

Australian Karting Association Inc

# Track Committee

## MINUTES

**Saturday 13<sup>TH</sup> & Sunday 14<sup>TH</sup>  
JULY 2013**



Venue: Rendezvous Grand Hotel, MELBOURNE VIC.  
328 Flinders Street VIC 3000  
Date: Saturday 13th & Sunday 14th July 2013 - 9.00AM

## TRACK AGENDA ITEMS

1. Welcome and Introduction of members of the panel.

Chair: Tom Nipperess – National Track Coordinator.

Dave Price – Qld, Mike Sully – WA, Mark Eyre – NT, Ross Gathercole – VIC, Warren Smith – TAS, Graham Jensen – SA, Steve King – NSW.

Guest: Phil Smith – Finance Director.

KartingNSW Item 1 – Track Item – Track Handbook

Recommend that this revised document be adopted Nationally (Karting NSW Policy attached

Discussion on Karting NSW Track Inspection Handbook. ME51 Australian Standards Committee in relation to safety barriers, kart design. Crash test on V8 tyres.

National accident statistics still not being forwarded to National Coordinator.

AKA Item 2 Review the N.S.W. Track manual for the possible adoption of the same as the national manual.

Carried over discussion from Item 1.

Training and accreditation for Track Inspectors.

Training for Club Track Inspectors.

Development of training programme.

Lack of understanding of consequences by clubs.

AKA Item 3: Hi Viz apparel.

Discussion when pushing out karts that have out grids close to the track should a Hi Viz apparel be worn?

Discussion.

That the Committee refer to Rule 17.12 (j).

AKA Item 4: Discussion on the Lightening meters in regards to type to suit all track lighting.

Equipment supplied to Track Inspectors as Standard. Light Meter, Measuring Wheel and Digital Camera.

Discussion in relation to the use of the light meter and types of light that is fit for purpose.

That the variation of light is the problem.

Ammendments.

TRAC 1.10 Track Lighting

1.10, 3, a. No point of the track surface will measure less than 15 Lux to be placed in the Track Inspection Handbook.

Moved: WA Seconded: TAS.

For: NSW, VIC,SA,TAS,NT

Against: QLD.

Carried.

1.10. 3. e. No section of track surface will have its intensity of lighting vary by more than 20% over a 5 metre distance.

Moved: VIC

Seconded:QLD

Carried.

Delete section 1.10, 3, c & d from both Track Inspection Handbook and National Circuit Construction and Safety Standards.

Moved: WA

Seconded: TAS.

Carried.

AKA Item 5: Revisit the rules in relation to track lighting ( all karts are now fitted with transponders and the light requirements of the past may not be relevant today).

Covered by Item 4.

AKA Item 6: Control lights, such as Tracksa .We need to set the guide lines to standardise the use of these lights ( everyone seems to have different ideas).

TRAC 1.10 Control Lights (flashing Amber/Red/ Blue Lights)

The minimum requirements for lights shall be 150mm diameter incandescent or a minimum of 100 square centremeters of LED lighting mounted a maximum of 2 meters high. Blue and Amber lights shall be independently switched, red shall be full course. All lights shall be controlled from central point. All cabling must be either underground or around fence lines and must comply with relevant electrical codes. Position, construction and number positions of lights to be decided in consultation with State Track Inspector.

Moved: NT

Seconded:TAS

Carried.

AKA Item 7: AKA Insurance: **Item not dealt with.**

AKA Item 8: Plans for Horsham.

**Discussion.**

That the committee agree that this application is a major modification and Rule 1.05, 3, a & b apply. As such this application will only be approved in a clockwise direction. Flag point 5 to be moved to prior to entry onto main straight.

Item 9.

National Track Inspection Handbook

### **Track Inspections**

1. The track Inspector who carries out the Track Inspection **MUST** endorse the Annual Track Licence.
2. Make inspections at the request of the Clubs, before any structural changes to the integrity of the track are made.

Protocol: Club to State Office to Zone Track Inspector to State Track Inspector to National Track Coordinator for approval where required.

3. Club Track Safety Officers:

**The functions of Club Track Safety Officers are too:**

- Maintain track at all times in accordance with these regulations, including any variations as work orders by State Track Inspectors.
- Ensure that all work orders / logbook reports have been remedied before the next race meeting.
- Liaise with State Track Safety Inspector.

- Check communications – two way radios and Public address system are in proper working order.
- Check fire extinguishers for compliance.
- Check Track Lighting (if applicable) is in working order.
- Check all flags and Fire Extinguishers – condition and quantity.
- Check starting light for working order.
- To maintain compliance with W H & S regulations.

**3a. The Club Track Safety Officer or authorised representative must be present at the time of the annual track inspection by the Track Inspector.**

4. National Track Safety Committee

This committee will comprise of:

Chairperson – National Track Coordinator

Members - State Track Inspectors.

The committee will meet annually for training/regulatory updates

Where an exemption to the existing regulations or a ruling is required, it is the duty of the Track Safety Committee to make such ruling or exemption in writing to the Board of Australian Karting Association Limited.

5. Critical Incident Procedure. (Any competitor/Pit Crew that is transported to hospital)
- a. The Chief Steward of the meeting shall contact the State Track Inspector immediately after the incident.
  - b. The State Track Inspector will inform the National Track Coordinator of the incident.
  - c. The incident will be investigated with a view to Track Safety and compliance. This investigation can be by either meeting or telephone hook up.
  - d. The results of this investigation will be forwarded to the Board of Australian karting Association.

