



2022 New London-Waterford Speedbowl

SK Light Modified Rules

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All items marked in **RED** are new and/or are wording changes to the **2021** NLWS SK Light Modified rulebook.

All references to the New London-Waterford Speedbowl in the following rules may be referred to as (NLWS) as an abbreviation of the speedway name and deemed an official recognition of the New London-Waterford Speedbowl in this **2022** rule book.

Drivers & Car Owners are required to familiarize one's self with the General Track Rules as well as the SK Modified rulebook.

By registering as an owner or driver you agree to be knowledgeable and bound by the contents found in these divisional rules and in the General Rules.

2022 NLWS SK Light Modified General Rules

General SK Light Modified Division Rules

- 1) In the following rules you will see the term "stock OEM" used. This means "original equipment manufacturer". These parts must come on a standard production car.
 - a) No carbon fiber or titanium parts allowed.

None of the following will be allowed in or on any engine or driveline component or part: abrasive cleaning, acid dipping, chemical milling, coating, epoxying, finishing, grinding, painting, plating, polishing, porting, etc.

- b) The rules herein are for the New London-Waterford Speedbowl only, with no

- expressed or implied agreement with any other Division or Speedway as to their interpretation and/or method of inspection,
- c) All equipment must be approved by track officials. No equipment is considered to be approved by reason of having passed through a technical or safety inspection unobserved. No car will be considered as having passed inspection for the event until the finish is made official.
 - d) All engine models, equipment changes, or modifications not specifically addressed in this rulebook must be submitted to the New London-Waterford Speedbowl for consideration of approval prior to competition.
 - e) All equipment is subject to the approval of the New London-Waterford Speedbowl Officials.
 - f) Once a car has been presented to the New London-Waterford Speedbowl Officials for post- race inspection the entire car and all of its components become subject to inspection. This includes but is not limited to items designated for inspection following a particular event.
 - g) All rule changes and updates made during the course of the season for the current rulebook will be posted to the New London-Waterford Speedbowl website (www.speedbowl.com). This will serve as the only form of official notification until the printing of the **2022** New London- Waterford Speedbowl rule book.
 - h) An aftermarket, aluminum fabricated racing seat, sized correctly for the driver, must be used. The seat frame must be made of steel tubing (min 1" round or square) and must be welded to the roll cage and/or frame. The seat cannot attach to any part of the floor pan. The seat must be bolted at 4 places at the bottom of the seat, and 4 places at the back. The bolts must be 3/8" diameter grade 8, with large fender washers on the seat side. You must have (2) head supports, (2) shoulder supports, and (2) leg supports bolted to your seat.

*****Cars of a similar division from other race tracks may be eligible for competition, pending a discussion with track officials and subsequent inspection of said car*****

2) Scoring Transponder Location

- a. Transponder mounting brackets will be installed on the inside (or outside) of the right rear frame rail. The round post of the bracket must be on top and the square tab on the bottom flush with the lower edge of the frame rail. The bracket must be mounted with its center line exactly 12" to the rear of the rear axle centerline and must be completely vertical to the ground. Transponders are required on the cars at all times. Any car not registering a transponder signal during practice will be black-flagged to be made aware of their scoring transponders failure and is required to remedy it before proceeding further in the event.

Transponders are available from: AMB, US, Inc. 32 Highlands Parkway, Suite 104 Smyrna, GA 30082 Tel 678- 816-4000 Fax 678-816-4001

3) Driver Eligibility

- 4) Drivers 15 years old and up are eligible to compete in the New London Waterford Speedbowl SK Light Division.
- 5) In order to participate in any on-track activity, a driver must be signed in with the handicapper **and have all completed paperwork on file. Paperwork includes Driver Registration form, Number Registration Form, etc.**

TECHNICAL RULES

All **2022** NASCAR Whelen Modified Tour (NWMT) rules will be enforced for the Lite Modified Division, with the following changes and/or additions:

1) Approved Models

Approved model bodies are listed in the NWMT Rulebook. Other models - both domestic and foreign steel passenger cars - may receive approval for the Lite Modified Division providing they are the same in body configuration and meet the spirit and intent of competitive racing in the Lite Modified division.

