

SIRA
MIDWEST
CHAMPIONSHIP
SERIES

Southern Indiana Racing Association

2009

RULE BOOK

Rev2

Preface

The contents of this rule book are the result of many hours of frustration, trial and error, and experience of many past and/or present Southern Indiana Racing Association (S.I.R.A.) members, Directors and Officers. The purpose of these rules is to promote safety in preserving our sport of go-kart racing, strong and fair competition, and administration of competition with fairness and impartiality. All competitors and their pit crews are required to be familiar with S.I.R.A. rules and policies as well as any unique Support Organization rules due to special circumstances at any S.I.R.A. event. The prime responsibility for the safe condition and operation of the karts rests with the driver/owner. The race Support Organizations of the race are to provide the program by which these two means are brought together. Safety is everyone's responsibility and must be shared by everyone in the sport of karting. This rule book is to provide a common denominator of standards to benefit all those concerned. For this reason, adherence to the rules and regulations set forth in this book is fundamental to the welfare of everyone in the sport of karting.

Particularly in reference to engine specifications, the World Karting Association's Technical Manual, as well as Rule books for Shifter Kart USA (SKUSA), TAG USA and Burris F-200, are sometimes mentioned in this rule book and by S.I.R.A. Officials. All engine specifications and legal modifications allowed in the S.I.R.A. Midwest Championship Series are per this S.I.R.A. Rule Book *ONLY*. WKA, SKUSA, TAG USA and Burris F-200 Tech Manuals are used for *REFERENCE ONLY* to provide common specifications for the karters' convenience. WKA, SKUSA, & TAG USA and have *NOT* sanctioned S.I.R.A. to use their names for any event or published technical specifications. No infringement on the part of S.I.R.A. upon any copyright is intended or should be inferred.

LIABILITY

Rules contained herein shall govern *ALL* S.I.R.A. events. Participation in these events means *ALL* entrants have understood these rules and shall abide by them *AND* any further decisions, rulings, etc., made by S.I.R.A. Officials (Officers and members of the Board of Directors).

NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM THE PUBLICATION OF OR COMPLIANCE WITH THESE RULES AND REGULATIONS. THESE RULES ARE IN NO WAY A GUARANTEE AGAINST INJURY OR DEATH BY THE PARTICIPANTS, SPECTATORS OR OTHERS AT ANY SOUTHERN INDIANA RACING ASSOCIATION-SANCTIONED EVENT. BY COMPLETING THE OFFICIAL ENTRY FORM FOR ANY S.I.R.A. EVENT, AN ENTRANT AND/OR DRIVER ELECTS TO COMPETE AT HIS/HER OWN RISK AND THEREBY RELEASES AND FOREVER DISCHARGES THE SOUTHERN INDIANA RACING ASSOCIATION, HEIRS, ASSIGNS, OFFICERS, REPRESENTATIVES, AGENTS, EMPLOYEES AND ANY/ALL MEMBERS FROM ANY/ALL LIABILITY FROM ANY/ALL CLAIMS OF SAID INJURIES TO PARTIES LISTED ABOVE GROWING OUT OF, RESULTING FROM THE EVENT CONTEMPLATED UNDER THE ENTRY FORM OR CAUSED BY ANY CONSTRUCTION OF CONDITIONS OR THE COURSE.

TABLE OF CONTENTS

Section I: Spirit and Intent/Terms/Events	4
Section II: Eligibility	5
Section III: Rules of Conduct	8
Section IV: Pit Rules	11
Section V: Safety	13
Section VI: Scoring	15
Section VII: Championship Points	18
Section VIII: General Kart Specifications.....	20
Section IX: Flags.....	26
Section X: Race Procedures	29
Section XI: Engines/Classes/Tech.....	34
Section XII: Officials	48
Section XII: Forms	51

Section I: Spirit and Intent/Terms/Events

A. SPIRIT AND INTENT

Guidelines offered in this rule book and/or subsequent Southern Indiana Racing Association (S.I.R.A.) bulletins are subject to the term “Spirit and Intent” in reference to all aspects of S.I.R.A. racing. *ALL* participants (drivers, crew members, sponsors, etc.) will adhere to the “Spirit and Intent” of these guidelines in *ALL* actions regarding S.I.R.A. racing. These guidelines are offered and enforced to ensure fair, equitable and safe competition. No “reading-between-the-lines” should be inferred from these guidelines and S.I.R.A. Officials *WILL NOT* become bogged down with internal litigation over legality or illegality of a particular issue.

“Spirit and Intent” clauses allow S.I.R.A. Officials to make decisions for the “good of the club” and resolve disputes regarding *ALL* issues as Officials deem necessary. As such, those decisions will supersede/add to/modify various aspects of this rule book. Competitors will be allowed a forum to voice disputes and disagreements but in *ALL* cases, S.I.R.A. Officials (club Officers and members of the Board of Directors) will have the *FINAL* say.

Any item not directly specified in this rule book (henceforth known as “the gray area”) is thus *ILLEGAL* unless and until directly approved by S.I.R.A. Officials.

B. NEW RULES AND CLASS FORMULATION

1. Rule/class changes or new classes can only be instigated at the annual membership meeting.
2. Final decisions are subject to the approval of the Board of Directors.

C. DEFINITIONS OF TERMS

1. A *RULE CHANGE* is defined as anything affecting a participant’s competitiveness in such a way:
 - a. They would have no class in which to participate.
 - b. They would be non-competitive with their current karting equipment.
 - c. They would have to make a substantial change in their karting equipment.
2. A *POLICY CHANGE* is defined as anything that may affect a rule, but not in such a way as to make anyone non-competitive or require a participant to change their equipment substantially to race competitively and legally. A policy *CAN* and *MAY* be put into effect *IMMEDIATELY*.

D. EVENTS

1. S.I.R.A. events generally consist of one (1) ten (10) lap or five (5) minute Heat Race and one (1) fifteen (15) minute or twenty-five (25) lap main event. The timed or lap count distance is based on track size and will be announced at the drivers meeting. (Kid Karts are on a track to track basis).
2. Race officials reserve the right to change the distance of any and all events due to time, safety and/or any other constraints.

Section II: Eligibility

A. ELIGIBILITY

1. Only Southern Indiana Racing Association (S.I.R.A.) members (annual or temporary) may compete in S.I.R.A.-sanctioned events.
2. A non-member is granted a temporary (one-event) license through an extra non-member entry fee premium.
3. To receive points in a particular SIRA Midwest Championship Series class, a driver *MUST* be a S.I.R.A. member *AND* have designated that class on his/her membership application as well as fulfill all technical (includes tire regulations) and race requirements. [See **Sections VI.** and **VII.** for more information.]
4. Male and female drivers are allowed in all classes.

B. LIABILITY WAIVERS

1. All drivers entering an S.I.R.A. race circuit must sign and execute insurance-related documents and liability waiver(s) as prescribed for that event.
2. Failure to sign subjects individual to disqualification and/or suspension of membership privileges.

C. MINOR'S LIABILITY WAIVER AND PROOF OF AGE

1. All minors must sign a Release of Liability form as well as have a parent/legal guardian's signature before competing in an S.I.R.A.-sanctioned event.
2. The legal age of consent for S.I.R.A. is 18 years old.
3. Anyone under the age of 18 years will be considered a *MINOR* by S.I.R.A. standards. A minor's entry is not considered valid unless a parent has signed it.
4. Kid Kart, Junior Sportsman I (formerly Junior Novice) and Junior Sportsman II / 2- and 4-Cycle (formerly Junior 2- and 4-Cycle) drivers are required to bring their original Birth Certificate (with a Notary Seal) to their first race to verify age.

D. LIABILITY INSURANCE

1. All properly-endorsed members (annual and temporary) have the full benefits available to them through the S.I.R.A. liability insurance program.

E. MEDICAL INSURANCE

1. A \$10,000.00 medical insurance policy (\$100.00 deductible) applies to all properly-registered drivers.
 2. This is a secondary medical policy *ONLY*; it will be used *ONLY* if your insurance limits have been exhausted or you have no medical insurance.

F. COMPETITION AGE

1. A driver's competition age shall be determined by his/her age as of Jan. 1 of that racing season. This primarily applies to Junior classes but may apply to Senior-level classes as well.
2. If a driver's age changes during the racing season, he/she may move (up) to another class by declaring so. Once advanced, a driver cannot regress. Championship points *CANNOT* be transferred.
3. A Junior class driver *MAY NOT* move up to a Senior-level class in the last two (2) races of any season unless such a move is approved by the Board of Directors.

G. BAD CHECKS

1. Any participant passing a bad check to S.I.R.A. or any of its Support Organizations must have it paid in full with acceptable fees before being able to compete.

H. PREGNANT WOMEN

1. Pregnant women *MAY NOT* compete in any capacity.

J. INJURED DRIVERS

1. Drivers with a cast or obvious injury must present a doctor's certificate for Board of Directors approval before being allowed to compete. Injured drivers without a certificate cannot race.

K. APPEARANCE

1. All S.I.R.A. event participants shall present a neat, clean and orderly appearance at all times.

L. DRIVING ABILITY

1. S.I.R.A. officials have the option of removing *ANYONE* from practice or competition who does not demonstrate proper driving ability.

M. OFFICIAL ENTRY

1. The driver and kart shall be the entry, not the owner of the chassis.
2. All points or awards are the property of the driver of record.

N. PRE-ENTRY REGISTRATION

1. For single-day events, pre-entries *MUST* be received by the Official S.I.R.A. Registrar by the Friday prior to Sunday's event. For two-day events, pre-entries will be accepted through Saturdays practice. Race day entries will grid behind pre-entries.
2. Race-day registration (with drivers starting behind pre-entries) closes at 10:00 AM. Late entries may be considered following transponder assignments but the driver *MUST* report to the transponder table, grid and scoring areas to have their late entry information recorded.

3. If an event mandates special circumstances, other pre-entry conditions and deadlines may be announced. These special conditions and deadlines will be announced in sufficient time *PRIOR* to the race event. These special conditions and deadlines will supersede Paragraph 1 and Paragraph 2 above.

P. PROMOTIONAL RIGHTS

1. S.I.R.A. and event organizers/sponsors generally promote race events in a variety of media, including (but not limited to) print (newspapers, posters, etc.), radio and television.
2. Participants assign all commercial communication and broadcast rights to S.I.R.A. and declare S.I.R.A. as their lawful agent and representative regarding such rights.
3. Participants agree S.I.R.A. or its assigns, on a non-exclusive basis, may use their name and pictures taken at any sanctioned event for publicity purposes.

Section III: Rules of Conduct

A. CONDUCT

1. All participants shall conduct themselves in an orderly manner.
2. Physical violence or abuse of *ANY* individual (Race Official, Director, participant and/or spectator) at an Southern Indiana Racing Association (S.I.R.A.) event may subject the offender to immediate ejection from the event site and possible suspension of membership status.
3. *ANY* action detrimental to S.I.R.A. and/or karting in general may result in a participant's disqualification, immediate ejection from the event site and/or possible suspension of membership status.

B. VERBAL ABUSE

1. Verbal abuse or threats directed towards *ANY* individual at an S.I.R.A. event may subject the offender to immediate ejection from the event site and possible suspension of membership status.

C. FIGHTING

1. Any participant instigating, provoking and/or participating in a fight may be suspended for two (2) races by Board of Directors consent and subject to probation for the rest of the year.
2. A full year's suspension may be accessed upon a second offense.

D. RESPONSIBILITY

1. Drivers will be responsible for the conduct of their crews *AT ALL TIMES*. Any offense committed by a crew member will be chargeable *DIRECTLY* to the driver or entrant. This is especially true during the running of the race when the kart owner (and/or driver) is away from the pit area. A crew member is defined as someone who is connected to, helping with, interested in and/or generally associated with the kart, driver and/or team.
2. This responsibility also extends to conduct in the event's local area, including motels, hotels, restaurants and track facilities.

E. PROHIBITED SUBSTANCES

1. All participants at an S.I.R.A. event shall be sober and/or not under the influence of any substance impairing their ability to participate in a safe and orderly manner.
2. It is the participant's responsibility to withdraw from competition if taking medication(s) impairing his/her ability to safely compete.
3. In the judgment of any Race/S.I.R.A. Official, any individual under the influence of alcohol or any controlled substance may be ejected from the event site immediately.
4. All local laws concerning the use of alcohol or controlled substances apply before, during and/or after any S.I.R.A. race event.