## 6. Event Classification/Inspection.

CIK/National. Final inspection 1 month prior.

State Open/Closed. Final inspection 1 month prior

Promoted Series Events. Final inspection 1 month prior  
(Recommended)

Titled Events. As requested by State Karting Council.  
(Recommended)

Open/Closed Club Events. Annually.

## 7. Inspection Policy

### 7a. New /Altered tracks

The inspection policy for new and altered tracks is to be in accordance with the National Circuit Construction and Safety Standards manual.

That extension or alterations to the racing surface must conform to the National Circuit Construction and Safety Standards manual.

### 7b. Existing tracks approved prior to 01 January, 2014.

Preamble:

The following are the regulations of the AKA for permanent bitumen and dirt surfaced Kart Tracks in Australia. These regulations must be complied with for existing circuit. The AKA Limited and the Track Safety Committee, reserve the right to vary these requirements at any time, with issues of safety being paramount. Other additional requirements as required by Local and State Governments and State Karting Councils may also be applied.

### State Track Safety Inspectors:

State Track Safety Inspectors are responsible for ensuring compliance with the following regulations and must endorse the annual track permit for any given club.

The functions of Track Safety Inspectors are to;

- Make inspections annually prior to the existing track licence expiring.
- Make inspections at the request of the club through State Office.
- Make inspections if required, during a meeting (Only with approval of the State Track Inspector).
- Make recommendations to the Club on safety improvements in-line with Karting Australia guidelines.
- Communicate official information only to the respective club via their State Bodies (Rule A1).
- Prepare and sign the reports of the inspections and forward them to their respective state bodies or as may be appropriate.

### Club Track Safety Officers:

The functions of Club Track Safety Officers are to;

- Maintain track at all times in accordance with these regulations, including any variations as work orders by State Track Inspectors.
- Ensure that all work orders / logbook reports have been remedied before the next race meeting.
- Liaise with State Track Safety Inspector through State Office.

### DEFINITIONS:

#### Catch Traps:

An area of loose material designed to slow a kart, which has left the track surface, before it impacts a safety barrier or fence.

#### Circuits:

The area and all features, bounded by and including the perimeter safety fence and grids.

#### Complex:

The race complex in its entirety, including track, paddock, grids, buildings, spectators areas and vehicle parking.

#### Corner:

A change in direction of the track, in excess of 20 degrees, generally with a radius to the inside and outside edges.



**Kerb:**

A raised concrete barrier on the inside edge of a track corner, constructed to a specified profile, to deter karts from driving off the track.

**Paddock:**

An area set aside for the use by competitors for kart maintenance, repair and storage during the course of an event. Clubs may put in place access exclusions to the paddock for vehicles and the general public.

**Parc Ferme:**

A secure area adjacent the track and under the control of Officials. The general public is prohibited to enter this area and procedures may be put in place to restrict access by competitors and other persons.

**Ripple Strip:**

A profiled concrete strip on the outside edge of a track corner, constructed to a specified profile, to deter karts from driving off the track.

**Run-off Area:**

The area from the edge of the track to the first line of protection.

**Safety Barrier:**

An energy-absorbing barrier designed to protect a kart and driver from hitting a solid object or official.

**Safety Catch Fence:**

A fence structure used to safely restrain the forward movement of a kart that has left the track. It is of a higher standard than a safety fence.

**Safety Fence:**

A structure erected as a final defence to safety restrain the forward movement of a kart that has left the track. A circuit will have a safety fence for its full perimeter.

**Security Fence:**

A fence constructed to prevent the access of all persons to a secure area.

**Spectator Fence:**

A low profile fence constructed to restrict the access of all persons to a specified area.

**Start Grid:**

An area set aside from the paddock and track for the assembly of karts in race order prior to the start of a race. Access restrictions may apply.

**Straight:**

The section of track between two corners.

**Track:**

A permanent or temporary course being a surface normally defined by a single edge line, kerbs and ripple strips at each side of the course used for karting competitions.

**Stands and Temporary Structures:**

All spectator stands, viewing platforms and like structures whether of a temporary or permanent nature, must be approved by the appropriate statutory or regulatory body(ies) charged with the responsibility of approving such structures and thereafter be maintained and repaired so that such structures, at all times, remain in full and strict compliance with the approval conditions as they exist from time to time.

**Weigh-In-Area:**

An area set aside from the paddock and track for the assembly of karts at the end of a race prior to being weighed. Access restrictions shall apply.

TRAC 1.01      Refer to national Circuit Construction and Safety Manual.

TRAC 1.02      Refer to national Circuit Construction and Safety Manual.

TRAC 1.03 Track Density/Maximum Number of Starters:

Track Length (Metres)	Track width at narrowest		
	6m	7m	8m
<500	20	22	24
500 - 625	22	24	26
626 - 750	24	26	28
751 - 875	28	30	32
876 - 1000	32	34	36
> 1000	NA	38	40

Upon application to the State Track Inspector a Club may apply for an increase of a maximum of 4 karts to the density of their existing track. This will be approved on the basis that the out grid capacity and Ingrid capacity match the track density.