2) Weight

- a) All specified weight requirements will be with the driver.
- b) The minimum total weight at all times will be 2645 lbs. for rebuilt sealed engines and 2580 lbs. For the NEW sealed engines. Maximum left side weight of all cars is 56% of total weight. Cars found under the minimum total weight rule after qualifying will be placed to last in that event Cars found under the minimum total weight rule after the feature event will be penalized one (1) position per pound under.
- c) Added weight must be magnetic steel or lead only, in block form, and weighing no less than five (5) lbs. per block (no pellets). Added weight must be securely bolted to the frame rail and painted white with the car number stenciled in black. No added weight will be permitted inside the driver's compartment. Weight must be welded in a box or attached with two or more 7/16" diam. (minimum) grade 8 bolts and locking nuts.
- d) Nothing may be added to or taken from the car to make total or left-side weight Gas, oil or water may not be added. Wheels and tires cannot be changed, but an amount equal to one half of one percent (.5%) of the gross weight will be added for loss in weight due to race wear.

3) Window Net

A commercially manufactured, SF- rated, nylon window net must be installed in the driver side door window opening. It must be positioned to cover the entire window opening. Window nets may not be used beyond three (3) years from the date of manufacture or no older than the date of expiration. The window net must be rib type, made from minimum three-quarter (¾) inch and maximum one (1) inch wide nylon material with a minimum one (1) inch and a maximum two and one-quarter (2 ¼) inch square opening between the ribs. The minimum window net size must be 22 inches wide by 16 inches high. All window net mounts must be a minimum one-half (½) inch diameter solid steel rod on the bottom and a minimum one (1) inch wide by three- sixteenths (⅜) inch thick flat steel or a minimum one-half (½) inch diameter solid steel rod on the top, with mounts welded to the roll cage. The window net must fit tight and be secured with a lever-type quick release latch. The lever must be secured by a detent ball in the lever and may be supplemented by Velcro® fastener only - pins or clips are not permitted. The latch must mount at the top in the front to roof bar (#3) and release from the inside.

4) Windshield

A flat windshield is mandatory, per the NWMT Rulebook, made of a minimum of one eighth (1/8) inch polycarbonate, that extends from the left A-pillar to the #4A center windshield bar and from the roof to the cowl. A minimum of three Dzus type fasteners must be used on each of the four sides. For additional specifications see the NWMT Rulebook.

5) Rear View Mirror

One (1) single image 8" x 2" rear view mirror mounted in the center of the upper windshield is permitted. If you use a head and neck restraint system, you may run a 14" x 2" mirror. A side view or spot mirror is permitted. Oversized mirrors may be blacked out by the use of paint only, to obtain the correct size allowed.

6) Doors

- a) All door panels must be made of magnetic sheet steel or aluminum. For additional specifications see the NWMT rulebook.
- b) A magnetic steel anti-intrusion plate made from a minimum thickness of .080 must be securely welded to the outside of the left side door bars. The anti-intrusion plate(s) must fill the area between the horizontal centerlines of the top and bottom door bars, and vertical centerlines of main roll bar, and the left front roll bar leg. The plate(s) must be formed to match the curvature of the door bars. Individual plates, if used, should be made as large as possible. All plate(s) must have the corners fastened / welded. To facilitate emergency removal of the left side door bars, the anti-intrusion plate(s) must have six (6), 2-1/8 inch diameter holes cut in the anti-intrusion plate, with three (3) holes forward of the front vertical supports and three (3) holes rearward of the rear vertical supports in the following locations: The upper two (2) holes must be centered vertically between the left side door bars, at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support. The middle two (2) holes must be centered vertically between the left side door bars, at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support. The lower two (2) holes must be

centered vertically between the left side door bars, at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support.

- c) Aluminum crush panels must be installed per the NASCAR Whelen Modified Tour rules. For additional specifications see the NWMT Rulebook.

7) Quarter Panels

- a) All quarter panels must be made of magnetic steel or aluminum. For additional specifications see the NWMT rule book.
- b) Interior sheet metal: The rear center panel (over the fuel cell) must be made of magnetic sheet steel, 22 gauge, .031" thick, with a minimum width of 28", and must extend from the vertical panel forward to the #7 roll bar, per the NWMT Rulebook. For additional specifications see the NWMT Rulebook.