F. PIT CREWS

1. A crew member is defined as someone who is connected to, helping with, interested in and/or generally associated with the kart, driver and/or team.
2. Unacceptable actions of *ANY* crew member may subject the *DRIVER* to penalty and/or disqualification from an event and/or suspension of membership privileges.

G. SCORING

1. No participant or crew-member may approach the scoring area at any time unless directed to do so by a S.I.R.A. official. Any questions about scoring must be addressed to an S.I.R.A. official (President, Vice-President or Director). **EXCEPT FLAGMAN & SCORING**
2. Race results will be announced as quickly as possible after each race is completed. Results will be posted on a board in or around the trophy area. *DO NOT* go to the scoring area to find out how you finished.
3. Scoring protests must be written by the involved competitor in that class and filed with an S.I.R.A. official within 20 minutes of the completion of the event or posting of results in cases of disputed finishes. *DO NOT* go to the registration or scoring area to file your protest. Protests by crew members or other classes' competitors will not be accepted.
4. It is the driver's responsibility to ensure the scoring transponder is securely mounted on the kart before entering the track for practice, qualifying and/or race.
5. If the transponder is lost or damaged, it is the driver's responsibility to pay the replacement cost of \$240.00 to S.I.R.A.
6. Rental transponder *MUST* be removed from the kart at the scale area and handed to the Scale Official after practice, qualifying or the race. Failure to return the transponder will result in disqualification.

***VIOLATION OF ABOVE RULES 1,2,3 WILL RESULT IN A DISQUALIFICATION**

H. PROPER DRIVING TECHNIQUES

1. The spirit and intent of proper driving techniques in competition is to compete on the track without touching or endangering the vehicle of fellow participants.
2. Inadvertent contact is a reality of racing.
3. If, in the judgment of presiding officials, a participant is bumping, crowding, chopping, blocking and/or pushing other participants in an intentional manner, that participant may be subject to on track penalties, post-race penalties, immediate event disqualification and/or suspension at the discretion of the Board of Directors. **ROUGH DRIVING, THE PARTICIPANT WILL BE STOPPED AND/OR SUBJECT TO SUSPENSION. A WAIVED OR OPEN BLACK FLAG IS AN AUTOMATIC DQ.**

J. LAPPED KARTS

1. Participants about to be lapped by faster competitors are responsible for being aware of the approaching faster karts and must yield the racing line until faster karts have passed.
2. Lapped karts will observe the layover flag (blue with orange stripe) or be subject to disqualification.

K. VIOLATING PROBATION

1. Participants on probation found violating any rules will be suspended immediately.
2. Any further problem(s) will result in membership revocation.

L. REVIEW BOARD

1. Any participant previously suspended or having his/her membership revoked will have future membership subject to review by the Board of Directors.

M. PARTICIPATING PRIVILEGE

1. Officials reserve the right to prevent *ANY* individual from participating in any S.I.R.A. event for *ANY* reason.

Section IV: Pit Rules

A. PIT AREA/SIZE/CONTENTS

1. Southern Indiana Racing Association (S.I.R.A.) and/or Race Officials will designate a pit area for all competitors.
2. Size of pit areas at S.I.R.A. Midwest Championship Series events varies from event to event.
3. It may be necessary to unload/move trucks, vans, cars and/or trailers to prevent congestion at some events. It is recommended vehicles always be parked in an orderly and compact manner.
4. The number of persons in each kart's pit area may be regulated.
5. All decisions in this manner are left to the discretion of Race/S.I.R.A Officials.

SESSION OF REGULATIONS

1. Each pit area and/or driver shall have a copy and thorough knowledge of this rule book.

C. FUEL/LUBRICANTS

1. No fuel, lubricants or other hazardous substances may be disposed of in the restricted pit area, except in containers specifically designated for such purpose. Failure to comply will subject individual(s) to disqualification of points and awards that race day.
2. *NO* carcinogens of any kind are allowed in fuel or lubricants. Banned substances for all 2-cycle classes include, but are not limited to, alcohol, aldehydes, aminodiphenyl, benzene (in excess of EPA limits), Benzedrine, beryllium compounds, bromine compounds, butadiene, chlorinated compounds, chromates, dioxanes, ethyl acrylate, ethylene oxide, hydrazine compounds, nlethylene dianiline, naphthylarnine, nitrogen compounds (nitro methane, nitro propane, etc.), styrene, toluidine and zyiidine. Additional substances deemed to exceed the Threshold Limit Value for human exposure as listed by the American Conference of Governmental Industrial Hygienists are also illegal. Banned substances for all 4-cycle classes include, but are not limited to, any crankcase lubricant(s) containing an oxygen-bearing, vapor-producing and/or combustible substance.
3. Testing *WILL* be performed at *ALL* sanctioned events (before, during and/or after) by direction of any S.I.R.A. Official or Tech Inspector. For more information on S.I.R.A. testing procedures, please see **Section XI**. – *Engines/Classes/Tech*, pages 40-41. Carcinogens of any kind found during testing will result in a competitor's *IMMEDIATE* disqualification from the event and possible club suspension, as decided upon by the Board of Directors.

E. TRASH DISPOSAL

1. Any entrant who litters in the pit area may be disqualified from any awards or points that race day.

2. It is the responsibility of the entrant to maintain his/her pit area in a neat and orderly fashion.

F. DRIVING IN THE PIT AREA

1. Any driver who drives or allows his/her kart to be driven in the pit area will be assessed a one-lap penalty in all class races for that day. This includes driving the kart *PAST* the scale area.

2. A driver may test his/her clutch RPM lock-up point (accelerating from a dead stop until clutch fully engages at a specific engine RPM) but *MUST* do so in a safe manner and in as short a distance as possible in designated areas only. *ANY* unsafe action will be considered grounds for a one-lap penalty.

3. Pedal-driven or motorized vehicles (bicycles, scooters, mopeds, golf karts, roller blades, skateboards, etc.) *MAY NOT* be used in the pit area for obvious safety reasons. Only S.I.R.A. and/or Race Officials are allowed to use these vehicles. This will result in a one lap penalty.

G. ENGINE STARTING

1. No kart engine may be started before the published time in the race entry form.

Section V: Safety

A. ACCIDENTS

1. Karts involved in any accident may be required to stop for an inspection by Race and/or Southern Indiana Racing Association (S.I.R.A.) Officials.

B. ACCIDENT REPORT

1. Drivers involved in an accident of any nature requiring ambulatory care must be reported to the S.I.R.A. President as soon as possible.
2. Individuals, nature of injuries and injuring events must be described in this report.

C. EMERGENCY EQUIPMENT

1. An ambulance and/or certified EMT *MUST* be present before any track action (racing or practice) will be allowed.
2. If an ambulance and/or EMT has to leave during the day, all racing will cease until it returns or until other arrangements can be made.
3. Each entrant should have a first-aid kit in their pit area.

D. FIRE EXTINGUISHER

1. Each entrant should have at least one fire extinguisher in their pit area or at the starting grid.

E. PROTECTIVE BARRIERS

1. No person shall be on the track side of any barrier during practice or racing.
2. Any signaling shall be done from the pit side of hay-bales or other barriers.

F. PROTECTIVE CLOTHING/HELMETS

1. All drivers *MUST* wear a heavy vinyl or leather jacket, driving suit specifically designed and applicable for kart racing or equivalent approved by the S.I.R.A. Board of Directors.
2. No shorts of any kind will be allowed during practice or racing.
3. Shoes and gloves are mandatory.
4. All protective clothing is required for inspection at the pre-race safety tech inspection.
5. Neck-braces are mandatory.
6. Chest protection (SFI chest protector) is mandatory for all drivers 12 years and younger. Rib protection is strongly recommended for those older than 12 years, but not mandatory.
7. Crash helmets of approved design and specifically manufactured for racing will be required for all racing and practice. These helmets must meet SNELL 2000 requirements, at minimum. The outside helmet structure must provide full ear protection. All helmets must be properly fastened; drivers will be black-flagged to correct the situation. All helmets must be a full-faced helmet.

G. EAR PLUGS

1. Ear plugs for drivers and crew are recommended.

H. LONG HAIR

1. Drivers with long hair are required to secure their hair and place it under the jacket or helmet. This ensures the hair won't get entangled in the components of the kart during practice or racing.

J. ON TRACK DRIVER/KART SAFETY

1. During any on-track event (practice, qualifying or race), a driver may be forced to stop on the racing surface/course and cannot drive the kart to a track's safe shoulder or non-racing surface.
 - a. If possible, the driver should safely exit the kart and, from a safe location, warn on-coming drivers of his/her disabled kart.
 - b. If it is not possible to safely exit the kart, the driver should remain in the disabled kart and wave both arms above his/her head to signal any Corner Workers and on-coming karts of disabled condition/location.
2. Once all karts are safely past the disabled kart, the disabled kart may be restarted to rejoin the event.
3. If a disabled kart cannot rejoin the on-track event, the kart *MUST* be placed in a secured and safe off racing surface location.
4. A disabled kart *MUST* not hold up the event restart in *ANY* way. *ANY* failure to quickly restart the disabled kart or secure the kart in a safe, off-track location will result in disciplinary action and/or disqualification. Officials reserve the right to inspect the previously-disabled kart to ensure the kart meets all safety regulations or refuse to allow the kart to rejoin the on-track event.

Section VI: Scoring

A. SCORING MANAGER

1. The Southern Indiana Racing Association (S.I.R.A.) Scoring Manager is designated by the S.I.R.A. President.
2. This individual will operate the S.I.R.A. electronic scoring system at all racing events and keep accurate records of the SIRA Midwest Championship Series driver points.

B. TIMING AND SCORING

1. S.I.R.A. utilizes the AMB electronic timing and scoring system at all events.
2. Competitors may use an S.I.R.A.-assigned AMB transponder or their own AMB transponder.
3. If a competitor is using an S.I.R.A.-assigned transponder:
 - a. Competitor *MUST* pick up transponder at a designated Transponder Distribution Table *PRIOR* to his/her event.
 - b. Competitor *MUST* return transponder to the Transponder Runner immediately *AFTER* his/her event. Transponder Runner usually asks for the transponders while the competitors are waiting in line for the post-race weigh-in.
 - c. Failure to pick up and mount transponder to kart will result in the competitor being credited with zero (0) laps in the event, regardless of the competitor's actual performance and finish. No Exceptions.
 - d. Failure to return transponder will result in the competitor's disqualification from the race event. As well, the competitor must reimburse S.I.R.A. for the transponder replacement cost (approximately \$240). This includes lost transponders due to accident or faulty mounting.
4. If a competitor is using their own transponder:
 - a. Transponder must be of AMB manufacture or AMB compatible.
 - b. Transponder must be in good working order and sufficiently charged.
 - c. Transponder frequency must be provided to S.I.R.A. Scoring Manager prior to his/her race event.
5. Transponder must be securely mounted in a fixed position to kart in approved locations *ONLY*:
 - a. On left or right-side nerf bar immediately *BEHIND* front wheels.
 - b. On left or right-side side pod/body panel *BEHIND* front wheels.
 - c. Secured with pin/clip in approved transponder holder. Holders are available from S.I.R.A. Scoring Manager for a small fee.
 - d. Mounted perpendicular to the track ("UP" position) for maximum signal range.
 - e. If the transponder is mounted in an inadequate position, is lost or battery dies during race, the driver will receive last place points.
6. Scoring loop on track receives transponder signal and relays it to the scoring computer.
 - a. Loop designates official finish line.
 - b. Loop is either taped down to track or buried in narrow groove in track.

- c. The Head Flagman generally is located at the official finish line. If not, his location relative to the official finish line will be announced at the drivers' meeting prior to the event.
 - d. Dragging body components can damage the scoring loop, if the loop is above ground. If a competitor's kart is found to be dragging and catching the loop, that competitor may and will be black flagged. If the body component can be fixed, competitor will be allowed to return to the event.
7. Occasionally, manual line scoring will be performed due to loop or scoring system issues. AMB results *ALWAYS* take precedence over manual results unless ruled otherwise by S.I.R.A. Officials.