TRAC 1.04      Circuit Grading Criteria:

GRADE	EVENT STATUS	CRITERIA
International	CIK/FIA International Events	Refer CIK/FIA Homologation Regulations
A	National Sprint Championships	Circuits to be a minimum length of 750 metres and a minimum width of 7 meters. Refer also to National Championships Organisers Manual.
B	State Open Sprint Championships (Bitumen)	Circuits to be a minimum length of 500 metres and a minimum width of 7 metres.
C	State Closed Sprint Titles (Bitumen)	Circuits to be a minimum length of 500 metres and a minimum width of 7 metres.
D	National and State Dirt Track Championships	Circuits to be a minimum length of 350 metres and a minimum width of 7 metres.
E	Any Open or Closed (non-championship) Race Meetings	Circuits to be a minimum length of 300 metres and a minimum width of 6 metres.

## TRAC 1.05 Track Dimensions:

### 1. Length

The maximum length of any sprint track will be 1.7km (except as approved by NKC). The line around a track used for determining its length will be the centre line.

### 2. Straight

The length of a straight will be measured from tangent points of the proceeding and following corners.

### 3. Start Straight

- (a) All new tracks are to have a minimum distance of 50m from the start line to the start of the first corner and be a minimum length of 80m.
- (b) The first corner must be as “open” as possible and a minimum width of 7m.

### 4. Track Width

- (a) All new track straights over 80m in length are to be minimum width of eight (8) metres; elsewhere the minimum width will be 7 metres.
- (b) For all existing tracks, all straights over 80m in length are to be minimum width of 7 metres; elsewhere the minimum width will be 6 metres.
- (c) Track widths will be measured over the sealed bitumen surface, excluding any kerbs or ripple strips.

### 5. Separation

- (a) The distance between high speed converging sections of track shall be a minimum of ten (10) metres, between track edges, on all new tracks and major alterations, unless the National Safety Committee approves a suitable alternative.
- (b) All other sections of the track shall have a minimum of ten (10) metres separation, apart from the area around the internal radius of any corner.

### 6. Track Gradient

The recommended maximum longitudinal gradient will be 5% and recommended maximum transverse gradient will be 10%.

## 7. Vertical Clearance

There shall be no permanent or temporary objects within 2.4 metres vertically above the surface.

### TRAC 1.06 Safety Features:

#### 1. Surface

(a) The surface of Bitumen tracks will be sealed with Bitumen/concrete.

The surface of Dirt tracks may be Dirt/concrete/bitumen.

(b) The surface must be smooth and continuous and have sufficient fall to prevent formation of puddles in wet conditions (a minimum of 2.5% being recommended).

(c) Where practical, the track surface levels should follow the natural contours. Verges should be graded level with the track for a minimum distance of 5 metres from the track edge.

(d) Both edges of the track surface will be defined with a 100mm wide white line.

#### 2. No Mans Land

(a) All tracks are to have a “no mans land” marked on the track immediately before the starting line.

(b) The marking will be located in the centre of the starting straight, a minimum of 200mm and a maximum of 800mm in width.

(c) The length of the markings will be as required by the State Track Inspector but will be a minimum of 25 metres from the start line.

#### 3. Bulk Line

All tracks are to have a bright green coloured line painted across the ougrid lane a minimum of 5 metres back from the circuit edge (or appropriate to suit local conditions with approval of State Track Inspector).

#### 4. Acceleration Line

All tracks will have a yellow line painted on the track, at 90 degrees to the track edge, 60 metres (or appropriate to suit local conditions with approval of State Track Inspector) prior to the start lights and /or Starting Point.

5. Start Line

A white line painted across the track at 90 degrees to the track edge, which may also be the finish line.
6. Finish Line

A white line painted across the track at 90 degrees to the track edge.
7. Breakdown Lane
  - (a) Where a mechanical breakdown lane is provided it shall be adjacent to the main track.
  - (b) There must be a chicane at the entry to the deceleration lane aimed at substantially reducing the speed of the karts entering the breakdown lane.
  - (c) The sealed width of the deceleration lane must be a minimum of 1.5 metres and a maximum of 2.5 metres.
  - (d) The sealed width of the stopping area of the breakdown lane must be a minimum of 3.0 metres and separate from the main track by a safety barrier.
8. Track edges, verges and run-off areas
  - (a) The track must be bordered all along its length on both sides by compact verges having an even surface.
  - (b) These verges must be free of debris or gravel and must normally be grass-covered over a minimum width of 1.0 metres
  - (c) The verges must be continuation of the transverse profile of the track, with no step between track edge and verge. Any horizontal transition must be very gradual and progressive.
  - (d) A run-off area is that section of ground between the verge and the first line of protection and unless otherwise specified must have the same basic characteristics as the verge, although it may be less stabilised. The run-off area must be graded to the verge. If there is a negative slope, this must not exceed 5% for a distance of 5 metres from the track edge; if there is a positive slope, this must not exceed 10% for a distance of 5 metres from the track edge, with a smooth transition from track to run-off are.
9. Corners

Kerbs must be laid on the inside of corners to prevent karts moving onto the inside verge of corners in normal racing.

## 10. Kerbs Outside

- (a) Are to be “a maximum” 500 mm wide.
- (b) The surface may be smooth or rippled.
- (c) They will be sloped at a negative angle to the plane of the track and a maximum of 5 degrees.