8) Hoods and Roof (Letter C)

All roof panels must be made of magnetic sheet steel or be a NLWS-approved manufactured fiberglass roof panel. All cars utilizing an approved fiberglass roof must install the minimum 1/8" thick aluminum anti-intrusion plate in the roll cage halo as described in the anti-intrusion plate specification of the NWMT rulebook.

9) Engine Requirements

- a) See Lite Modified 602 Crate Engine Specs below. The maximum static compression permitted is 9.5 to 1. Any engine measured over 9.5 to 1 is illegal and will not be allowed to compete until serviced by a New London Waterford Speedbowl authorized service center.
- b) New London Waterford Speedbowl approved service centers for the REBUILT sealed GM Performance 602 Circle Track Engines are:

R.A.D. Auto Machine

T/A Engines

Nat's Racing Engines

Larry's Auto Machine

Ashaway Performance
Engines

- c) *The only approved engines for Crate use are the GM Performance Factory Sealed Circle Track 602 (Part #19258602). Engines must be purchased directly through General Motors or an authorized service center. All crate engines must be serviced through an authorized New London Waterford Speedbowl service center (see below) prior to competing at New London Waterford Speedbowl. Only New London Waterford Speedbowl authorized service centers can perform updates to the GM Performance Factory Sealed Circle Track engine. Upon completion of the updates, which include a parts package and dyno sheet, the engine will be sealed. It must be purchased from an authorized GM dealer. Invoice from the purchase must be presented with engine during registration when New London Waterford Speedbowl seals are installed. Any team that has a sealed, pre-registered, part #19258602 engine may continue to use it, following existing rules. The GM crate engine manual will be used to inspect all crate engines.*

d) Rebuilt Crate Engine Specs

As an option for the Lite Modified Division, a rebuilt 602 spec engine based on the GM Performance Factory Sealed Circle Track Crate Engine is permitted. The engine is the GM Part Number 88958602/19258602 GMR 350/350 Circle Track Engine with spec modifications that can be done only through a New London Waterford Speedbowl approved service center. The engines will be inspected and sealed upon completion by a New London Waterford Speedbowl authorized service center. All engine seals must remain intact and unaltered. Any service work requiring the removal of any seals/ bolts must also be scheduled with and approved by New London Waterford Speedbowl Officials before the seals and bolts are removed. Tampering with seals/bolts will result in penalties and loss eligibility of the of the engine to compete in the SK Lite Modified Division. The engine will only be available through a New London Waterford Speedbowl approved service center. This engine brand new 88958602 with no internal changes performed or allowed except for the valve springs, timing chain, and gears. The external changes are the harmonic balancer and oil pan.

NOTE: All engines must be sealed and documented to compete at New London Waterford Speedbowl. A completed engine registration form, which can be found on the last page of these rules, must be completed and submitted to New London Waterford Speedbowl Officials.

For information on rebuilt engines contact one of the approved service centers.

10) Carburetor

- a) Holley two-barrel model #4412 carburetor must be used. The body, base plate, metering block, and bowl must be a standard Holley 4412 part, HP parts are not permitted. Carburetors and/or carburetor components machined from billet materials are not permitted.
- b) OEM type gaskets, jets and power valve must be used.
- c) The diameter of every hole in the carburetor must pass the standard NASCAR/ New London Waterford Speedbowl pin and tooling gauges as part of our routine inspection process.
- d) The only changes that will be allowed are as follows:
 - i. The choke plate and shaft may be removed, but must be permanently sealed.
 - ii. Throttle plate screws may be trimmed flush with the shaft
- e) Body of carburetor and metering block: No polishing, grinding or reshaping of any part. Drilling of additional holes or plugging holes is not permitted.
- f) Choke horn may not be removed.
- g) Boosters may not be changed. Size or shape must not be altered. Height must remain standard.
- h) Venturi area must not be altered in any manner. Casting ring must not be removed.
- i) Alterations to allow additional air to be picked up below the opening of the venturi such as altered gaskets, base plates, and drilling holes into the carburetor will not be permitted.
- j) Base plate must not be altered in shape or size.
- k) The stock Holley 4412 or Stainless Steel Holly part #346 butterflies must be used. They may not be thinned or tapered. The Butterflies must remain as manufactured, and must maintain the Holley production tolerance thickness of .0438" to .0398". Idle holes may be drilled in butterflies. Screw ends may be cut even with the shaft but screw heads must remain standard.
- l) Throttle shaft must remain standard and must not be thinned or cut in any manner.
- m) Holley aluminum main bodies are not approved for use.