C. RACE RESULTS

1. Race results will be announced as quickly as possible after each race is completed. Results will be posted on a board in or around the trophy area. *DO NOT* go to the scoring area to find out how you finished.
2. Finish positions are based on the number of completed laps of each entrant and the running order at the checkered flag. If entrants have a similar number of laps, the running order at the finish determines the final finishing order.
3. In case of a red flag condition, the event restart line-up will be determined by the running order of the previously-scored complete lap. For example, if the red flag is displayed midway through lap 14, the running order on lap 13 will be used for the restart (with the exception of the involved karts, who will be placed on the tail). If the event is called official, the same lap 13 line-up will be used for the finishing results.
4. A race may be called official if a red flag is displayed past the halfway mark *OR* the designated time limit of the race is reached. The finish order will be determined by the running order of the previously-scored complete lap with karts involved in the red-flag-caused accident placed on the tail of their respective lap (in case of the red flag).
5. Penalties and/or disqualifications may be assessed during or after a race event is complete. In cases of penalties, the penalized kart(s) will be grouped with similar lapped karts with the last-lap running order determining the final finishing position. Failure to scale following the completion of a race or failing technical inspection will result in disqualification. Except injury requiring medical attention.

D. SCORING PROTEST

1. An entrant has the right to protest the scoring results if there is a valid doubt about the announced results.
2. Scoring protests *MUST* be written by the involved competitor in that class and filed with an S.I.R.A. Official (President, Vice-President or Director) within 20 minutes of the completion of the event. *DO NOT* go to the registration or scoring area to file your protest. Protests by crew members or other classes' competitors will not be accepted.
3. A standard protest form is available at the scales. This form *MUST* be filled out to enable the Board of Directors to have all required information needed to make a decision.
4. An S.I.R.A. Official may approach the scoring area to assist in determining correct results. Approach the scoring area *ONLY* if you are asked to by an S.I.R.A. Official.

5. If the correct results cannot be determined before the race day is over, the awards will be held until scoring back-up can be checked. Awards will be distributed at the following race location in the schedule.

E. AWARDS

1. Awards are to be distributed only after 20-minute protest period has elapsed and *ALL* competitors have completed/passed technical inspection.
2. All awards must be signed for when they are picked up.

F. KART NUMBERS

1. Number panels should feature a large, easy-to-read, two-digit number against a contrasting color background (e.g., a black number on a white number panel).
2. Three-digit numbers or letters are *NOT* permitted.
3. Number panels are required in four (4) locations (this is not a disqualifying infraction):
 - a. Nose or steering fairing.
 - b. Both (left *AND* right) side-panels/pods.
 - c. Behind the seat *OR* number-panel mounted securely to rear bumper.
4. Numbers are assigned per class.
5. Number 18 is retired and not available.
6. S.I.R.A. members may retain the same number throughout the racing season.
7. Numbers 1-10 are restricted for the previous year's finishers (in that order) for that class.
8. If numbers 1-10 are not taken, that number or numbers will be available to other S.I.R.A. members in the following order:
 - a. First choice – Highest top ten finisher in that class.
 - b. Second choice – All other members in order of membership sign-up for the current year.

G. WITHDRAWN DUE TO INJURY

1. If a driver is injured (requiring medical attention) in practice and cannot race, he/she may have the entry fee (less insurance cost) returned.

Section VII: Championship Points

A. FINISH/POINTS

1. Finishing position is announced when scoring has been reviewed and accepted by Southern Indiana Racing Association (S.I.R.A.) Officials. Finishing positions will only become official following any and all technical inspections and protests.
2. S.I.R.A. Midwest Championship Series class championships shall be determined by the total counted points awarded in all S.I.R.A. races.

B. POINTS

1. Points are awarded to the driver, not the kart or kart owner.
2. Points are awarded only to S.I.R.A. members signed up for a designated class. Points may be accrued in a class *ONLY* after that class is so designated and dated on the involved driver's membership application. Only points accrued *FOLLOWING* this date will be accepted for this class' final championship standings. A driver must also meet *ALL* tire requirements for accruing points. [See **NOTE** below.]
3. Points are based upon the member's actual finishing position, regardless if the individuals finishing ahead of the involved member are S.I.R.A. members (*AND* signed up to receive points in that class) or not.
4. Points, once earned in a given class, cannot be transferred. If cancellations occur at the beginning of the season and a competitor decides to change classes, he/she may do so providing no races have been run. This is the only exception of point transferral.
5. Points are awarded based on the following finishing positions:

<i>Position</i>	<i>Points</i>	<i>Position</i>	<i>Points</i>	<i>Position</i>	<i>Points</i>
1st	37	6th	22	11th	12
2nd	32	7th	20	12th	10
3rd	28	8th	18	13th	8
4th	26	9th	16	14th	6
5th	24	10th	14	15th	on back 4

NOTE: In order to accumulate points toward the SIRA Midwest Championship Series championship, an entrant *MUST* run four (4) specified club tires on the kart in the race. Tire size and compounds are listed for each class in Section XI under Classes.

C. AWARDS

1. Race-day awards can be trophies, plaques, jackets, helmets bags or any other appropriate item approved by S.I.R.A. Officials.

D. YEAR-END AWARDS

1. End-of-the-year SIRA Midwest Championship Series championship awards for S.I.R.A. members will be distributed at the annual Awards Banquet following the conclusion of the racing season.
2. A member *MUST* have competed in a minimum number of events (75% of the season total) in order to be eligible for year-end awards.
3. Trophies and other awards will be distributed one for every three karts declaring points provided they have met all eligibility requirements.
4. Trophies or plaques may be distributed to other competitors (from sixth place on) at the discretion of S.I.R.A. Officials. This distribution may be based on the total number of season entries in a particular class, total number of points-earning drivers and/or other factors.

E. POINTS DETERMINATION

1. From year to year, S.I.R.A. chooses to delete some number of races in points accumulation in determining total championship points.
2. For year 2009, **NO** dropped events will be allowed.
3. Members who start *EVERY* scheduled race of the season will receive ten (10) bonus points to their championship points total.

F. TIE SITUATION

1. If there is a tie in points at the end of the year, the dropped race will be added back to the drivers' totals to break the tie.
2. If there is still a tie, the drivers' best finish or finishes will be used to break the tie.
3. If there is still a tie, the Board of Directors will rule as the tie-breaker.

Section VIII: General Kart Specifications

A. FRAME AND OVERALL DIMENSIONS

1. Besides compliance with the spirit and intent of the rules, overall quality of workmanship will be considered in the acceptance of a kart presented for competition in the Southern Indiana Racing Association (S.I.R.A.).
2. A driver shall fit *ENTIRELY* within the specified width and length dimensions of the kart when normally positioned for racing competition.
3. May be of “offset” or “straight-up” design.
4. Frame specifications:
 - a. Have a proven safe design. Main frame rails shall be constructed of nominally round tubing, allowing for normal distortion and elongation near bends radii.
 - b. Minimum diameter for main frames rails is 1.0"/25.4 mm; maximum diameter of 1.40"/35.6 mm.
 - c. Minimum tubing wall thickness must be 0.078"/2.0 mm (for 1.0"/25.4 mm diameter) or 0.060"/1.5 mm (for 1.125"/28.6 mm diameter or greater).
 - d. Frame material shall be, at minimum, cold-rolled electric weld (ERW) steel tubing or other material of at least equal strength.
 - e. Floor pan *MUST* prevent any portion of driver's body to contact the racing track surface.
5. Minimum and maximum widths/lengths:
 - a. Wheelbase:
 - i. Standard kart – maximum of 43.0"/1092.2 mm; minimum 40.0"/1016 mm.
 - ii. Cadet kart – maximum 38.0"/965.2 mm; minimum 35.0"/889 mm.
 - iii. Kid kart – maximum 31.0"/787.4 mm; minimum 29.0"/736.6 mm.
 - iv. Wheelbase is measured longitudinally between the true axle centers.
 - b. Tread width:
 - i. Minimum 28.0"/711.2 mm as measured from outside of the one tire to inside of opposite tire laterally.
 - c. Overall width:
 - i. Maximum of 55.125"/1400.2 mm for all classes. Maximum width includes side pods.
 - d. Overall length:
 - i. Standard kart – 74.0"/1879.6 mm (maximum).
 - ii. Cadet kart – 69.0"/1752.6 mm (maximum).
 - iii. Overall length includes nose piece.
 - e. Overall height:
 - i. Standard kart – maximum of 26.0"/660.4 mm.
 - ii. Kid kart – maximum of or 20.0"/508 mm.
 - iii. Maximum height includes steering fairing.
6. Any kart, dry and fully-equipped including single engine, *MUST* weight a minimum of 85 pounds (excludes kid karts).
7. All non-structural ballast weights added to meet *MINIMUM* kart/driver weight requirements must be bolted securely to the kart frame or seat.

- a. Minimum 0.25"/6.4 mm diameter bolts must be utilized to secure weights. All bolts must be cotter-keyed or doubled-nutted.
 - b. Weights *MAY NOT* be mounted to nerf bars.
 - c. No added weight allowed on driver.
 - d. All weights **MUST** be painted a bright color (such as white) and contain the kart number.
8. All drivers are subject to a minimum combined kart/driver weight check prior to events *AND* mandatory post-race weight check. Points will be awarded to only those satisfactorily completing post-race weight check.
- NOTE:** If a weight, body component or other kart component falls off a kart during an event, it cannot be re-mounted for the post-race weigh-in. For example, if a ten-pound weight comes off during the race, the kart must still meet the class minimum weight at the post-race weigh-in *WITHOUT* the weight. Failure to meet the minimum weight or attempting to include the dismantled item at the post-race weigh-in will result in the competitor's disqualification from the race event.
9. Use of suspension components of any type (including springs, shocks, etc.) is prohibited.

B. BUMPERS AND NERF BARS

1. Front bumper specifications:
 - a. *MUST* be constructed of minimum 0.75"/19.1 mm diameter steel tubing.
 - b. Top of upper "hoop" *MUST* be a minimum of 7.75"/196.9 mm above the ground with the kart in race-ready condition.
 - c. Upper hoop *MUST* be supported in at least two (2) places by 0.75"/19.1 mm or larger tubing uprights. Uprights *MUST* be within 0.5"/12.7 mm vertically when measured 3.0"/76.2 mm down from the top of the upper hoop.
 - d. Bumper *MUST* be supported by two (2) vertical upright tubes.
2. Pedal mounting points *MAY* be incorporated into the front bumper provided bumper is:
 - a. Welded to frame.
 - b. Through-bolted to frame.
 - c. Bolted then pinned with safety wire or cotter keys.
3. Rear bumper specifications:
 - a. Constructed of 0.75"/19.1 mm diameter steel tubing.
 - b. Maximum height of 7.50"/190.5 mm with kart in race-ready condition.
 - c. No wider than outside edge of rear tires.
 - d. No less than lateral width of main frame rails.
4. Nerf bar specifications:
 - a. Constructed of minimum 0.75"/19.1 mm diameter steel tubing.
 - b. No longer than 24.0"/609.6 mm (standard kart) or 19.0"/482.6 mm (cadet kart). Measurement is from back side of nerf bar closest to the rear tire in a straight line to point of attachment to the frame in the front.
 - c. Double-high bars are *MANDATORY* when CIK-style side pods are *NOT* utilized. Double-high bars are *MANDATORY* on *ALL* Kid Karts.
 - d. Weights *MAY NOT* be mounted to nerf bars.

C. BODY COMPONENTS

1. All bodywork will be neat in appearance and securely mounted to the kart chassis. *ALL* mountings *MUST* be cotter-keyed, safety wired, lock-nutted or double-nutted.
2. CIK-approved, Euro-style body panels are legal, provided they are securely mounted on the kart chassis. These panels may include a nose, side-pods and steering fairing.
3. American-style full-nose and enclosed side panels are legal, provided they are securely mounted on the kart chassis.
4. Any combination of American-style full-nose and CIK-approved side pods are permitted.
5. Wings and/or spoilers *ARE* permitted, provided they are securely mounted to the kart chassis *AND* pass S.I.R.A. safety inspection.
6. Bodywork cannot protrude more than 1.0"/25.4 mm wider than outside of each tire, per side. This does not apply to wet (rain tire) set-ups.
7. *ALL* body parts, mountings and/or aerodynamic panels are subject to S.I.R.A. Tech approval.
8. Number panels are required in four (4) locations (not a disqualifying infraction):
 - a. Nose or steering fairing, visible when viewed directly in front of the kart.
 - b. Both (left *AND* right) side-pods.
 - c. Behind the seat *OR* number-panel mounted securely to rear bumper, visible when viewed directly from behind the kart.
9. Number panels should feature a large, easy-to-read, two-digit number against a contrasting color background (e.g., a black number on a white number panel). Three-digit numbers or letters are *NOT* permitted. Numbers will be assigned by S.I.R.A. Scoring and Registration officials.