## 11. Kerbs Inside

- (a) Are to be a maximum of 500 mm wide.
- (b) Their surface must form a positive angle to the plane of the track being a minimum of 15 degrees and maximum of 20 degrees (equivalent to 80mm to 110mm rise measured at the kerb extremity, for a 300mm wide kerb).
- (c) As an approved alternative the current CIK/FIA kerb profile may be used.
- (d) It is recommended that the drainage slots be inserted in inside kerbs.
- (e) It is recommended that the face of the kerb be 25mm high reference the National Circuit Construction and Safety Standards Manual..
- (f) The adjacent verge will be finished level with the top of the kerb.

### TRAC 1.07 Locating Safety Structures:

The primary and optimal form of protection for karts is to ensure suitable run off distances are provided between the edge of the track and any solid object. In general the minimum distance to a fence or barrier will be five (5) metres (or appropriate to suit local conditions with approval of State Track Inspector).

- (a) Safety barriers and catch traps must be installed to prevent karts crossing in any area where two sections of track are close to each other and/or there is a possibility that karts may cross.
- (b) Solid objects should be removed from the track area where possible. If this is not possible, then suitable run off distance and protection is required. Any structure or solid object of any type must have safety barriers and catch traps to protect competitors.



## TRAC 1.08 Safety Structures:

### 1. Safety Barriers

Shall be designed to absorb the energy from impact with a kart and to rapidly decelerate an out of control kart with minimum damage to both kart and driver.

#### (a) Construction

##### (i) Tyre Barriers

Barriers constructed of similar **size automotive tyres** securely bound in vertical stacks and longitudinally in a manner that forms a flexible structure. The tyre wall shall be constructed so as curve away at the end of the barrier. Tyre barriers are constructed four tyres high by four bundles long, unless directed otherwise. With tyre barriers it is imperative that the tyres are bound together with strapping or synthetic rope (minimum 8mm rope) or bolted or TEK screwed. Washers will be used each side of the tyre wall. If TEK screws are used, a suitable “speed nut” must be fitted to the thread end. Bolt or screw threads shall not protrude from the outside face of the completed wall. The barriers are not attached to the ground so they can move freely when hit by a kart. Tyres must be in good condition and no external metal strapping is permitted.

##### (ii) Plastic Barrels

Plastic barrels may be used as a safety barrier around the track perimeter. **They cannot be used at flag points.** They may be used in other locations at the discretion of the State Track Inspector. The barrels must be parallel-sided plastic with minimum size of 600mm diameter x 900mm high. The barrels will have holes drilled in their bases to drain water. The barrels must be bolted together at the top and bottom, in-groups of five barrels. The barrels on the end of each group of five barrels must be filled with a maximum of 100mm of crushed stone as ballast. Each group of five barrels must be tied to the adjoining group with synthetic rope, minimum 8mm UV protected. They shall only be used in an upright position.

- (iii) Alternatives – Safety barriers may be constructed of approved alternate material provided they meet the same performance criteria as listed above.
- (iv) Commercial – Current alternative commercial barriers approved are; -Air fence kart inflatables -Air fence kart
- (v) Separation – Safety barriers must be separated by a minimum of 300mm from any solid object or other safety structure.
- (vi) Facings may be used to supply continuous belting face to safety barriers in the areas of frequent impact. Minimum height to be 500mm, minimum thickness 5mm.
- (vii) Fixings
  - Rope shall be durable synthetic of a minimum 8mm diameter UV protected.
  - TEK screws will be a minimum of 4mm diameter with 25mm diameter washers each side of the fixing.
  - Bolts will be a minimum of 4mm diameter with 25mm diameter washer each side of the fixing.
  - Facings to be secured with minimum 6mm dome headed bolt with washers and nuts internally only, to be fixed on every second tyre row top and bottom.
- (b) Locations
  - Safety barriers may be used in the following locations.
  - (i) For separation between sections of track.
  - (ii) In high speed run-off areas, as a line of defence before a safety fence.
  - (iii) For the protection of all trackside Officials posts including flag points, a double tyre barrier at right angles to the track will be constructed a minimum of four (4) tyres long by four (4) tyres high with a minimum height of 720mm with a 300mm separation all tyres to

be bolted together as per 18.09.1(a)(i). Traffic side of tyre barrier to be painted different colour from all other tyres.

- (iv) Where possible, safety barriers are to be a minimum of five (5) metres from the edge of the track and have verge and catch trap protection prior (or appropriate to suit local conditions with approval of State Track Inspector).

## 2. Catch Traps

Catch traps are an area of loose material designed to slow a kart, which has left the track surface, before it impacts a safety barrier or fence.

### (a) Construction

- (i) Catch traps will consist of a bed of woodchips a minimum of 2 metres wide by 300mm deep at the leading edge, the leading edge to be kept as near level with the track surface as possible. The height of the woodchip bed must remain constant throughout the width and length of the bed. The woodchip will be raked regularly to maintain a loose consistency.

OR

- (ii) A bed of gravel a minimum of two metres wide by 250mm deep set down 250 mm into the existing surface level so as to produce a level leading edge (In total 500mm deep). The stone to be used shall be either round river stone or clean crushed stone of a single size 5 – 10mm. On a regular basis, the surface of the trap is to be deeply raked up into ridges approximately 100mm deep and 200mm apart, along the direction of racing. A correct prepared gravel trap should be difficult to walk on.
- (iii) If either material is not available, then a locally available suitable non-compactable material may be used as approved by State Track Inspector in consultation.