11. Carburetor Adapter

- a. The Canton Racing Products aluminum adapter plate (part number 85065A) or the Big Haus USA #001 must be used. Alterations of any kind to the adaptor plate are not permitted.

12. Carburetor Air Filter & Air Filter Housing

- a. Only a round dry type paper air filters elements maintaining a minimum 12 inches & maximum 14 inches in diameter is permitted. The air filter element must be a minimum of one and one-half (1 ½) inches and a maximum of five (5) inches in height. All air must be filtered through the element.

- b) Only a round, magnetic steel or aluminum filter housing is permitted. The top and bottom of the air filter housing must be solid with no holes. A maximum one (1) inch lip will be permitted from the air filter element to the outer edge of the air filter-housing top and bottom. The air filter housing carburetor mounting ring must have only one (1) round hole a minimum of five (5) inches in diameter. It is permissible to attach a shield to the front area of the air filter housing up to a maximum of one half of the air filter circumference. The shield must not be higher than the height of the air filter element. The air filter housing top and bottom must be the same diameter. The air filter housing must be centered and sit level on the carburetor. No air induction, ducts, baffles, tubes, funnels or anything else which may control the air entering inside of, or between, the air filter and carburetor is permitted.
- c) The bottom of the air filter element must measure within one (1) inch of the carburetor's top flange. A spacer may be used between the carburetor and the air cleaner so long as the one (1) inch specification is not exceeded.
- d) No portion of the hood may be higher than the bottom of the air cleaner.

13. Ignition System

- a) NASCAR approved ignition system must be used.
- b) Electronic distributors are permitted. All electronic distributors must be in stock type housings, have stock-type controls and modules (no circuit board modules), be equipped with a magnetic pickup, be gear driven, and be mounted in the stock location. Billet distributor housings are permitted.
- c) ONLY camshaft driven distributors are permitted.
- d) Only one (1) ignition coil is permitted and must be mounted on the engine side of the firewall internal to the distributor cap.
- e) Electronic firing module amplifier box is not permitted.
- f) Computerized, multi-coil, dual electronic firing module box or crank trigger systems are not permitted. Magnetos are not permitted. All ignition systems are subject to approval by New London Waterford Speedbowl Officials.
- g) Adjustable timing controls are not permitted.
- h) Retard or ignition delay devices are not to be permitted.
- i) An MSD # 8728 External RPM limiter with a 6400-RPM chip or the MSD #8727CT set to 6400 RPM is mandatory. Cars with Rev limiters reading 5200 RPM or less during post-race inspections will be disqualified. Cars with Rev limiters reading more than 6400 RPM during post-race inspections will be disqualified.

The violet wire of the MSD #8728 must be cut back flush to the unit's housing. The green and the white wires of the MSD # 8728 must run directly to the coil negative. The green wire of the MSD #8727CT must run directly to the coil negative. The MSD RPM Limiter must be mounted on the engine side of the firewall in plain view. New London Waterford Speedbowl Officials may require the replacement of the 6400-RPM chip with a New London Waterford Speedbowl supplied chip at any time during an event. RPM limiters must be fully functional and operational at all times. The MSD Rev Limiter must be mounted on the right side firewall, and must be visible, but shrouded so the driver cannot access it.

- j) Accessories to regulate the power supply are not permitted.

- k) The tachometer wire must run from the distributor to the tachometer along the #8 dash bar separate from any other wires and in unobstructed view for inspection. The tachometer wire must be isolated from any other wires, connections or devices. The entire length of the tachometer wire must be visible from the distributor to the gauge.
- l) The vacuum advance unit may be replaced with a manual, non-electronic timing adjuster that does not extend more than two inches beyond the distributor housing.

14. Alternator

A functioning 12-volt single alternator system with an internal voltage regulator and one (1) output wire must be used. External voltage regulators are not permitted. The alternator must be mounted on the front of the engine. Only standard production V-type or flat type V-ribbed alternator drive belts will be permitted.