D. AXLES AND HUBS

1. Wheel hubs *MUST* be constructed of metallic materials.
2. Ground-ball or roller-type wheel bearings only. Split race bearings are *NOT* acceptable. Wheel bearings must be adjusted so there is no excessive wheel play.
3. Front axle nuts *MUST* be safety wired, cotter-keyed or snap-ringed. Self-clamping wheels may utilize snap-rings instead of nuts. Berry clips or cir-clip-type safety fasteners are allowed in place of safety wire or cotter keys, where applicable. The use of castle-type nuts is strongly recommended.
4. Rear axle may be solid or tubular of one-piece design.
 - i. Minimum diameter – 1.0"/25.4 mm.
 - ii. Maximum diameter – 1.576"/40 mm (4-cycle classes); 1.97"/50 mm (2-cycle classes).
 - iii. Both driving wheels must be locked to the rear axle with a “live” axle design.
5. Front spindle and rear axle may not protrude beyond outside of rim and tire.
6. Except in rain setup, tires may be 1” inside bodywork.

E. STEERING

1. General:
 - a. Must be direct, mechanical type.

- b. All steering assembly bolts and nuts, including spindle bolts, must be cotter-keyed, safety wired, berry clipped, and/or cir-clipped.
 - c. All bolts will be minimum 14,000-pound tensile strength, 0.25"/6.4 mm diameter and at least Grade 5 or US Mark 3 rating.
 - d. All rods ends must have universal-type swivel joints.
2. Specifications:
- a. Solid shaft – Minimum 0.625"/15.9 mm diameter cold-rolled steel, one-piece design. Steering wheel attachment must be secured with quality nut or cap screw in an axial position with the centerline of the shaft. Welding the steering wheel to the hub or the hub to the upper shaft is *NOT* allowed. No shaft extensions are permitted.
 - b. Hollow shaft – Minimum 0.700"/17.8 mm diameter steel tubing, one-piece design, with minimum 0.070"/1.8 mm wall thickness with minimum 0.25"/6.4 mm diameter fastener at end. Steering hub (one-piece, not welded) will be secured through the axis with a 0.25"/6.4 mm diameter bolt parallel to the axis point.
 - c. Tiller/vertical shaft steering systems are *NOT* allowed. Rack and pinion systems are *NOT* allowed.

F. BRAKES

1. General:
- a. All karts must have working brakes which, at minimum, brake both rear wheels equally and adequately. Four-wheel brakes *ARE* permitted.
 - b. All bolts and nuts must be cotter-pinned, safety-wired, berry clipped, and/or cir-clipped in such a way to prevent the nut from moving.
 - c. Brake pedal must be secured to the kart with safety wire or cotter keys.
 - d. No scrub or band-type brakes are permitted.
 - e. Master cylinder actuating rod or cable must be 0.25"/6.4 mm diameter steel or equal quality cable, with positive fasteners at each end.
2. All master cylinder/caliper mounting bolts and master cylinder roll pins are to be cotter-keyed, safety wired, berry clipped and/or cir-clipped in such a manner they cannot be loosened without removal of the cotter-keys/safety wire/cir-clip. Nylock-style nuts used to hold the brake disc or drum to their hubs are *PROHIBITED*. The use of steel locking nuts or drilled bolts with castellated nuts, properly pinned, is the only acceptable fastener for discs or drums.
3. Since most competition karts have brake pads secured by countersunk bolts, safety wiring is not feasible. Karters should monitor proper tightness and use appropriate thread locking substance (such as Loctite) to prevent loss or loosening.
4. Hydraulic brake connections must be tight and free of any visible leaks. All brake lines should be safely routed to prevent any rubbing or pulling loose while kart is in motion.

G. DRIVELINE COMPONENTS

- 1. Clutches are mandatory in all classes except where otherwise specified. May be of “wet” or “dry” design.
- 2. Wet clutches are allowed only when the unit is sealed to prevent fluid leakage.

3. Karts with outboard clutch mounting must have guard to contain clutch (third bearing) in case engine crankshaft breaks. Clutch mounted between engine and seat does not require third bearings or guard.
4. All chain, belt or gear-driven karts must be equipped with a chain, belt or gear guard designed to retain a broken chain, belt or gear. Outboard drive systems will be allowed only if the chain and sprockets are completely enclosed from front, rear, top and outside.
5. Chain-oiling systems *ARE* permitted but shall flow no more than four (4) ounces of oil per 14-minute time period.

H. WHEELS AND TIRES

1. Tires must be pneumatic, designed for racing application only. Maximum diameter of 10.375"/263.49mm; minimum diameter 9.0"/228.6mm. Tires must be available to general market at least 60 days prior to use in any sanctioned event.

NOTE: In order to accumulate points toward the SIRA Midwest Championship Series championship, an entrant *MUST* run four (4) specified club tires on the kart in the race. Tire size and compounds for each class are listed in Section XI under Classes.

2. Rain tires may be of *ANY* brand but *MUST* be designed for wet competition.
3. Recapped tires *ARE* allowed in all classes.
4. In cases of adverse weather, S.I.R.A. Officials will mandate the type of tire (slick or rain) to be utilized by competitors. In some intermediate situations (track is dry in places and slightly wet in others), S.I.R.A. Officials will make the tire type optional (up to the competitors to decide on an individual basis).
5. Wheel material is optional, but must be of proven design capable of maintaining tire bead seal in competitive conditions.
6. Clip-on or double-back tape wheel balancing weights are not to exceed 0.25 ounce weight each. Additional security is strongly suggested when utilizing stick-on weights (such as duct tape over weight).
7. Tire cleaning with a heat gun in the pit area is permitted. Waste rubber must be properly disposed of.
8. *NO* Chemical treatment of tires is permitted at the race track.

J. FUEL SYSTEM

1. Fuel tanks *MUST* be constructed of puncture-resistant material with a secure, leak-proof fill closure.
2. Fuel lines must be safety-wrapped at all connecting points. Excessive fuel line *IS NOT* allowed.
3. Fuel line must be nylon-strapped to carburetor and fuel tank inlet.
4. *NO* pressurized fuel systems are permitted.

K. DATA ACQUISITION SYSTEMS

1. A variety of commercially-available data acquisition systems are allowed in S.I.R.A. competition.
2. Sensors *MAY* be mounted anywhere on kart provided they don't protrude outside of the kart body, are securely mounted and pose no safety threat to the driver or competitor.

3. Any system(s) capable of modifying ignition timing, air or fuel ratio mixtures, traction control, throttle position, or providing instant track-to-pit/two-way information transfer/communication with the kart in motion is not permitted.

L. SEATS

1. Must securely locate driver laterally and longitudinally.
2. Seat must be of one-piece or molded construction with no added-on sections.
3. Seat must be securely bolted to frame (non-adjustable during competition) and provide adequate ground clearance.
4. *NO* portion of the seat may be located behind the rear axle (when viewed from above).

M. MISCELLANEOUS

1. *ALL* karts must be equipped with at least one (1) positive-acting throttle-return spring.
2. Seat belts or other driver restraints are *PROHIBITED*. Helmet straps for head support (straps connecting helmet to left or right shoulder of driver) *ARE* permitted.
3. Rear-view mirrors are permitted, provided they are securely mounted and do not pose a safety hazard to competitors.
4. *NO* type of radio communication device may be utilized. This rule is waived for the Kid Kart class.
5. Bumper and nerf bar/side pods rules may be waived by S.I.R.A. Officials in rain conditions (rain tires utilized instead of slicks).

N. KID KART SPECIFIC

1. Kart *MUST* be equipped with two (2) positive-acting throttle-return springs.
 - a. One spring to be located on the carburetor.
 - b. Second spring to be located on foot pedal.
2. Seat *MUST* be a minimum of 12.0"/304.8 mm high.
3. Steering height may be a maximum of 20.0"/508 mm high.
4. Chain guard *MUST COMPLETELY* cover chain, as viewed from above.
5. *ONLY* 219 chain, 10-tooth clutch driver and 89-tooth axle gear may be utilized at *ALL* tracks, regardless of track size.
6. *NO* offset karts allowed. Seat *MAY NOT* be offset beyond outside edge of left frame rail.
7. Any brand of tire/compound may be used. Tires must be 4.50 x 5 or 4.60 x 5 (front) and 5.50 x 5 (rear). Maximum rear tire circumference of 33.75"/857.3 mm.
8. Rear bumper must be continuous loop shaped with vertical and angular bracing connecting upper and lower loop rails. Bumper *MUST* protect rear tires.
9. Tread width of kart may be:
 - a. Front – Maximum 40.0"/1016.0 mm; no minimum.
 - b. Rear – Maximum 42.0"/1066.8 mm; 39.0"/990.6 mm minimum.
1. Measurement is to outside of rim/tire.

Section IX: Flags

A. GREEN

1. Shown at the start of practice/race when the track is clear. The green flag is displayed at the beginning of all races by the Southern Indiana Racing Association (S.I.R.A.) head flagman.
2. Green flag(s) may also be displayed in some/all turns by designated corner workers.
3. Karts “jumping” the start of an event (leaving the grid in the case of a Gran Prix start or accelerating prior to the dropping of the green flag on a rolling start) will be penalized one (1) lap.
4. In Gran Prix-style starts, the S.I.R.A. head flagman will raise the green flag to the vertical position, indicating 30 seconds to start. At 15 seconds, the flag will be lowered to the midway or horizontal position. At 0 seconds, the flagman has the option of waving the green flag at any following time, indicating the race start.

B. YELLOW

1. Indicates a potentially-dangerous situation (stalled kart, accident, hay-bale out of place or other obstruction) on the track.
2. When displayed in a particular corner, all karts *MUST* slow down with the driver raising one hand. *NO PASSING IS ALLOWED* in that corner from the point of the flag to the incident site. Once clear of the incident site, a kart may resume racing speed.
3. This flag may also be displayed at the start of a practice session, indicating less-than-optimum track conditions; karts must reduce speed in the session until the green flag is displayed.
4. In the case of oval or small sprint road courses, a full-course yellow may be in effect if the flag is displayed by the S.I.R.A. head flagman. *NO PASSING IS ALLOWED* anywhere on the course at this time. Any karts involved in the incident necessitating the yellow flag will restart at the tail of the field.
5. Passing or disregarding the yellow flag will result in a one-lap penalty. Multiple offenses will result in disqualification.

C. RED

1. Indicates a dangerous situation at some point on the track.
2. Each driver *MUST IMMEDIATELY* reduce his/her speed and return to the starting grid at a “crawling” pace.
3. Karts may *NOT* return to the pit area but may be worked on in the grid area. This does not apply to Kid Kart and Junior Sportsman I classes.
EXCEPTION: No fuel may be added or kart frame changed during red flag session.
4. All karts involved in the incident necessitating the red flag will restart at the tail of the field. The event restart line-up will be determined by the running order of the previously-scored complete lap. For example, if the red flag is displayed midway through lap 14, the running order on lap 13 will be used for the restart (with the exception of the involved karts, who will be placed on the tail).

5. The S.I.R.A. head flagman will determine when a red-flag session is over and the race may be restarted. No extra time will be allotted for repairs at that time and all karts will be re-gridded in the restart order. Any kart not sufficiently repaired at that time must be removed to the pit area and withdrawn from the race.
6. If a red flag is shown anytime past the half-way mark of any race, S.I.R.A. Officials may call the race as complete. The finish order will be determined by the running order of the previously-scored complete lap (with involved karts placed on the tail of their respective lap).
7. The red flag will stop the clock.
8. Restarts will be standing starts.

D. BLUE OR BLUE WITH ORANGE STRIPE

1. Indicates a faster competitor is about to lap you.
2. A driver shown the “layover” flag *MUST* make room for the faster kart (in some cases, moving out of the racing groove) and point to the side (left or right) for the faster competitor to use in the pass.

In some cases, multiple karts may be about to lap you; in this case, the S.I.R.A. head flagman will try to indicate how many karts are about to lap you.

3. Drivers *ARE NOT* to take advantage of this flag to pass a fellow competitor. For example, if two or more karts are being lapped, the second lapped kart may not pass the first lapped kart who has moved out of the racing groove for the faster competitor. Besides being poor sportsmanship, any driver disobeying this rule will be assessed a one-lap penalty and subject to possible disqualification

E. BLACK AND YELLOW

1. Indicates an equipment violation.
2. If displayed for you, you must exit the track to the grid area to execute the necessary repairs to the kart. A driver may re-enter the race once the necessary repair has been completed.