- (iv) In high-speed run-off areas the width of the trap will be increased to 4 metres.
- (v) The catch trap must be graded to the verge or track surface. If there is a negative slope, this must not exceed 5% for a distance of 5 metres from the track edge; if there is a positive slope, this must not exceed 10% for a distance of 5 metres from the track edge, with a smooth transition from track to run-off area.
- (b) Locations
  - (i) In front of fences in high-speed areas.
  - (ii) In all areas where deemed necessary by the State Track Inspector.

### 3. Safety Catch Fence

A catch fence is a last line of restraint in critical areas where a kart may otherwise be projected over a safety fence or crossing to another section of track. It will normally only be used on existing circuits. On new circuits and alterations to existing circuits, it is preferable to provide adequate run-off areas rather than to rely upon barriers to control karts.

- (a) Construction
  - (i) A 50mm square x 2.5mm diameter chain wire fence with steel rails, or a heavy wire or cable along the top, and a heavy wire or cable along the bottom. Fencing shall be installed to manufactures recommendations.
  - (ii) A minimum height of 1.8 metres.
- (b) Location
  - (i) A catch fence will normally be located in high speed run-off areas.
  - (ii) A catch fence will be located at the maximum distance possible from the outside edge of the track.

Internal safety catch fences to be removed.

#### 4. Safety Fence

A safety fence is used to control the access of spectators and unauthorised persons into dangerous or controlled areas. All circuits will have a safety fence for the full perimeter of the track. Gates may be provided but these must be able to be locked. Gates must only swing inwards.

##### (a) Construction

- (i) As a minimum a safety fence will be 1.15 metres high above the adjacent ground levels. It will be constructed from heavy galvanised wire with a 2.5mm high tensile tensioned top wire and a lower panel of 6/90/30 hinge joint fencing from 2.5mm wire. Fencing shall be installed to manufactures recommendations
- (ii) The maximum spacing of posts will be three metres with corner braces and strainers as recommended by the manufacturer. Minimum post specification will be 75mm diameter CCA treated timber or 50mm NB galvanised steel posts and must be capped.
- (iii) The wire mesh must be installed on the trackside of any supporting posts.

##### (b) Location

- (i) A safety fence will be located a minimum of 5 metres from the outside edge of the track.

#### 5. Spectator Fence

A spectator fence is used to control the access of spectators and unauthorised persons into dangerous or controlled areas and to maintain a separation from safety or catch fence at all tracks.

##### (a) Construction

A spectator fence must be a minimum of 6/90/30 hinge joint fencing with 2.5mm wire, support posts at a maximum spacing of three metres, or must be a minimum of five (5) 2.5mm wire strands evenly spaced over the entire height, support posts at a maximum spacing of 3 metres. It will have a minimum height of 0.9 metres. A spectator fence is to have warning signs at 10m spacing's stating, "KEEP OUT \_ PROHIBILTED AREA".

(b) Location

In all areas where spectators are allowed, a spectator fence will be installed, set back a minimum of 0.8 metres and a maximum 1.8 metres from any safety fence or safety catch fence.

6. Security Fence

At State or National events a fence erected to define and maintain a secure area such as parc ferme. It may be permanent or temporary. The fence will normally be 1.8 to 2.4 metres high chain wire supported on posts.

TRAC 1.09 Fire Extinguishers:

1. Fire Extinguishers are to be located at the following positions.
  - (a) At the weigh in scales and at least four other accessible points in the paddock area for meetings with up to 200 entrants plus one additional extinguisher for each 100 (or part thereof) entrants. For National Championships, fire extinguishers are to be located at the scales, start grid and four accessible points in the paddock area.
  - (b) At any fuel dispensing area (must have the appropriate approved fuel spillage kit), if in use.
  - (c) At any fuel testing area (must have the appropriate approved fuel spillage kit), if in use.
  - (d) At all flag points.
2. Fire extinguishers to be of a type suitable for flammable liquid fire and be non-hazardous to humans. Minimum 2.5kg and must have current certification tag.
3. Notices for fire extinguishers, 1000mm by 600mm, with lettering a minimum height of 180mm, are to be located with the bottom of the sign 2.5metres and a maximum of 3.5metres above the ground at all locations in the parc ferme/paddock area, exceptions being the scale area and the fuel dispensing and testing areas and these areas must have suitable signs displayed.
4. Entrants may be required to supply an approved filled fire extinguisher in their paddock space, but the presence of such extinguisher shall not relieve the organisers of the obligation to supply adequate fire fighting equipment for the circuit as a whole.

## TRAC 1.10 Track Lighting:

### 1. Start Grid and Weigh Area

Must be such that no shadows are cast, which may be a danger to competitors and pit crews whilst starting or retrieving karts

### 2. Paddock

Must be adequate enough for competitors and pit crew to move around the paddock without endangering themselves by objects hidden in shadows.

### 3. Track

(a) No point of the track surface will measure less than 15 Lux.

(b) Track lighting is to be measured at ground level on the centre line of the track.

(c) No section of track surface will have its intensity of lighting vary by more than 20% over a 5 metre distance.

(d) No lighting source shall cause glare to drivers or officials.

(e) All new track lighting must be designed by a qualified person.

### 4. Emergency Track Lighting

Tracks will have emergency lighting. The emergency lighting will have an alternate source of power supply to that which powers the main track lighting. The emergency lighting will be permanently on during racing, The minimum number of lights will be one (1) light for every two hundred metres of track. Positioning of the lights will be at the discretion of the State Track Inspector. Alternate power supply must comply to electrical authorities.

