, E3a or E3b.

- 5.3.7 SPEED OVER A COMMERCIAL ROUTE
- 5.3.7.1 The record attempt shall be flown on a normally scheduled and timetabled flight over a route regularly served by scheduled air services, according to ICAO definitions. Except on international flights, the route shall be at least 100 kilometres in length. Payload shall be carried during the attempt.
- 5.3.7.2. The attempt shall be made on the outward or return journey or can be for the double journey.
- 5.3.7.3. In attempting the record for the double journey the time spent on the ground between outward and return journeys shall be counted as flying time. Conditions stated in 5.3.5.6 above shall apply.
- 5.3.7.4 The flight shall be timed from take-off to landing and any time spent on the ground between the start and the finish shall count as elapsed time.
- 5.3.7.5 The crew other than the pilot-in-command may be changed.

#### 5.4 **Speed over recognised courses**

- 5.4.1 Speed over recognised course records may be flown between any two cities and/or geographical features designated for that purpose by the NACs of the countries in which they are situated.
- 5.4.2 The minimum distance between the start point and the finish point when these are situated in the same country shall be 250 kilometres. In countries where the NAC has not designated cities or geographical features or points not designated which are to be used the NAC organizing the attempt will be responsible for obtaining approval of the NAC(s) involved. FAI will be responsible for the approval of cities or geographic points not within Member countries.
- 5.4.3 The start point and the finish point shall be situated within 20 kilometres of the city centre in such a way as the distance flown will not be less than the distance between the city centres, subject to a tolerance of 2% with a maximum of 60 kilometres. However when geographical features are used the start point and/or the finish point shall be situated at those geographical features.
- 5.4.4 There shall only be one position recognised by FAI for each city or geographical point.
- 5.4.5 Each course shall be the subject of a separate record for the journey out and the journey back, and for the journey out and back.
- 5.4.6 Crews must not be changed.
- 5.4.7 The speed recorded shall be the speed between the start and finish lines computed as the average speed along the great circle distance, any time spent on the ground being counted as flying time.

## **RECORD FILE**

6.1	<u>Claims</u>
6.1.1	Notice of a preliminary claim for a record must be received by FAI within 7days of its completion as an attempt.
6.1.2	A record attempt must be certified by the organizing NAC as a National Record within 90 days.
6.1.3	The file containing all the information and certification necessary to prove that the conditions have been met in support of the record claim must be received by FAI within 120 days of its completion as an attempt.
6.1.4	FAI can request additional evidence or clarification in support of a record claim.
6.2	<u>Certification</u>
6.2.1	Each record file shall contain all flight certificates necessary to establish full details of the record.
6.2.2	All certificates must be signed or countersigned by the official(s) controlling the record attempt.
6.3	Certificate Evidence
6.3.1	TAKE-OFF (1)
6.3.1.1	Name and Position of place of take-off.
6.3.1.2	Date and time of take-off.
6.3.2	STARTING POINT (2)
6.3.2.1	Co-ordinates as necessary to completely identify location.
6.3.2.2	Altitude limit of crossing, if any.
6.3.2.3	Evidence of crossing the line and time of crossing.
6.3.2.4	Evidence that the position of the start line complied with record requirements.
6.3.3	COURSE FLOWN (3)
6.3.3.1	Details of course including its category.
6.3.3.2	Lengh of course and how measured.
6.3.3.3	Marking of course and identifying features of any turn or control point.
6.3.3.4	Evidence that course flown complied with record requirements, if any.
6.3.4	TURN AND/OR CONTROL POINTS (4)
6.3.4.1	Name, position and identification marks of points.
6.3.4.2	Evidence that points were declared prior to take-off.
6.3.4.3	Evidence that points were correctly rounded or reached. Each photograph must include part of the rotorcraft and turn point.
6.3.5	INTERMEDIATE LANDING AND TAKE-OFFS (5)
6.3.5.1	Identification, date and time of any intermediate landings and take-offs made during the record attempt.
6352	Evidence that the landing places were declared before take-off, if required

6.3.6	FINISH POINT (6)
6.3.6.1	Identification of finish point, time of crossing and altitude limits if applicable.
6.3.6.2	Evidence that position of finish line complied with record requirements, if any.
6.3.7	ARRIVAL (7)
6.3.7.1	Place and co-ordinates of arrival, landing place and time of landing.
6.3.7.2	Evidence of landing if alternate landing place.
6.3.8	ALTITUDE/HEIGHT (8)
6.3.8.1	Altitude or height achieved.
6.3.8.2	Evidence that time and distance altitude was maintained, if applicable.
6.3.8.3	Evidence that height was reached within set time limit, if any.
6.3.9	FLIGHT REQUIREMENTS (9)
6.3.9.1	Evidence that flight requirements were met, if any.
6.3.9.2	Evidence that transition to and from horizontal flight complied with record requirements.
6.4.	Supplementary Control Certificates
6.4.1	RADAR (10)
6.4.1.1	Evidence of calibration of a radar.
6.4.1.2	Evidence of radar display or reading.
6.4.2	BAROGRAPH (11)
6.4.2.1	Chart or photocopy of barogram
6.4.2.2	Calibration chart for barograph used with date of calibration.
6.4.2.3	Evidence of sealing and unsealing of barograph
6.4.3	WEIGHT OF ROTORCRAFT (12)
6.4.3.1	Weight of take-off
6.4.3.2	Weight, after landing, if applicable, of any load or ballast carried
6.4.3.3	Type of load or ballast and how stored.
6.4.3.4	Evidence that rotorcraft weight complied with class limits.
6.4.4	SPECIAL EQUIPMENT AND AIDS (13)
6.4.4.1	Detail of any auxiliary power unit(s), take-off aids or other special equipment carried.
6.4.4.2	If any equipment or load jettisoned with position and time of jettisoning.
6.4.5	FUEL AND FUELLING (14)
6.4.5.1	Place(s) and time(s) at wich the rotorcraft was refuelled on the ground and/or position and time at which the rotorcraft was refuelled in flight.
6.4.5.2	Evidence that all tanks were sealed after refuelling and before the record attempt and that the seals were intact at the termination of the record attempt. Seals to be checked immediately before and after the record attempt.
6.4.5.3	Evidence that in flight refuelling did not take place during record attempt.

6.4.6	CREW (15)
6.4.6.1	Name of crew at the start of flight.
6.4.6.2	Evidence that no changes in or additions to the crew were made during the record attempt.
6.4.6.3	Names of any crew leaving for emergency reasons, with details.
6.4.7	PAYLOAD (16)
6.4.7.1	Composition of payload carried and details of any changes made during the record attempt.
6.4.8	COMMERCIAL AIR ROUTES (3)
6.4.8.1	Evidence that the route was officially approved for scheduled commercial operation according to ICAO definitions.
6.5	Records certificates
	Model certificates for use in connection with claims follow hereon.
	See the Annex no 1 to no 16

## **COMPETITIONS**

7.1. The regulations summarize the general contents of the rules for competitions under FAI Rotorcraft Commission's responsibility. The detailed Competition Rules shall be approved by FAI Rotorcraft Commission. and will be issued as an Annex.