F. GREEN AND WHITE FLAGS CROSSED

1. Indicates the race is one-half complete.

G. ROLLED BLACK

1. Indicates your driving actions are bordering on disqualification.
2. Any further similar action on your part will be cause for disqualification (display of the black flag unfurled). [See **Item H.** below]

H. FULL BLACK

1. Indicates you are disqualified; proceed to the pit area at a safe speed and in an orderly manner.
2. Drivers shown the black flag are immediately *DISQUALIFIED* from that event, receiving no trophies or SIRA Midwest Championship Series points.

3. Drivers may be disqualified for operating a kart in an unsafe condition, using poor driving technique or any other condition deemed not in compliance with or intent of S.I.R.A. Midwest Championship Series rules.

4. If any driver ignores the black flag for two consecutive race laps, that race will be stopped immediately.

Restarting the race or the awarding of trophies (based upon the previously-scored complete lap prior to the race stoppage) will be up to the discretion of the race officials.

J. WHITE

1. Indicates one lap remains in the race/practice session.

K. CHECKERED

1. Indicates the race or practice session is complete.

2. Proceed directly to the scales/pit area.

3. *DO NOT* take any extra laps, unless specifically instructed to do so by S.I.R.A. Officials.

Section X: Race Procedures

A. MANDATORY DRIVER'S MEETING

1. There is a *MANDATORY* drivers' meeting at *ALL* Southern Indiana Racing Association (S.I.R.A.) events.
2. During this meeting, the Race Director may establish special conditions and/or regulations for that event.
3. Failure to attend a mandatory drivers' meeting will waive the competitor's right of protest for that event and will result in the driver starting at the tail.
4. Adverse weather, safety or other conditions may necessitate S.I.R.A. Officials to mandate additional conditions and/or regulations at *ANY* time throughout the race day.
 - a. In all cases, these rulings will supersede/add to/modify any pronouncements made at the drivers' meeting.
 - b. In cases of adverse weather, S.I.R.A. Officials *MAY* mandate the type of tire (slick or rain) to be utilized by competitors. In some intermediate situations (track is dry in places and slightly wet in others), S.I.R.A. Officials will make the tire type optional (up to the competitors to decide on an individual basis).
 - c. In cases of adverse weather, S.I.R.A. Officials will grant competitors a specified amount of extra time to change tires and make other kart setup adjustments.

B. ON TRACK DRIVER/KART SAFETY

1. During any on-track event (practice, qualifying or race), a driver may be forced to stop on the racing surface/course and cannot drive the kart to a track's safe shoulder or non-racing surface.
 - a. If possible, the driver should safely exit the kart and, from a safe location, warn on-coming drivers of his/her disabled kart.
 - b. If it is not possible to safely exit the kart, the driver should remain in the disabled kart and wave both arms above his/her head to signal any Corner Workers and on-coming karts of disabled condition/location.
2. Once all karts are safely past the disabled kart, the disabled kart may be restarted to rejoin the event.
3. If a disabled kart cannot rejoin the on-track event, the kart *MUST* be placed in a secured and safe off racing surface location.
4. A disabled kart *MUST* not hold up the event restart in *ANY* way. *ANY* failure to quickly restart the disabled kart or secure the kart in a safe, off-track location will result in disciplinary action and/or disqualification. Officials reserve the right to inspect the previously-disabled kart to ensure the kart meets all safety regulations or refuse to allow the kart to rejoin the on-track event.

C. PRACTICE

1. The practice order will be as published on a practice rotation form, unless revised by Race or S.I.R.A. Officials. Normally, junior and senior drivers will not practice together.
2. Officials will give every class one practice session on race day.
3. Number of karts allowed on the track in any session will be determined by S.I.R.A. Officials.
4. No driver is allowed to practice out of group unless official permission is granted; this includes going out a second time within the same session (for example, if a class is split up due to a large number of entries). If caught practicing out of group/order, a driver will receive a verbal warning for the first infraction; starting at the rear of the race line-up or a one-lap penalty may be assessed upon further infractions.

D. ENTRY POSITIONS

1. Each pre-entered driver will declare which class they are drawing for and personally draw a ball from the hopper at registration to determine starting position. If two drivers in the same class draw the same number, the driver that drew the number second starts behind the driver that drew the number first. All race-day entrants will start in order of entry behind the pre-entered drivers.
2. Entrants are forbidden to sell positions or falsely register in any class.
3. If there is a driver substitution prior to the race start, the substitute driver *MUST* start at the back of the line-up. No driver substitutions (relief driver) may be made once an event has started.
4. All points are awarded to the driver starting the race.

E. MAXIMUM RACING ENTRIES

1. The maximum number of karts allowed in any class event shall be determined by S.I.R.A. officials.
2. Classes may be split if deemed necessary. The split class would be run according to grid positions drawn: The odd-numbered grid positions would be in the first race.

F. MINIMUM RACING ENTRIES

1. Any class with a low number of entries may be combined with another class.
2. Classes which do not maintain an average of 7.5 karts per event over the racing season may be subject to the class being discontinued for the following year. S.I.R.A. Officials will do their best to see a dropped class (engine, kart, etc.) is incorporated into another class so that an entrant's equipment will not be obsolete, but this may not always be possible.

G. STARTING GRID/EVENT START

1. Prior to the first race of the day, a starting grid will be marked off in an appropriate area near the scoring/finish line.
2. Each kart will line up by designated start position at the starting grid when the race class is announced. All entrants must answer the grid call within three (3) minutes.

3. The Head Flagman generally is located at the official finish line. If not, his location relative to the official finish line will be announced at the drivers' meeting prior to the event.
4. For Gran Prix (standing) starts, each kart will assume a 45-degree angle position to the grid line. No kart can be pushed, lifted or allowed to warm tires once the starting flag has become vertical; drivers cannot "push off" or reach back to "roll" rear tires at start. This is mainly for safety: To prevent a driver's hand, arm, uniform, strap, etc. from becoming entangled with any rear kart component. Any infraction of this sort will result in a one-lap penalty.
5. A race may be started as soon as the Head Flagman perceives the field to be in proper alignment, regardless of the type of start (rolling or Gran Prix).
6. To receive points, kart and driver must be in race trim and take the green flag.

H. CLASS ROTATION

1. Each class will rotate through the day's schedule as the season progresses.
2. Kid karts will not change in rotation.

J. RESTART

1. The S.I.R.A. head flagman has the option of restarting any race if two or more karts become entangled and/or disabled at the first turn.
2. If the race is restarted and there is another accident, there will be no additional restarts.
3. Any race red-flagged after halfway may be called official and not restarted.

K. RACE TIME LIMIT

1. Every event shall have a designated time limit, specified by S.I.R.A. Officials.
2. The time limit will vary from track to track and is based on track size, lap times and other factors.
3. At the start of each event, the official clock is started. This clock will continue to run even if yellow and red flags are displayed during the event. If the event the time limit is reached, the checkered flag will be immediately displayed and the race is called official, regardless of the number of total laps run. All participants must then proceed directly to the scales for post-race weight check.
4. The official clock will stop if the ambulance/EMT must leave the event site, the electronic scoring loop must be repaired or other unique situations, not of the competitors' making, occurs during the event.

L. COMPETITION

1. Be alert; all carburetor tuning or adjustments must be done with extreme caution. Give consideration to other competitors in an unsafe situation. All erratic changes of driving lines or changes in direction will be grounds for disqualification.

M. FINISH

1. The finish line shall be laid out in front of the scoring area. The checkered flag will be displayed to the leader/winner at the completion of the designated laps at this designated point.
2. Finish positions are based on the number of completed laps of each entrant *AND* the running kart order at the checkered flag. If entrants have a similar number of laps, the running order at the finish determines the final finishing order.
3. In a timed street events, the checkered flag will be displayed to the kart crossing the finish line at the end of the specified time, regardless of the kart position. The winner *MUST* take the checkered flag.
4. Karts that drop out during the course of an event will be scored and awarded finish position/points based upon the number of laps completed. All laps completed must be under the kart's own power or momentum; no pushing of any kart is allowed.
5. If an event is called official prior to the posted number of laps, the event finish will be determined by the running order of the previously-scored complete lap. For example, if the event is called midway through lap 14, the order on lap 13 will be used for the final finish (with the exception of the accident-involved karts, who will be placed on the tail of their respective lap).
6. Penalties and/or disqualifications may be assessed during or after a race event is complete. In cases of penalties, the penalized kart(s) will be grouped with similar lapped karts with the last-lap running order determining the final finishing position.

N. WEIGH - IN

1. Scales are provided at each race site. It is the entrant's responsibility to adjust his/her weight to meet the appropriate classes' minimum weight.
2. For some classes, a driver *MUST* declare a weight to the actual race event. It is the *ENTRANT'S RESPONSIBILITY* this is done.
3. *ALL* karts must weigh after the race to obtain finishing points. If a kart/driver does not meet minimum weight, he/she is allowed one reset of the scales for re-verification.
4. Failure to scale following the completion of a race or failing to meet any classes' minimum weight will result in disqualification.
5. Any entrant missing the post-race weigh-in due to injuries (requiring medical attention) sustained during the race event *WILL NOT* be penalized.

P. TECHNICAL INSPECTION

1. S.I.R.A. and Race Officials reserve the right to inspect *ANY* and/or *ALL* karts at any time for *ANY* aspect (including, but not limited to, engine legality, fuel legality, safety items, kart specifications, rule compliance, etc.) of competition.
2. All karts considered eligible for technical inspection *MUST* be taken to designated tech area *IMMEDIATELY* following a race.
 - a. Karts *MAY NOT* be removed to pit area before tech inspection and may only be removed from the tech area *AFTER* tech inspection is completed by S.I.R.A. tech officials.
 - b. Only *ONE (1)* team-designated representative (engine builder, driver, crew chief, tuner, etc.) is allowed in the tech inspection area with the kart and *ONLY* at the instruction of S.I.R.A. tech officials.

- c. Technical inspection will be in and of any manner of S.I.R.A tech officials' choosing.
 - d. Refusing technical inspection or not taking kart to tech area following race will result in *IMMEDIATE* disqualification from that race.
3. Illegal items found during technical inspection may be confiscated or marked by S.I.R.A. Officials.

Q. TECHNICAL PROTESTS AND LEGALITY

1. A participant may protest another participant's legality (including, but not limited to, engine legality, fuel legality, safety items, kart specifications, rule compliance, etc.) at the post-race weigh-in at the event scales or within a 20-minute "protest period" following the completion of the particular event.
2. Protests *MUST* be filed with an S.I.R.A Officer or Director and be accompanied by a \$100 protest fee. The protesting individual *MAY* remain anonymous but *MUST* remain at the race site until the protest is resolved by S.I.R.A. officials.
3. Protested items (engine, kart, etc.) *MUST IMMEDIATELY* be taken to an S.I.R.A.-designated impound area for inspection.
 - a. If the protesting party leaves before the protest is resolved, the protest is void and the *ENTIRE* fee is non-refundable.
 - b. If the protested party refuses to be inspected or leaves the impound area before the inspection is complete or the protest is upheld. Half of the fee will be returned to the protesting party. Furthermore, the protested party will be disqualified (no points or awards) for the particular race event.
 - c. If the technical inspection reveals no illegality, the protested party will claim half of the protest fee.
 - d. If the technical inspection cannot determine an individual's legality before the race day is over, the fee and all awards, points, etc., will be held until S.I.R.A. Officials can make a binding ruling. In some cases, additional research, information, etc., must be gathered to adequately make a proper ruling on the designated issue of protest.
4. Illegal items found during technical inspection may be confiscated or marked by S.I.R.A. Officials.

R. REFUNDS

1. If a driver is injured (requiring medical attention) in practice and cannot race, he/she may have the entry fee (less insurance cost) returned.

Section XI: Engines/Classes/Tech

A. ENGINE SPECIFICATIONS

1. All engine specifications and legal modifications are per the Southern Indiana Racing Association (S.I.R.A.) Rule Book *ONLY*. **WKA, SKUSA, and Burris F-200 Tech Manuals are used for *REFERENCE ONLY* to provide common specifications for the karters' convenience. WKA and SKUSA have *NOT* sanctioned S.I.R.A. to use their names for any event or published technical specifications.**
2. Compliance of engine technical specifications is *SOLELY* the responsibility of S.I.R.A.