### 5. Control Lights (flashing Amber/Red/ Blue Lights)

The minimum requirements for lights shall be 150mm diameter incandescent or a minimum of 100 square centimeters of LED lighting mounted a maximum of 2 meters high. Blue and Amber lights shall be independently switched, red shall be full course. All lights shall be controlled from central point. All cabling must be either underground or around fence lines and must comply with relevant electrical codes. Position, construction and number positions of lights to be decided in consultation with State Track Inspector.

#### TRAC 1.11 Pit/Paddock Area:

- 1 The paddock must be clearly defined and fenced. Under most conditions the public are permitted in the paddock. All karts shall be accommodated within the paddock area. The paddock must be of sufficient area to cater for the maximum number of karts likely to attend a race meeting.
- 2 The paddock area surface is to be of a suitable material, graded and drained to maintain access during all weather conditions.
- 3 The access ways to paddock spaces are to be a minimum width of 3 metres.
- 4 A trade area is to be set aside, for exclusive use of Trade Vehicles that have prior arrangements with the Promoters.
- 5 The promoting club, in conjunction with the State Track Safety Inspector, will designate a safe area for the starting of kart engines. This area will be clearly marked and sign posted.
- 6 All circuits shall have a main notice board. This board is to have a map showing;
  - (a) emergency vehicle access routes
  - (b) fire extinguishers
  - (c) parc ferme boundary
  - (d) paddock boundary
  - (e) all track licence & Sport and Recreation licences
  - (f) kart engine starting area.
  - (g) evacuation plan & emergency phone numbers

The notice board will be located in close proximity to the Race Secretaries Office and will be used to display all official communications to competitors and race information. It is recommended that the notice board be lockable and protected from the weather.

#### TRAC 1.12 Start Grid and Weigh In:

The entrance and exit to and from the track must be clearly defined “OUT” on the start grid and “IN” on the weigh grid. “Covered Footwear” signs past this point.



The direction of racing and practice is to be displayed by an all-weather arrow sign, the location of the sign is to be determined by State Track Inspector.

#### 1. Start Grid Area

- (a) Must be large enough to accommodate the maximum number of starters permitted on the track.
- (b) The kart positions on the grid are to be clearly marked as per grid layout diagrams (i.e. Single/Double grid).
- (c) The grid surface is to be smooth bitumen sealed or concrete and well maintained.
- (d) The lane to the track must be fitted with a suitable gate of strength at least equivalent to the adjacent fence.
- (e) The sealed width of the lane to the track must be a minimum of 5m and the width between safety structures must be a minimum of 7.5metre.
- (f) The minimum grid surface width for a single grid is 7 metres.
- (g) The minimum grid surface width for a double grid is 12.5 metres.
- (h) As a minimum both sides of the start grid must be enclosed with a spectator fence spaced at a minimum of 7 metres to a maximum of 9 metres apart for a single grid and minimum of 12.5 metres to a maximum of 15 metres apart for a double grid.
- (i) referring to double grid dimensions, if the minimum of 1.6 metres cannot be achieved it shall be referred back to the relevant State authority for approval of safety modifications.

#### 2. Weigh In Area

- (a) The weigh in area must be fenced to prevent entry of unauthorised personnel. As a minimum a safety fence will be used in State and National events.
- (b) Scales are to be located at the end of the weigh in area away from the track.
- (c) The surface is to be bitumen sealed or concrete and to be of sufficient area to accommodate the maximum grid capacity. (allow 4.0 m<sup>2</sup> per kart)

- (d) Access to the weigh in area will be by way of a deceleration lane. The sealed width of the deceleration lane must be a minimum of 1.5 m and a maximum of 2.5 m with an overall clear width of 3.0 m.
- (e) The deceleration lane will include suitable bends or a tyre chicane 4 high by 4 long to slow the travel of karts. The weigh in area should be protected from an out of control kart by a catch trap or safety barrier.
- (f) An entry lane to the deceleration lane may be painted on the track.

**TRAC 1.13 Parc Ferme Area:**

The parc ferme may include the start grid area, the weigh in area and the weigh scales, an area for impounding karts for technical checking and any tyre or fuel impound area. The parc ferme must be clearly defined and fenced and under most conditions the public are not permitted in the parc ferme. Appropriate spectator or security fences will define the parc ferme areas. No smoking is permitted in this area and this direction must be clearly signposted.

**TRAC 1.14 Emergency Communication:**

A telephone must be provided at all circuits. A mobile phone will suffice where reception can be achieved. Where telephone reception is not available, radio contact with emergency authorities must be in place during competition, practice, come and try days and working bees.

**TRAC 1.15 First Aid Requirements:**

These vary from State to State but there must be clear access for an ambulance and suitable areas set aside for first aid facilities. It is recommended that a medical room be established for use by first aid personnel and for the treatment and recovery of injured persons in private. (refer Rule 3.25 of the AKA Manual.)

TRAC 1.16 Stewards Meeting Room:

- 1 All circuits will have an enclosed facility for conducting Stewards hearings. The room should be weatherproof and provided with power. Artificial lighting must be provided.
- 2 A board in the Stewards' room to have a map showing;
  - (a) fire extinguisher locations
  - (b) parc ferme boundary
  - (c) paddock boundary
  - (d) evacuation plan & emergency phone numbers
  - (e) kart engine starting area
  - (f) sensor device area
  - (g) track map

TRAC 1.17 Control Tower:

It is recommended that control towers be adequately covered, closed and ventilated with access by way of an approved permanent stairway. This area is to be considered out of bounds except for essential race day Officials or their delegated messengers.

