A.3 LANDING TEST

A.3.1 The object of this test is to assess the pilot's skill in landings of different types. Circuits may be left or right hand. Circuits for landings 1 and 4 are to be above 500 feet QFE but for landings 2 and 3 are not to be less than 1,000 feet or more than 1,200 feet QFE. These will be defined by the competition management who has the right to vary the circuit direction. The tests include the landings described below:

A.3.1.1 LANDING 1. NORMAL LANDING

A landing where the use of power, spoilers, flaps or sideslip is at the discretion of the pilot.

A.3.1.2 LANDING 2. FORCED LANDING

Abeam the zero line, the engine is throttled back to idle power at an altitude of not lower than 1,000 feet QFE and not higher than 1,200 feet QFE. Power shall not be used thereafter. Flaps, spoilers and sideslip may be used at the discretion of the pilot.

A.3.1.3 LANDING 3. FORCED LANDING WITHOUT FLAPS

Abeam the zero line flying with flaps fully retracted, the engine is throttled back to idle power at an altitude of not lower than 1,000 feet QFE and not higher than 1,200 feet QFE. Power, spoilers and flaps shall not be used thereafter. Sideslip may be used at the discretion of the pilot.

A.3.1.4 LANDING 4: OBSTACLE LANDING

The competitor will make a landing after passing a marked obstacle 2 metres high, placed 50 metres before the touchdown line. Use of power, spoilers, flaps or sideslip is at the discretion of the pilot. Approaches in connection with the obstacle landing, where the wheels are lower than the obstacle before passing over it, are not permitted (creeping).

A.3.2 Landings will be run as a separate event to enable the participation of all international judges in the judging of the event. Depending on the situation the competition director decides to execute the landing competition as follows:

- Each landing followed by a full stop, or

- Two landings with a touch and go in between.

The sequence of landings will be briefed.

- **A.3.3** All landings are to be made as close as possible to the zero area, within a strip 12 metres wide and 72 metres long. See Appendix A2. The strip will be marked and aircraft must keep within the strip.
- **A.3.4** Touchdown must be on both mainwheels with a maximum distance of five (5) metres between mainwheel 1 and mainwheel 2, except when the chief judge has decided that a crosswind condition exists. If the touchdown is in or after the zero area and the distance between the touchdown of the mainwheels is 5 metres or less, the touchdown point for measurement is the touchdown of the first mainwheel.

If the distance is more than 5 metres, the touchdown point for measurement is the touchdown of the second mainwheel.

Nosewheels must be off the ground. Tailwheel aeroplanes must be landed in a configuration where the tail is lower than the horizontal attitude.

- **A.3.5** Touchdown on or after the zero area is measured when the aircraft is rolling on the ground after all bounces. In case of bounces before to after the line, the touchdown counted is that one which gives the highest penalty.
- **A.3.6** An aircraft is considered bouncing when both mainwheels (or a sole mainwheel) leave the ground, after any touchdown, to a height of more than the diameter of the mainwheel, or for a distance more than 15 m. A jump into a 5 meter box must be calculated this way: Box meters minus 4 meters, minus the measured lift-off point before.
- **A.3.7** In the case of any part of the aircraft touching the ground before the zero area, the distance measured will be the distance from the touchdown point to the zero line. In the case of a tailwheel landing which is judged to be three-pointer landing (the tailwheel may roll on the ground for a maximum distance of five (5) metres before the mainwheels), the touchdown point of the mainwheels shall be measured.
- **A.3.8** A crosswind condition shall exist, when the crosswind component of the wind, that is the component at right angles to the runway in use, is 8 kts or more. Wind direction and speed shall be measured close to the zero-line by suitable anemometer and recorded for each landing. The maximum allowed tailwind component is 3 kts.

The chief judge will decide when a crosswind situation exists, and shall direct that a conspicuous flag signal is placed 30 metres before the zero line to advise competitors.

Touchdown on the upwind mainwheel only is allowed when a crosswind exists.

- **A.3.9** Power has to be completely retarded at touch down and only sufficient power is permitted after the aircraft has come to a complete stop, to continue the roll to the end of the landing strip. After leaving the landing strip, the runway shall be cleared.
- **A.3.10** Abnormal landings in all four types of landing are defined thus:
 - a) Nosewheel not off the ground, or
 - b) A tailwheel aircraft not in a configuration with the tail below the horizontal, or
 - c) One mainwheel off the ground at the initial touchdown, without authorised crosswind conditions, to a height of more than the diameter of the mainwheel, or
 - d) Touchdown on downwind main wheel only and with upwind wheel off the ground in crosswind conditions, to a height of more than the diameter of the mainwheel, or
 - e) Any part of the aircraft other than the wheels touching the ground, or
 - f) Retraction of flaps inside landing strip before touchdown.
 - g) Landing with locked wheels.
 - h) Mainwheels leaves the ground, while nosewheel remaining on it.
- **A.3.11** In the event of a competing aircraft not touching the ground in any of the landing tests or landing outside the strip, he will be penalised.
- **A.3.12** All approaches and landings must be considered as being safe. If the chief judge, competition director or his appointed representative is of the opinion that an approach or landing is deemed as dangerous, flying will be stopped until the jury has made a decision (See A.7.1).

A.10.3 LANDINGS

	1	2	3	4
	Normal	Forced	Forced	Obstacle
			no flaps	
Maximum penalties per landing	400	200	200	400
Outside the strip or no landing	200	150	150	200
Abnormal landing (A.3.10 a to h))	150	150	150	150
Rolling out of the landing strip to the side	200	150	150	200
Power on the ground in the strip	50	50	50	50
Non permitted use of power (in the air)	-	200	200	-
Non permitted use of flaps or spoilers (in the air)	-	-	200	-
Touching, destroying the obstacle or "creeping" over obstacle	-	-	-	400

Penalty information for distance:



normation for distance.