B. TECHNICAL INSPECTION

1. S.I.R.A. and Race Officials reserve the right to inspect *ANY* and/or *ALL* karts at any time for *ANY* aspect (including, but not limited to, engine legality, fuel legality, safety items, kart specifications, rule compliance, etc.) of competition.
2. All karts considered eligible for technical inspection *MUST* be taken to designated tech area *IMMEDIATELY* following a race.
 - a. Karts *MAY NOT* be removed to pit area before tech inspection and may only be removed from the tech area *AFTER* tech inspection is completed by S.I.R.A. tech officials.
 - b. Only *ONE (1)* team-designated representative (engine builder, driver, crew chief, tuner, etc.) is allowed in the tech inspection area with the kart and *ONLY* at the instruction of S.I.R.A. tech officials.
 - c. Technical inspection will be in and of any manner of S.I.R.A. tech officials' choosing.
 - d. Refusing technical inspection or not taking kart to tech area following race will result in *IMMEDIATE* disqualification from that race.
3. Illegal items found during technical inspection may be confiscated or marked by S.I.R.A. Officials.

C. TECHNICAL PROTESTS AND LEGALITY

1. A participant may protest another participant's legality (including, but not limited to, engine legality, fuel legality, safety items, kart specifications, rule compliance, etc.) at the post-race weigh-in at the event scales or within a 20-minute "protest period" following the completion of the particular event.
2. Protests *MUST* be filed with an S.I.R.A. Officer or Director and be accompanied by a \$100 protest fee. The protesting individual *MAY* remain anonymous but *MUST* remain at the race site until the protest is resolved by S.I.R.A. officials.
3. Protested items (engine, kart, etc.) *MUST IMMEDIATELY* be taken to an S.I.R.A.-designated impound area for inspection.
 - a. If the protesting party leaves before the protest is resolved, the protest is void and the *ENTIRE* fee is non-refundable.
 - b. If the protested party refuses to be inspected or leaves the impound area before the inspection is complete or the protest is upheld. Half of the fee will be returned

- to the protesting party. Furthermore, the protested party will be disqualified (no points or awards) for the particular race event.
- c. If the technical inspection reveals no illegality, the protested party will claim half of the protest fee.
 - d. If the technical inspection cannot determine an individual's legality before the race day is over, the fee and all awards, points, etc., will be held until S.I.R.A. Officials can make a binding ruling. In some cases, additional research, information, etc., must be gathered to adequately make a proper ruling on the designated issue of protest.
4. Illegal items found during technical inspection may be confiscated or marked by S.I.R.A. Officials.
 5. Claiming Procedure for Economy Class
 - a. All claiming will occur at the conclusion of the Feature event in the scale area.
 - b. The claim is open for any competitor starting the Economy Class Feature to claim any other competitor in the Economy Class Feature regardless of finishing position. All competitors must remain in the scale area for a 20 min post race period or until released by the SIRA officials.
 - c. To file a claim, the Claim Form must be filled out and turned into the SIRA official with the \$200 claim money in cash prior to the feature event or within the 20 min post feature race hold time. Claims can only be filed by the Drivers in the Economy Class.
 - d. Refusing to accept the claim will result in immediate disqualification of competitor along with forfeiture of any winnings earned in the class. Competitor will also not be allowed to compete any longer in the class. The Engine Serial number will be recorded by SIRA and not allowed to compete in the Economy Class again.**
 - e. An engine cannot be claimed if inspected and determined to be illegal. In this case the competitor with the illegal engine will be disqualified and will forfeit all winnings. The Engine Serial number will be recorded by SIRA and not allowed to compete in the Economy Class again.

D. FUEL

1. Acceptable fuels/lubricants are:
 - a. 2-Cycle – gas and oil:
 - i.. No restrictions on type of fuel or oil, other than it meets/passes all guidelines/testing procedures as described in **Items 2.-3.** and **5.** (below).
 - ii. All fuel (or anything else entering the engine other than atmospheric air) must pass through the inlet needle and seat of the carburetor(s).
 - iii. Some Unlimited class categories run open fuel but *MAY NOT* utilize any banned substances.
 - b. 4-Cycle – methanol
 - i. Testing will follow guidelines as found in section 5 “Testing procedures”
 - c. F-200 and Economy Class – Gasoline

- i. Testing will follow BNSS guidelines as found in section 5 “Testing procedures”
- 2. Hydrazine, dioxins or carcinogens of *ANY KIND* are illegal in *ALL* classes. Banned substances for all two-cycle classes include, but are not limited to alcohol, aldehydes, aminodiphenyl, benzene (in excess of EPA limits), benzidine, beryllium compounds, bromine compounds, butadiene, chlorinated compounds, chromates, dioxanes, ethyl acrylate, ethylene oxide, hydrazine compounds, methylene dianiline, naphthylamine, nitrogen compounds (nitromethane, nitropropane, etc.), styrenes, toluidine and zylidine. Additional substances deemed to exceed the Threshold Limit Value for human exposure as listed by the American Conference of Governmental Industrial Hygienists are also illegal. Banned substances for all four-cycle classes include, but are not limited to, any crankcase lubricant(s) containing an oxygen-bearing, vapor-producing and/or combustible substance.
- 3. S.I.R.A. Officials will check for banned fuel substances at *ALL* race events.
 - a. *ANY* S.I.R.A. Official may specify an entrant be tested at *ANY* time before, during and/or after an S.I.R.A. event.
 - b. Any entrant found to have fuel containing any banned substance will be *IMMEDIATELY* disqualified for that race and subject to suspension for the remainder of the racing season.
 - c. Refusal to submit to testing will result in the same penalty.
 - d. Some commercially-available oils and fuels contain oxygenators, dioxins and carcinogens which are illegal in S.I.R.A. It is the entrant’s responsibility to test or have tested these oils/fuels prior to competition in an S.I.R.A.-sanctioned event.
 - e. 2-cycle gasoline(s) *MAY NOT* contain alcohol. An entrant must exercise care when purchasing their fuel from any Gasoline Outlet, regardless of brand, due to the fact many outlets add a percentage of alcohol to their gasoline.
 - f. *ALL* additives to 4-cycle methanol fuel are prohibited.
 - g. If fuel testing is done prior to the start of a race and an entrant is found to have illegal fuel, that entrant is disqualified for that race. The entrant will not be awarded any points nor allowed to use that race as a throw-out for points accumulation if disqualified for a fuel infraction. If disqualified for a fuel infraction, an entrant’s entry fee will *NOT* be refunded.
- 4. An entrant may ask that their fuel be re-tested following their disqualification for a banned fuel substance.
The entrant must submit a Fuel Re-Test Request Form (available from an S.I.R.A. Officer or Board Member) along with a non-refundable \$30.00 fee. The disqualification will be held in abeyance until the results of the re-test become available.
- 5. Testing procedures:
 - a. 2-Cycle–
 - i. A Digitron meter will be used to test 2-cycle/F-200 fuels. The meter will be set to -75 with the probe fully immersed in a plastic container of clean, ambient-temperature cyclohexane (Zoning Fluid).
 - ii. The probe is then fully immersed in the competitor's fuel and allowed to settle. The probe must not touch any part of the fuel tank while the meter is settling.

- iii. The final meter reading *MUST* be a zero (0) or negative number; any plus number will result in disqualification.
 - iv. Fuel to be tested may be removed from the kart's fuel tank and placed into a suitable, clean plastic container. This may help eliminate any effects of an aluminum fuel tank and facilitate cooling to ambient temperature. Artificial cooling of the sample (ice baths, etc.) is not allowed. Final testing shall occur no later than 10 minutes after the sample's removal from the kart's fuel tank.
 - b. 4-Cycle –
 - i. A “Water Test” will be used to check for additives to methanol fuel. Methanol fuel is completely water-soluble and such a test will display any additive.
 - ii. Equal parts of methanol from the competitor and pure, distilled water will be combined in a clean, transparent container. The mixture shall be shaken and allowed to settle for approximately 30 seconds. Methanol with no additives will yield a completely clear liquid once settling is complete; the test sample will be compared to a sample of pure, distilled water for clarity.
 - iii. Since contamination may occur when an illegal fuel is detected, all equipment, test containers and hands that come into contact with the illegal fuel must be cleaned. All items, including hands, must be cleaned *PRIOR* to testing another sample.
 - c. F200 and Economy Class –
 - i. The tech inspector will draw one gallon of fuel from the source of race spec fuel. The sample will be kept in a shaded, cool location, under the control of the tech inspector. A Digitron meter must be set to 000 using the controlled sample. BNSS recommends zeroing the meter with spec fuel as opposed to using the cyclohexane method due to the potential for error due to reagent contamination and other environmental factors.
 - ii. Competitors are allowed plus or minus 10 on the meter. Competitors are eligible for one re-check following a failed test.
 - d. At the discretion of the S.I.R.A. Tech Inspector/Race Director or the filing of a Fuel Re-Test Request by the competitor (see **Paragraph 4.** above), a competitor's fuel may be sent in for further testing.
 - i. The competitor shall draw a sample from his tank or container (inspector's preference) into a suitable, clean container.
 - ii. The tech inspector will mark the container and provide tamper-proof sealing of the container.
 - iii. The sample will be forwarded to an accredited testing laboratory for full chemical analysis.

E. WATER - COOLED ENGINES

- 1. Legal only in the TAG, Unlimited and Shifter classes.

F. WEIGHT

1. Drivers are solely responsible for their entry to meet minimum class weight.
2. Minimum includes kart, driver, securely-mounted ballast and fuels/lubricants in race-ready condition.
3. Minimum weights are listed for each class below (**Item H.**).
4. All non-structural ballast weights added to meet *MINIMUM* kart/driver weight requirements must be bolted securely to the kart frame or seat.
 - a. Minimum 0.25"/6.4 mm diameter bolts must be utilized to secure weights. All bolts must be cotter-keyed or doubled-nutted.
 - b. Weights *MAY NOT* be mounted to nerf bars.
 - c. No added weight allowed on driver.
 - d. Weights *MUST* be painted a bright color (such as white) and contain the kart number.
5. If a weight, body component or other kart component falls off a kart during an event, it cannot be remounted for the post-race weigh-in. For example, if a ten-pound weight comes off during the race, the kart must still meet the class minimum weight at the post-race weigh-in *WITHOUT* the weight. Failure to meet the minimum weight or attempting to include the dismantled item at the post-race weigh-in will result in the competitor's disqualification from the race event.

G. EXHAUST/NOISE REDUCTION

1. To reduce noise levels and possible complaints, mufflers (for *ALL* 4-cycle classes) and airboxes (for *ALL* 2-cycle classes) are *MANDATORY* at *ALL EVENTS*.
2. *ALL* 4-cycle competitors *MUST* run an RLV B-91 Silencer. Silencers must be used as produced, without *ANY* modifications or alterations of *ANY SORT*. Economy Class is allowed unaltered stock exhaust OR unaltered BS tube style muffler part # 89966.
3. *ALL* 2-cycle competitors *MUST* utilize an approved induction silencer (airbox):
 - a. Engines up to 110cc displacement *MUST* use an approved induction silencer with a maximum two (2) baffle tubes not exceeding .905"/23.0 mm in diameter and a minimum length of 3.74"/95.0 mm. A shrinkage tolerance of -.008"/0.2 mm is allowed. Extended tubes are *NOT* allowed.
 - b. Engines exceeding 110cc displacement must use an approved induction silencer with a maximum three (3) baffle tubes not exceeding .905"/23.0 mm in diameter with a minimum length of 3.74"/95.0 mm. A shrinkage tolerance of -.008"/0.2 mm is allowed. Extended tubes are *NOT* allowed.
 - c. ICA, ICC, 60/80cc Shifter and 125cc "Moto" Shifters must use an approved induction silencer (airbox) in stock form with *NO* modifications to the box or inlet tubes. Airbox may have *UP TO* three (3) inlet tubes, each not to exceed 1.182"/30 mm inside diameter, and 3.74"/95 mm minimum length. Trimming of excess rubber on airbox flange (inside airbox) is permitted. Approved airboxes are RLV and CIK. Airbox may have an inside or outside filter. As per 2006 *WKA Rule Book*.
4. Yamaha "can" mufflers used in Junior Sportsman I, Junior Sportsman II / 2-Cycle, YBX, SSX and SSX Can Masters must conform to the following specifications.
 - a. Must be RLV-V #7548 production muffler.
 - b. Cannot be modified in *ANY* way except for addition of exhaust sensor mounting.
 - c. Mounted on engine with muffler throat in an upward position *ONLY*.