TRAC 1.18 Fuel Testing Facilities:

All buildings, including portable structures such as shipping containers, which are used for the purpose of fuel testing, must have adequate Fresh Air Ventilation System (flow through or

TRAC 1.19 Technical Inspection Area:

- 1 Enclosed and covered facilities with adequate lighting and suitable benches are to be provided for Engine Measuring and Fuel Testing.
- 2 An adequate secured area for the impounding of karts, tyres, fuel, etc. is required for all State and National Championships and other events as required by the AKA.

TRAC 1.20 Tyre Inflation:

Complexes that have a facility for fitting and inflating tyres must provide a safety cage (approved) and sign instructing the use thereof. Maximum outlet pressure for fitting, inflating and cleaning is 4 bar or 58 psi and air equipment tested annually.

TRAC 1.21 Sensor Devices:

Pick up / sender / sensor devices are not permitted inside the circuit safety fence unless in an approved designated area.

TRAC 1.22 Amenities:

- 1 Toilet and canteen facilities are to comply with Local Council regulations.
- 2 The design and maintenance of all facilities should be such to ensure that the safety of spectators and competitors is paramount.
- 3 Paths and trafficable surfaces should be even and non-slip.
- 4 Electrical and communication wires should be under ground or strung on poles and any hazardous areas isolated.
- 5 All new tracks must have a toilet that is accessible for disabled persons.

TRAC 1.23 Parking:

- 1 All circuits must have a designated parking area for competitors, officials and spectators.
- 2 All circuits must have a designated area, outside the fenced-in-track area, for the storage of track maintenance equipment and the parking of service vehicles.
- 3 All circuits must have a designated area for parking an ambulance and pick up vehicle/s. This area must be positioned so as not to cause a hazard for competitors or officials. If necessary, a safety barrier must be constructed.

TRAC 1.24 Official Signage:

Refer to the Karting Australia Track Safety Manual for details of official safety signage to be displayed at race complexes.

Such signs should measure at least 1.8 metres x 1.2 metres in size and be a white background with the words **WARNING** in **LARGE BOLD LETTERS**, with the following words in **LARGE BLACK TEXT**.

1 Waivers

WARNING:- Go-Kart racing is dangerous.

Spectators are reminded that motor racing is dangerous and accidents can happen. All care is taken to protect the public, but spectators are warned there is a possibility of an accident causing injury, death or property damage. By entry into the racing circuit , the spectator acknowledges that there is a degree of danger, and the promoter, clubs, corporations, organisations and persons having any connection with the promoting, organising or conduct of the event shall have no liability to the spectator except where due care and skill has not been exercised.

2 Practice restrictions

3 Direction of practice / racing

(Refer to TRAC 1.12 of these regulations)

4 Fire Extinguishers

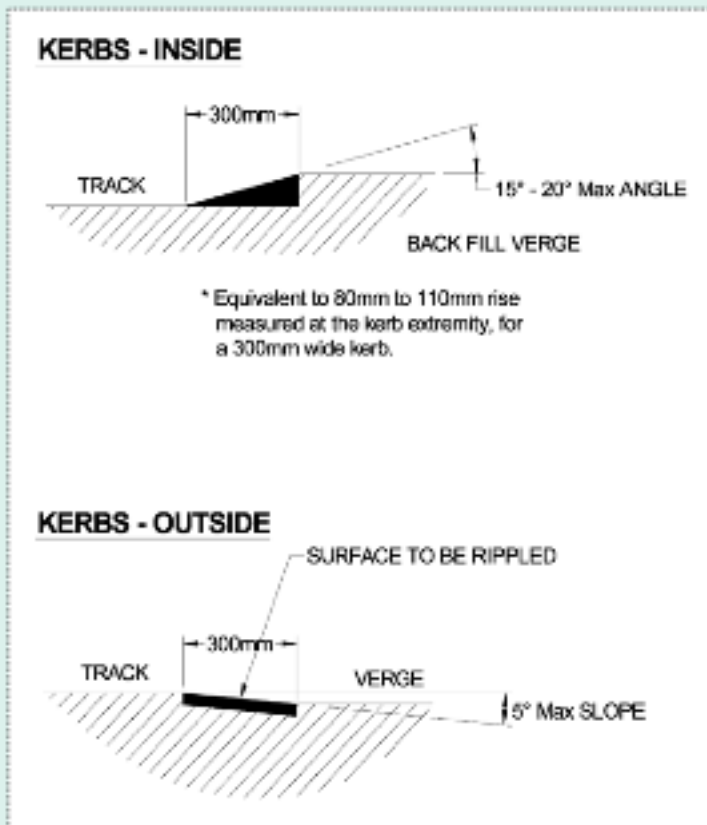
(Refer to TRAC 1.09 of these regulations)