15. Battery

One (1) 12-volt gel or Glass Mat type battery with a minimum of 171bs. is mandatory. The battery must be located between the frame rails under the hood or the floor of the car. If located under the floor, the battery must be completely encased; if located under the hood the battery must have a suitable cover. The battery must not be forward of the radiator or rear of the rear end housing of the car. The battery location must be acceptable to New London Waterford Speedbowl Officials.

16. Engine Cooling System

Only water or Water Wetter-type additives may be used in the cooling systems. No antifreeze allowed.

17. Water Pump

A steel or aluminum, OEM-type mechanical pump must be used. Combination water pump/alternator units are not permitted. Any serpentine, cog or V-belt pulley system is permitted.

18. Engine Oil Specifications

Combustion enhancing oils or additives are not permitted.

19) Engine Exhaust System

- a) The following part numbers are the only headers permitted. All headers must remain unaltered and exactly match the New London Waterford Speedbowl factory sample headers.

Troyer Chassis – **Beyea AMSST-602N1-TA**, Flowrite SMS25 or Kooks SMS1033.

Raceworks Chassis – **Beyea AMSST-602N1-3**, Flowrite SMS45 or Kooks SMS1033

Chassis Dynamics – **Beyea AMSST-602N1-3**, Flowrite SMS35 or Kooks SMS1435.

SPAFCO Chassis – **Beyea AMSST-602N1-3** or Flowrite SMS55.

- b) The exhaust header flange must mount directly to the cylinder head with no spacers between the flange and the cylinder head. A maximum header flange thickness of one half (1/2) inch is permitted.
- c) Inserts are not permitted in any part of the header or collector. Merge, crossover and pyramid collectors are not permitted.
- d) Exhaust pipes must come out of the engine at cowl and must extend a minimum of six (6) inches past the cowl. Right exhaust pipe may run beneath the car, but must turn down and out toward the bottom of the right side frame rail.
- e) LOBAK #RCM 30-12-30, LOBAK #35-12-35, Kooks #R300-10, or Flowrite P/N FR300 mufflers are required at all times. Modifications or repairs of any type are not permitted on the muffler. Both muffler flanges must be intact. Mufflers must be removable for inspection.
- f) Thermal wrap is not permitted anywhere on exhaust system.
- g) Only one muffler and exhaust pipe allowed per side. Exhaust pipe ends must be turned down to track.
- h) Exhaust system subject to approval by New London Waterford Speedbowl Officials.
- i) Interior coatings are not permitted.
- j) Exterior coatings other than paint are not permitted. All other coatings including powder coatings are not permitted.
- k) The life expectancy for all Lobak mufflers is two years. Race teams are responsible for the condition of their mufflers. Mufflers found to have deteriorated baffles due to rust/rot will be treated the same as if they were modified. Your mufflers must be in good condition and have complete baffles.

20) Engine Drive Train, Flywheel and Clutch

- a) Stock OEM dimension steel flywheel for engine type. OEM type steel pressure plate and steel disc only. Solid type disc only, no paddle or button type discs. Minimum diameter 10" clutch and pressure plate. Drilling or lightening of any part is not permitted. Steel bolts only. Flat surface machining allowed only on the face of the flywheel. Any cutting on the backside of the flywheel is illegal.
- b) The following weights are the minimum allowed for each part:

Flywheel Only (no bolts): 14.5 lbs.

Pressure Plate, Cover, & Solid Disc: 16 lbs.

- c) The steel solid disc (no bolts) must maintain a minimum weight of 2.5 lbs. and a maximum weight of 3.8 lbs. after the combined weight has been determined.

- d) All flywheels, pressure plates and clutch discs must be approved by New London Waterford Speedbowl officials.

21) **Bell Housing**

Only commercially manufactured magnetic steel bell housings may be used. The bell housing must enclose the flywheel 360 degrees with minimum three sixteenths ($\frac{3}{16}$) inch magnetic steel. Any modifications you make to the bell housing must be done with three sixteenths ($\frac{3}{16}$) inch steel and welded in place (no bolt on pieces). A commercially manufactured bell housing (like the Quarter Master #008110440) with a bolt on bottom cover may be used. An opening no larger than three and one half ($3\frac{1}{2}$) by four (4) inches may be used for throw out bearing access. This hole may be covered with sheet metal.