- d. Hole locations and dimensions are a tech item. Hole dimensions will be checked with a no-go gauge.
- 5. All varieties of exhaust and noise reduction devices (silencer or airbox), regardless of class, must remain mounted and in working order throughout the *ENTIRETY* of the race event. Any entrant whose exhaust or noise reduction device becomes disconnected at *ANY* time during competition shall be automatically black-flagged

H. CLASSES

1. KID KARTS –

- a. Open to drivers 5-8 years old.
- b. No minimum weight.
- c. Gas & oil only.
- d. Comer C-50 box stock engine, unaltered; 1.8hp; fixed jet carburetor, jet size #54 thru #58; 0.475"/12.1 mm no-go venturi. All parts "as cast." Head of 7.3cc minimum. Liner and aluminum cylinder "as cast." Piston 1.210"/30.7 mm minimum from bottom ring. Stock rings with maximum end gap of 0.040"/1.0 mm. Rings cannot fall through cylinder. All measurements are no-go. Timing key *MUST* be in place and straight up; no offset or slop.
- e. *NO* metal may be removed to match port opening to aluminum cylinder.
- f. Stock, original manufacturer muffler only. Only two (2) holes. Measurements of 0.110"/2.8 mm (vertical) and 0.475"/12.1 mm (horizontal). Each hole no-go.
- g. Air filters are open.
- h. Stock Comer clutch with all stock parts, unaltered. No blueprinting allowed.
- i. Engine Tech same as 2007 WKA Tech Manual.
- j. Tire size: up to 5.50 x 5 / Compound: Open

2. JUNIOR 1 -

- a. Open to drivers 8-12 years old.
- b. Open to 4 cycle & 2 cycle engines, full size or cadet chassis.

4-CYCLE *ONLY* –

- i. 230 pounds minimum weight.
- ii. Alcohol only.
- iii. 5hp stock Briggs & Stratton flathead engine with Turquoise (0.500"/12.7 mm) restrictor plate.
- iv. Silencer required. (See **Item G.**)
- v. Engine Tech same as 2007 WKA Tech Manual.
- vi. Stock Length Billet Rod *IS* allowed.
- vii. Tire size: Any / Compounds: Dunlop SL4, Bridgestone YHC, or Burris 44 or 55

2-CYCLE **Yamaha ONLY** –

- i. 240 pounds minimum weight.
- ii. Gas & oil only.
- iii. Stock Yamaha KT-100S with RLV-V #7548.

- iv. WA55B or HPV-1 carburetor with LAD Adapter; airbox required. (See **Item G.**)
- v. Engine Tech same as 2007 WKA Tech Manual.
- vi. Tire Size: Any / Compounds: Dunlop SL4, Bridgestone YHC,
or Burris 44 or 55

2-CYCLE Comer ONLY –

- i. 250 pounds minimum weight.
- ii. Gas & oil only.
- iii. Stock Comer 80cc with factory muffler.
- iv. Factory carburetor; airbox required. (See **Item G.**)
- v. Engine Tech same as 2007 WKA Tech Manual.
- vi. Tire Size: Any / Compounds: Dunlop SL4, Bridgestone YHC,
or Burris 44 or 55

3. 4 CYCLE JUNIOR GOLD

- a. Open to drivers 8-15 years old.
- b. Minimum weight – 300 pounds (Flathead) or 305 (Animal).
- c. Alcohol only.
- d. 5hp stock Briggs & Stratton flathead engine with Gold (0.575"/14.6 mm) restrictor plate *OR* Briggs & Stratton Animal engine with 0.505"/12.8 mm restrictor plate.
- e. Silencer required. (See **Item G.**)
- f. Engine Tech same as 2007 WKA Tech Manual.
- g. Stock Length Billet Rod *IS* allowed.
- h. Tire Size: Any / Compounds: Open

4. 2 CYCLE JUNIOR II –

- a. Open to drivers 12-15 years old.
- b. 305 pounds minimum weight.
- c. Gas & oil only.
- d. Stock Yamaha KT-100S w/ RLV -V SSX 4-hole can muffler
- e. Airbox required. (See **Item G.**)
- f. Engine Tech per 2007 WKA Tech Manual
- g. Tire Size: 4.50 fronts/6.00 rears – Compounds: Dunlop SL4,
Bridgestone YHC, Burris 44 or 55

5. F-200 LITE & HEAVY–

- a. Open to drivers 15 years and older.
- b. Lite – 335 minimum weight / Heavy – 375 minimum weight
- c. Gasoline only in F-200 classes.
- d. Silencer required. (See **Item G.**)
- e. Any kind of clutch permitted.
- f. Approved, commercially-available, single-cylinder, air-cooled, overhead-valve four-cycle engines. Maximum 200cc displacement. Approved engines/specifications (in inches unless given otherwise): see table

	Briggs	Honda	Kohler	Tecumseh	Yamaha	<i>Notes</i>
<i>Model</i>	Intek 5.5 Animal	GX200	C6 XKE	OHV 5.5	YF200R1	Animal w/ 5.5 Intek crank allowed
<i>Bore, std</i>	2.688	2.679	2.638	2.797	2.598	Standard bore
<i>Bore Max</i>	2.76	2.709	2.783	2.833	2.809	Maximum allowed
<i>Increase</i>	0.072	0.03	0.145	0.036	0.211	Increase from standard bore
<i>Stroke</i>	2.04	2.125	2.008	1.938	1.968	Standard stroke, +/- .01 tolerance
<i>Rod length</i>	3.375	3.303	3.425	3.484	3.324	Center to center, +/- .01 tolerance
<i>Rod length</i>	2.514	2.358	2.54	2.703	2.459	Inside length
<i>Wrist pin dia.</i>	0.625	0.708	0.55	0.563	0.63	+/- .0025 tolerance
<i>Rod journal</i>	1.098	1.18	1.218	0.999	1.101	+/- .0025 tolerance
<i>Flywheel</i>	5.75	5.75	8.1	7	6.5 lbs	Approximate weight in pounds
<i>Valve spacing</i>	1.382	1.219	1.38	1.25	1.181	Valve angels are 90 from deck

g. Block, cylinder head, crankshaft and side cover must be approved OEM items. External surfaces may be machined to remove excess material from mounting bosses, cast-in brackets, etc. no longer used. No performance-enhancing external machining is allowed.

h. Exhaust system must be fixed and non-adjustable with the kart in motion (e.g., no slippy pipes). Length is non-technical. Loop pipes are *NOT* permitted. System may consist of one to three pieces (header, connector tube and tail pipe). Exhaust pipe/header may not extend past rear bumper. Studs are allowed to attach the header to cylinder head. Sealer and gaskets are non-technical items.

i. Any commercially-available butterfly-type Tillotson HL series carburetor is allowed. Maximum venturi diameter of .790"/20.1 mm. Maximum throttle bores: 0.790"/20.1 mm carburetors = 1.010"/25.7 mm; 0.735"/18.7 mm carburetors = 0.885"/22.5 mm; and 0.630"/16 mm carburetors = 0.820"/20.8 mm. Metering holes, filter cups, adapters and air filters are non-technical items. Pulse-type fuel pumps are permitted.

j. Only aluminum intake manifolds are permitted. Maximum mean inlet tract length is 2.0"/50.8 mm; this length is determined by adding the longest and shortest tract distances (flange to flange) together and dividing by two (2).

k. Only aluminum connecting rods are permitted (fasteners and inserts/bushings excluded). Stock length (plus or minus 0.010"/0.25 mm) *MUST* be maintained. See chart for specific details.

- l. Any aluminum three-ring, flat-top or dished piston is permitted. No domed or pop-up pistons are allowed. OEM wrist pin diameter *MUST* be maintained. Rings and wrist pin are non-technical items. See chart for specific details.
- m. Standard OEM crankshaft with stock stroke length (plus or minus 0.010"/0.25 mm). Thermal treating and shot-peening are permitted. Minor grinding for camshaft clearance is permitted. No other alterations allowed. See list for specific details.
- n. Aftermarket or OEM flywheels are permitted. OEM flywheel must be unaltered, meet minimum listed weight and use stock OEM coil (ignition system). Only approved aftermarket flywheels may be used: ARC models 6606/6608 and UMMF models FA-100/FS-1001. Spec diameter and weights: 6.75"/171.5 mm +/- 0.25"/6.4 mm diameter x 4.75 pounds +/- 0.75 pounds. When using aftermarket flywheels, any approved OEM F200 coil may be used on any engine (i.e., Briggs coil on a Honda, Tecumseh coil on a Kohler, etc.). External coil modifications to facilitate mounting are legal. Coil mounts, flywheel key, spark plug boots and plug wires are non-technical items.
- o. Original factory-cast cylinder head must be used. Head is limited to two (2) valves maximum and must maintain original locations (listed spacing and angles). Porting and grinding are permitted. No performance-enhancing external addition of metal is permitted. Stock spark plug size and location *MUST* maintained. Minimum combustion chamber volume (at Top Dead Center) is 24cc. Measuring the head will be performed after the event when the engine has cooled down to a reasonable temperature.
- p. Steel valves only; no titanium components allowed. Maximum intake of 1.080"/27.4 mm and exhaust of 0.990"/25.2 mm. Stock OEM rocker arms and plates only. Rocker arms may be welded or reinforced for strength. No other alterations to original configuration are permitted. Flat, stock appearing tappets are allowed. Push rods, push rod guide plates, retainers, springs, keepers, rocker adjusters, etc, are non-technical items.
- q. Camshaft may have a maximum (actual) lift of 0.275"/7.0 mm measured at valve. Cam and crank gear are non-technical items.
- r. Fasteners are non-technical items but must remain in original location. Heli-coils, studs, etc. are allowed.
- s. Gaskets are non-technical items.
- t. Must retain splash-type oiling system.
- u. Tire Size F-200: BNNS (Burriss National Speedway Series)
Compounds: 44 or 55
- v. F-200 Engine tech is per BNSS (Burriss National Speedway Series)

6. YAMAHA SENIOR CAN -

- a. Open to drivers 15 years and older.
- b. Lite - 330 minimum weight / Heavy - 370 minimum weight
- c. Gas & oil only.
- d. Stock Yamaha KT-100S with airbox and RLV SSX 4-hole can muffler
(See **Item G.**).

- e. Tire Size: 4.50 Fronts and 7.10 Rears
Compounds: Dunlop SL4, Bridgestone YHC, Burris 44 or 55
- f. Engine Tech same as 2007 WKA Tech Manual.

7. 4 CYCLE SENIOR – FLATHEAD OR ANIMAL

- a. Open to drivers 15 years and older.
- b. Flathead or Animal
- c. Flat head-350 minimum weight / Animal- 390 minimum weight
- d. Engine tech same as 2007 WKA Tech Manual
- e. Stock Length Billet Rod *IS* allowed in flathead or Animal.
- f. Tire Size: Any / Compounds: Open

NOTE: 4-CYCLE FLATHEAD ONLY

- i. 5hp stock Briggs & Stratton flathead engine.
- ii. Stock Length Billet Rod *IS* allowed
- iii. Silencer required. (See **Item G.**)
- iv. Engine Tech same as 2007 WKA Tech Manual.
- v. 365 minimum weight
- vi. Tire Size: Any / Compounds: Open

8. YAMAHA PIPE / HPV

- a. Open to drivers 15 years and older.
- b. 350 pounds minimum weight.
- c. Gas & oil only.
- d. Tire size: Any / Compounds: Open

NOTE: Yamaha Pipe must conform to the following items.

- i. Stock 100cc Yamaha KT-100S engine.
- ii. Airbox required. (See **Item G.**)
- iii. Engine Tech same as 2007 WKA Tech Manual.
- iv. HPV is #3 pipe

9. 4 CYCLE & 2 CYCLE MASTERS –

- a. Open to drivers 35 years and older.
- b. Minimum Weights: Flat Head-350, Animal-390, and Yamaha - 370
- c. Stock Yamaha KT-100S with airbox and RLV SSX 4-hole can muffler (See **Item G.**).
- d. Tire Size: Yamaha - 4.50 Fronts / 7.10 Rears
Compounds: Dunlop SL4, Bridgestone YHC, Burris 44 or 55
4-Cycle - Any / Compounds: Open
- e. Engine Tech same as 2007 WKA Tech Manual.
- i. Stock Length Billet Rod *IS* allowed in flathead or Animal.

10. UNLIMITED -

- a. Open to drivers 15 years and older.
- b. Minimum weight will vary according to engine type. See below items.
- c. There are no fuel restrictions except that no illegal substance or substances may be used as fuel or as a fuel additive.