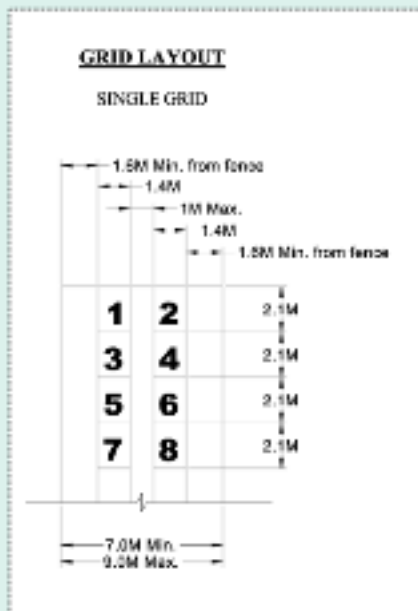
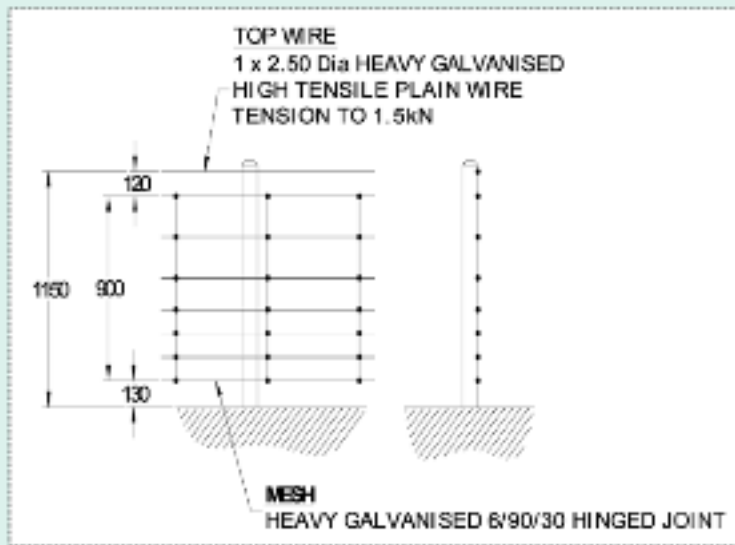
5 Requirement to sign Indemnity Form.

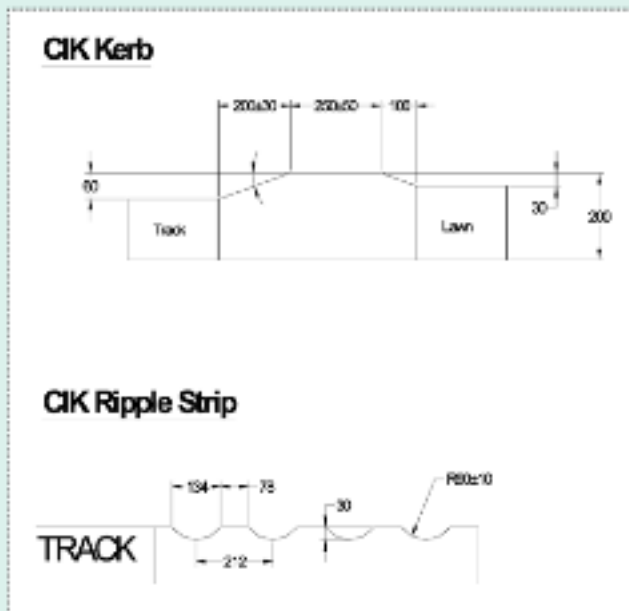
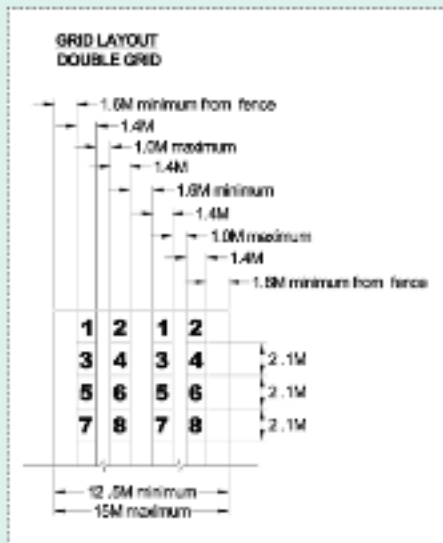
6 Recommendation covered footwear must be worn at all times (practice/race meeting) whilst in paddock area.

7. Enclosed Footwear must be worn on the outgrid/Ingrid at all times.

- (2) Practice restrictions
- (3) Direction of practice / racing  
(Refer rule 18.13)
- (4) Fire Extinguishers  
(Refer rule 18.10)
- (5) Requirement to sign Indemnity Form.
- (6) Tyre Fitting  
When fitting tyres a safety cage must be used.









## **SPEEDWAY**

### **1. TRACK LAYOUT**

Direction of racing **MUST** be anti-clockwise.

The track should be close as possible, be on level ground and must be an oval (formed by two straights joined by two semi-circles).

If there is banking on the track it must grow from the inner edge of the racing surfaced to the outer edge of the track.

### **2. PREPARATION AND MAINTENANCE**

The track should be properly watered in ample time prior to the meeting to ensure satisfactory racing and to protect the competitors and the public from excessive dust during the event.

To preserve the evenness of the track surface it should be graded as necessary between races.

### **3. TRACK MARKING**

The inside and outside edges of the track must be clearly defined.

If there is no safety fence on the outer edge of the track, it should have a substantial run off zone as to arrest the progress of racing vehicles.

Safety fences must be constructed in such a way that they do not allow for the possibility of any part of kart or competitor to be caught under or between the boards.

#### **3a. BAULK LINE**

All tracks to have a point marked no more than 40 metres from the starting area that will be the baulk line.

#### **3b. ACCELERATION LINE**

All tracks to have a point marked approximately 25 metres prior to the Start/Finish line, this point is the acceleration line.