22) **Transmission**

- a) Only OEM production stock 3 & 4 speed transmissions will be permitted. Top loader transmissions are not permitted. Gear ratio must be of stock OEM production.
- b) Only stock OEM factory housings will be permitted.
- c) Only OEM type, steel, angle cut forward gears are permitted. Square cut forward gears are not permitted.
- d) Removal of first gear or replacement of first gear with a metal spacer, in 4-speed transmissions is permitted. All other forward and reverse gears must be in working order, and they must be operational from inside the driver's compartment. All transmissions must have a constant engagement of the input shaft with gear and countershaft with cluster gears.
- e) Five-speed transmissions, with gears removed, are not permitted.
- f) Quick change transmissions are not permitted.
- g) Automatic or semi-automatic transmissions are not permitted.
- h) Machining or lightening of any internal rotating or non-rotating parts including gears, shafts and case is not permitted. Gun drilled transmission shafts are not permitted.
- i) Q Additional or different from OEM bearings other than the tail-shaft, which may have roller bearings, is not permitted.
- j) Auxiliary, over or under drive transmissions are not permitted. High gear must have a ratio of 1 to 1 and no other gear may have a ratio higher than 1.20 to 1.
- k) The shifter and all of its components must be made of steel or aluminum.

23) Rear Axle

- a) A standard weight/manufactured quick-change or straight rear end may be used. Ultra-light or lightweight rear ends or components are not permitted.
- b) Only magnetic steel axles, bearings, and axle housings are allowed.
- c) All axles must be a minimum of seven (7) lbs.
- d) Standard ten (10) inch housing and ring gear rear end must be used.
- e) Thermal dispersant coatings are not permitted.
- f) Lightened, ultra-light, EDM, scalloped, back-cut, ring gears are not permitted.
- g) Only locked rear drive axle assemblies permitted. No limited slip, ratchet, detroit locker, posi or gold track type differential permitted. Solid spool only.
- h) Cambered rear axle housings or other cambered components will not be permitted. A tolerance of 1½ degrees of camber (positive or negative) will be permitted.

24) Gear Rule

- a) 4.62 M
- b) 4.71 Maximum for Quick Change rear ends.
- c) Rear ends and components will be weighed as part of post-race tech.

25) Tires

- a) Hoosier Tire East of Manchester Connecticut will be the sole supplier of tires for the Lite Modified Division. Their contact information is listed in the "General Rules" section above.
- b) The size and compound numbers are 26.0/13.0-15 M30 on the left side and 27.0/13-15 M450 on the right side. If a tire cannot be identified, it will be considered illegal.
- c) New London Waterford Speedbowl Officials may confiscate and/or impound tires at any time for inspection.
- d) The JTR Eagle PPM Tester will be set at a fixed level and will be strictly enforced.
- e) A participant competing in any race at New London Waterford Speedbowl specifically agrees that he/she acknowledges it is illegal to soak or treat racing tires and that said soaking or treatment of racing tires is against EPA regulations and further contains carcinogens and hazardous material which are unfit for his/her health and the health of all competitors and spectators. Any participant found violating the rule is subject to suspension.
- f) New London Waterford Speedbowl will announce the number of tires available to teams in advance, using an event information form. New London Waterford Speedbowl competitors are required to register tires for each event. Tire registration form must be submitted to New London Waterford Speedbowl designated tire coordinator a minimum of 30 minutes prior to post time.

26) Coil Over Shocks

- a) The Lite Modified Division must utilize the track specified shocks only. Shocks are subject to dyno verification and must be within the manufacture's tolerance limits for each part number. Shocks must remain as manufactured with no alterations of any kind.

b) Approved shocks are:

Pro Shocks #TA55.5B
Front

Pro Shocks #TA745.5B
Rear

26a- COIL SPRINGS – Only coil spring suspension will be permitted. The suspension and coil springs at all four (4) wheels must be active and permit suspension movement in compression and rebound. All downward chassis movement while the race vehicle is in competition must be limited only by the normal increasing stiffness of the springs or the bottoming of the chassis against the racetrack, whichever occurs first. Any device or procedure that in the judgment of New London Waterford Speedbowl Officials attempts to detract from or compromise the above will not be permitted, including “coil-bind”. Any type of chassis travel limiter, used in compression or rebound, will not be permitted. Front shocks must have a minimum of 2” of piston available for spring travel in compression. All coil springs must not be colder than ambient temperature. A maximum of two full (360 degree) non-adjustable spring rubbers in each coil over spring is permitted. Shock/Coil over boots or bags are not permitted.