- d. Engine categories –
- i. Rotary valve or Reed valve Two-Stroke Cycle Engine or Engines, 230 lbs plus one pound for each cc or fraction of a cc. Multiple engines or cylinders are permissible. 210 cc maximum total displacement.
 - ii. Flat Head Four-Stroke Cycle Engine or Engines, 190 lbs plus one pound for every 3cc or fraction of a cc. multiple engines or cylinders are permissible. 486 cc maximum total displacement.
 - iii. Piston Port, McCulloch or US820 (West Bend) Two-Stroke Cycle Engine or engines, 170 pounds plus one pound for every cc or fraction of a cc. Multiple engines or cylinders are permissible. 225 cc maximum total displacement.
 - iv. Overhead Cam (OHC) Four-Stroke Cycle Engine or Engines
 - a. Single Overhead Cam (SOHC) Four-Stroke Cycle Engine or Engines, 185 lbs plus one pound for every 1.5cc or fraction of a cc. Multiple engines or cylinders are permissible, 360cc maximum total displacement.
 - b. Double Overhead Cam (DOHC) Four-Stroke Cycle Engine or Engines, 120 lbs plus one pound for every 1cc or fraction of a cc. Multiple engines or cylinders are permissible, 270cc maximum total displacement.
 - v. Overhead Valve Push Rod (OHV) Four-Stroke Cycle Engine or Engines, 220 lbs plus one pound for every 2.5cc or fraction of a cc. Multiple engines or cylinders are permissible, 500cc maximum total displacement.
 - vi. Rotary (Wankel) engines produced for the kart racing market, 400 lbs kart and driver combined minimum weight, (this is subject to review at the end of the season). The exhaust system of all Wankel engine powered karts must be completely wrapped with heat insulating tape.
 - vii. Forced Induction and Nitrous Oxide. If a kart is equipped with some type of supercharger turbocharger, or nitrous oxide system, add 15 lbs for each cylinder that is served by the system.
- e. Calculating Displacement / Declaring Weight
- i. The bore will be measured with dial calipers and the stroke with a suitable travel dial indicator.
 - ii. The following formula will be used for calculating displacement;
 $\text{BORE} \times \text{BORE} \times \text{STROKE} \times .7854 \times 16.39 = \text{CC of engine.}$
 (This assumes that the bore and stroke were measured in inches. The 16.39 is a conversion factor from cubic inches to cubic centimeters.)
 - ii. Always round up to the nearest whole cc when calculating minimum weight.
 - iv. Competitors must declare their weight and display it next to their front number in such a manner that the scale person can easily see it.
- f. Tire Sizes: Any / Compounds: Open

11. TAG SENIOR –

- a. All events will follow WKA 2008 engine tech & weight requirements ONLY per the 2009 WKA Tech Manual
- b. Tire size & compound: Open

12. SHIFTER

- a. Open to drivers age 15 years & older
- b. Minimum weights: Moto - 385 / ICC - 395
- c. Engines:
 - i. Moto – Mass-produced, single-cylinder, motorcycle engines.
 - ii. ICC – Purpose-built kart engines.
- d. Airbox required (See **Item G.**)
- e. Button and paddle-shifts are permitted.
- f. Classes:

125cc	Senior ICC 125	Gas & Oil	395 pounds
125cc	Senior Moto 125	Gas & Oil	385 pounds
- g. Shifter engine tech as per the 2008 SKUSA Tech Manual.
- h. Tire Size: Any / Compound: Open

13. ECONOMY

The purpose of this class is to allow an option for racers on a budget to compete in a competitive organized event. This class is open to any driver skill level and is intended allow new racers to participate against skilled drivers and other new competitors in a fun educational experience.

While new tires and chassis are not banned for this division, the intent of this class is to be an economy class and the expectation is to utilize older chassis and tires that can be obtained at a lower cost. All SIRA safety and general chassis rules will apply. Please see section V and VII in the 2009 SIRA rule book

- a. Open to drivers age 15 years & older
- b. Minimum weight 360 lbs
- c. Only Drum and shoe type clutches such as the Noram ® GE are allowed. No Disk clutches. A clutch guard must be used.
- d. Tire Size: Any / Compound: Open
- e. Engine Rules:
 - i. Single cylinder, 2 valve, OHV 4 cycle 196 ccOnly the following engines are approved for this class:
 - Homier Blue Max PN 36091 or superseding
 - Harbor Freight Greyhound PN 66014-OVGA, 66015 OVGA, 96500-2VGA or 96549-2VGA or superseding
 - American Power Sports PN APS223
 - Champion Power Equipment 196cc 6.5 HP
 - Jiangdong Model JF200L, or JF200E-L
 - Changzhou Hi Model HR200
 - Shanghai Power Model EF200

Tiger Model EF200
Tonya Model EF200
Lifan Model JF200

Other 6.5 HP 196 CC 4 stroke engines must be approved by SIRA prior to competition and comply with the technical rules listed below.

ii. Important Note: All parts must be factory production parts unless otherwise specified in this rules manual. No machining or alteration of any parts is allowed unless specifically noted. All parts will be subject to a comparison to a know Box Stock part (when performing a comparison check it a +/- .005" tolerance will be allowed). Engine will be teched as raced. There will also be a \$200 claiming rule in place for this engine. Refusing to accept the claimer will result in immediate disqualification of competitor along with forfeiture of any winnings earned in the class. Competitor will also not be allowed to compete any longer in the class.

iii. Combustion chamber volume: 27.5 cubic centimeter minimum, with piston at TDC, using prescribed procedure.

iv. Cylinder Head Requirements: Must be OEM casting only. Porting and/or grinding are not permitted. Valve seats are two angles 45 degrees valve face and 30 degrees top relief. Stock head bolts only, must have four. Head gasket maybe after market, must be of stock configuration. No copper or aluminum gaskets allowed.

v. Bore and Stroke: Stock cylinder bore is 2.685" max. Stroke is 2.123" + / - .005".

vi. Carburetor requirements: Huayi model carb only. Carb to intake sealer is gasket only no other sealer allowed. Choke must be as supplied from factory, but may be fixed to stay in open position. Choke bore .810" NO-GO. Venturi .615" NO-GO. Rear carb bore .751" NO-GO. Main fuel jet .042" NO-GO. Stock air cleaner assembly or aftermarket filter adapter with filter.

vii. Fuel Tank: Tank must remain in the stock mounting location on top of the engine. No modifications are allowed to the fuel tank. Fuel cap may have an additional fitting and line added to assist in tank breathing. The line must be routed so as to not allow fuel spillage during competition.

viii. Fuel: Fuel must 87 Octane pump gas only. Fuel tech will be the same as found in section D Fuel item 5c.

ix. Valve Train: Stock valve cover only with any stock configuration gasket, no sealer. Factory stock rocker arms and push rods only. Stock valves only 45 degree angle only both valves, no modifications allowed.

x. Only Stock valve springs only. Max wire diameter on spring wire is .698" with a maximum tension of 10.8 lbs. at a height of .850".

xi. Ignition system: Stock system only and must be unaltered. Kill switch and low oil sensor may be disabled and removed.

xii. Flywheel: Stock flywheel only with plastic fins. No alterations of any type allowed. Must also run stock flywheel key with no alterations for timing advance.

- xiii. Piston and Rings: Must be unaltered Box Stock only. No machining of piston and rings allowed.
- xiv. Connecting Rod: Stock Box Stock rod only. No machining of any type allowed. Stock rod bolts only.
- xv. Crankshaft Requirements: Stock Box Stock crankshaft required. Machining, polishing, addition of material or other alteration of crankshaft is prohibited. Stock factory timing gear mandatory and must be installed in original location. Crankshaft journal diameter is 1.180" - 1.175" min.
- xvi. Camshaft Requirements: Stock as cast camshaft only. Maximum running lift of .245" checked at valve as run.
- xvii. Block Requirements: Block must remain stock as produced. Stub for governor may be removed and hole plugged. No machining of block allowed. Welding to the block shall be for rod damage repair only and may not constitute a functional modification.
- xviii. Exhaust System: Unaltered stock exhaust OR Aftermarket single stage, one piece header with the BS tube style muffler part # 89966 or it's aftermarket equivalent(ex: rotary power) installed at the end of pipe. The tube style muffler may either be welded or tread fitted to the pipe end. OR Aftermarket single stage with the RLV B91 Silencer. Any stock configuration gasket or RTV will be allowed.
- xix. Governor: May remain in the engine or can be removed.

Section XII: Officials

A. ELIGIBILITY OF OFFICERS

To be voted in as a Board of Director or Officer for the current year you must have met one of the following criteria:

- A. Paid member previous race year.
- B. Participated in 3 or more race events the prior year.
- C. Held an appointed position with club the prior year. (ie; tech, scoring, flagman)

1. *ALL* Officers and Board of Directors must be paying members of the Southern Indiana Racing Association (S.I.R.A.).
2. Other positions (such as Technical Inspector, Scoring Manager, etc.) are appointed positions; these individuals need not be a member of S.I.R.A.
3. Current President, Vice-President, Secretary and Treasurer get a free membership for their term and may declare eligibility in one points class.
4. The President becomes a lifetime member after the completion of his/her term.

B. PRESIDENT

1. Elected by the membership at the annual membership meeting.
2. Term is for two (2) years with a vote of confidence by the Board of Directors after the first year.
3. Candidates for President must have held an elected office in S.I.R.A. for at least two (2) years.
4. Manages all club affairs.

C. VICE-PRESIDENT

1. Elected by the membership for a two-year term at the annual membership meeting.
2. Candidates for Vice-President must have been a member of S.I.R.A. for two years.
3. Second-in-command to the President.

D. SECRETARY

1. Elected by the membership for a two-year term at the annual membership meeting.
2. Keeps minutes of all Board of Directors meetings.

E. TREASURER

1. Elected by the membership for a two-year term at the annual membership meeting.
2. Responsible for managing all of the club's financial affairs.

F. DIRECTOR (14)

1. Elected by the membership at the annual membership meeting.
2. Terms are two (eight directors) or one-year (eight directors).
3. Ideally, each should come from a different area of the membership territory.

4. Must attend two-thirds of the races to remain director, with exception of illness.
5. Must perform duties – such as corner flagging/observing, helping with weigh-in, technical inspections, etc. – at most events or will be removed.
6. Required to attend Board of Directors meetings (pre-/post-race and off-site) to discuss/resolve club issues through a quorum vote.

G. VOTING

1. The Board of Directors (14) vote on all issues.
2. The President and Vice-President vote as tie-breakers *ONLY* in cases of a tie vote.
3. Directors personally involved in a particular issue will be asked to abstain from voting; otherwise, all present must vote on a raised issue.
4. A quorum of Directors must be present for a vote to be binding.
5. A quorum is 51% of Board of Directors must be present to commence voting with the exception of race day. In the case of DQ's on race day, the number of Board of Director's present will make the deciding vote.

H. DIRECTOR OF MARKETING

1. Appointed by S.I.R.A. Officers for the current racing season.
2. Duties will vary.

J. FLAGMAN

1. Appointed by S.I.R.A. Officers for the current racing season.
2. Flags all sanctioned events.

K. SCORING MANAGER

1. Appointed by the S.I.R.A. Officers for the current racing season.
2. Operates the S.I.R.A. electronic scoring system at all racing events.
3. Keeps accurate records of the SIRA Midwest Championship Series driver points.

L. RACE DIRECTOR

1. Appointed by the S.I.R.A. President to oversee/manage specific races through the season.
2. Acts as the liaison between S.I.R.A. and an event's Sponsoring Organization for a specific race.

M. TECH COMMITTEE

1. Appointed by the S.I.R.A. President and approved by the remaining Officers.
2. Administers technical inspections and guidelines when needed.

N. RACE OFFICIALS

1. Defined by above-listed officers and the Support Organization's race director.

P. CLASS REPRESENTATIVES

1. Appointed by the S.I.R.A. President to monitor a selected class and receive feedback from fellow racers in that class.

Q. ELECTION PROCESS

1. All election voting will be done by secret ballot.

2. Only current S.I.R.A. Members with paid membership for that year will be allowed to vote.

3. If a current member cannot attend the meeting, a signed proxy may delegate their vote to someone else as long as the current member has paid the membership for that year.

4. All elected terms begin at the annual membership meeting and continue for the year or years elected; all terms expire at the following year (or years') membership meeting.

Section XII: Forms
Economy Class Engine Claim Form

Name (Print): _____

Name (Sign): _____

Date: _____ Race Location: _____

Kart Number Being Claimed: _____

For SIRA Officials

Claim Accepted By (print): _____

Claim Accepted By (sign): _____

Engine Serial Number Claimed: _____

Engine Model Claimed: _____