Coil Over Springs:

1. Coil over springs must mount to the lower A-frames.
 2. Strut bars will not be permitted for mounting of coil over front springs.
 3. Coil over springs must be manufactured from one solid piece of heavy-duty magnetic round steel (flat or oval wire is not permitted) and must be constructed with both coil ends closed and ground. One inactive coil on each end of the coil spring is permitted.
 4. Only one (1) spring per wheel will be permitted.
 5. Coil springs may be coated but coating thickness and material must be acceptable to New London Waterford Speedbowl Officials.
 6. All active coils of the spring must have the same coil spacing, same wire diameter, and same inside and outside diameter. The first and last coils may be different due to having closed and ground ends.
 7. Progressive or digressive rate springs will not be permitted.
 8. Front coil must be a minimum of 6” in free height and a minimum of 250 lbs. per inch of spring rate. Rear coil must be a minimum of 8” in free height.
- New London Waterford Speedbowl reserves the right to set and enforce a maximum coil spring rate in 2022.

27) Bearings and Hubs

- a) Front spindles must be linked to frame per NWMT rulebook using approved tethers. Low drag components (oil filled hubs, oiled bearings, low friction bearings, non-steel bearings, coated or polished spindles, bearings or races) will not be permitted.
- b) Oil filling of any spindles, wheel bearings or hubs is not permitted.

28) Ground Clearance Requirements

The frame rail and sheet metal ground clearance is a minimum of two (2) inches. All ground clearance requirements are measured with the driver in the car. Minimum tire pressures for all inspection purposes are ten (10) psi for both left side tires and fifteen (15) psi. for both right side tires. Air may be added to the tires to achieve only the minimum tire pressures during inspections, per a New London Waterford Speedbowl provided tire pressure gauge. Immediately following competition, just prior to inspection. Team members are not allowed to work on cars without approval from an official. This includes but is not limited to adjusting or manipulating the cars ride height by pushing down or lifting up on any part of the car.

29) Brake Components

- a) Four-wheel disc brakes are mandatory. Only magnetic cast iron or cast steel, round, circular rotors are permitted. Only metal brake calipers will be permitted. Drilled, slotted or grooved rotors are not permitted. Only factory dust cleanouts are permitted. Dust cleanouts should not exceed .038 in depth. If the dust cleanout exceeds .038 in depth, the rotor will be deemed illegal. The brake rotors must be bolted to the hubs. Floating brake rotors will not be permitted.
- b) Only single stage master cylinders are permitted.
- c) Brake calipers with a maximum of four (4) pistons are permitted. Each brake caliper's pistons must all be of equal size. Each brake caliper may not exceed a racer net price of \$265.00
- d) All rotors and brake components subject to New London Waterford Speedbowl Officials' approval.

30) Brake Cooling

Electric blowers are not permitted for cooling purposes in brake duct systems. Additionally, electric blowers are not permitted anywhere on the car for cooling (i.e. brakes, rear end, etc.).

31) Fuel Specifications

- a) Sunoco Race Fuel 260GTX is the only fuel permitted for use in the Lite Modified Division. Any blending of fuels or use of any additives is not permitted.

- b) Pump gas and E85 are not permitted.
- c) New London Waterford Speedbowl Officials will take fuel samples as part of their normal inspection process.
- d) Icing or cooling of the fuel system is not permitted in the garage, pit or paddock areas.
- e) Nothing may be placed in the fuel line except a standard fuel filter. The use of any type of fuel catalyst or other fuel-altering device is prohibited.

32) Fuel System

See NWMT Rulebook

33) Fuel Cell

Must meet NASCAR specifications with a fuel cell bladder made of a material that returns to its original size and shape after deformation. Rotational molded bladders are not permitted. It is highly recommended that the fuel cell bladder be no more than six (6) years old. Competitor must provide bladder model, serial number and date(s) to New London Waterford Speedbowl Officials before competing. If a gas cap is used it must be painted white with the car number on it for identification. For additional specifications see the NASCAR Rulebook. The minimum requirement for approved fuel cells at New London Waterford Speedbowl is as follows: ATL Super Cell "100" FBI Series Bladders. (Note: the complete cell will be the SUI-Series), and the Fuel Safe Sportsman Cell (SM Series). Any cell that is rated above these cells (ATL 200 & 500 series), and the Fuel Safe Pro Cell (PC Series), will also be approved for competition at New London Waterford Speedbowl.

34) Fuel Cell Container Installation

See NWMT Rulebook

35) Fuel Filler & Vent Requirements

See NWMT Rulebook

36) Fuel Line Shut Off Valve

An Oberg fuel line safety valve (part #SV-0828) shall be installed in close proximity to the fuel cell so a visual inspection of the valve may be performed by removing the body panel above the fuel cell. It should be securely mounted in the fuel line per the manufacturer instructions.

NOTICE: Competitors are solely and directly responsible for the safety of their race cars and racing equipment and are obligated to perform their duties (whether as a car owner driver or crew members) in a manner designed to minimize to the degree possible the risk of injury to themselves and others.

37) Roll Bars

a) The door bars (#9 A & B), on both the left and right sides, must have a minimum of four (4) bars equally spaced from top to bottom that must be welded horizontally between the vertical uprights of the main roll bar (#1) and the front roll bar legs (#2 A & B). The top door bar on each side must maintain a minimum vertical height of 15-1/2 inches from the top of the main frame rails to its centerline and match up with the intersection of the dash panel bar (#8) at the roll bar legs (#2A & #2B) at the front and the intersection of the horizontal

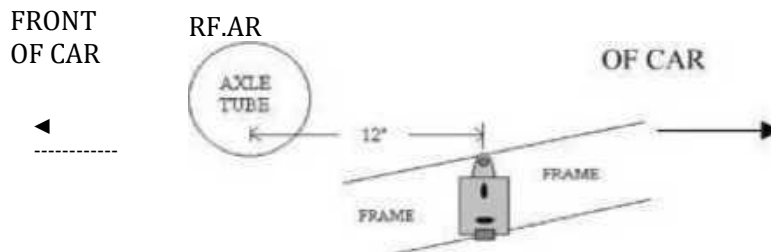
shoulder bar (#7) at the main roll bar (#1) at the rear. All door bars must be convex in shape. The door bars (#9 A & B) must have a minimum of six (6) vertical supports per side with two (2) equally spaced between each door bar. These supports must be made from a minimum of one and three-quarters (1 ¾) inches by 0.090 inch wall thickness magnetic steel seamless round tubing (not numbered but shown in the left side view of diagram #3). Right side door bars must cover a minimum of 25 inches of door length and may be either four (4) horizontal bars with six (6) vertical studs or two (2) horizontal bars and two (2) bars configured in an X design. If the X design is used, a vertical bar must connect through the center of the X from the top horizontal bar to the frame.

- b) A 13 gauge (0.0897 inch thick) magnetic steel anti-intrusion plate(s) must be securely welded to the outside of the left side door bars. The anti-intrusion plate(s) must fill the area between the horizontal centerlines of the top and bottom door bars, and vertical centerlines of main roll bar (#1), and the left front roll bar leg (#2A). The plate(s) must be formed to match the curvature of the door bars. Plate(s) welded between the vertical upright bars should be as large as possible. All plate(s) must have the corners welded with one (1) inch of weld followed by a maximum of three (3) inches of surface not welded and followed again by a minimum one (1) inch weld. To facilitate emergency removal of the left side door bars (#9A), the anti-intrusion plate must have six (6), 21/8 inch diameter holes cut in the anti-intrusion plate, with three (3) holes forward of the front vertical supports and three (3) holes rearward of the rear vertical supports in the following locations: The upper two (2) holes must be centered vertically between the left side door bars (#9A-1&2), at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support. The middle two (2) holes must be centered vertically between the left side door bars (#9A-2&3), at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support. The lower two (2) holes must be centered vertically between the left side door bars (#9A-3&4), at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support (see Diagram #9A in NWMT Rulebook).
- c) All cars must have a foot protection bar acceptable to New London Waterford Speedbowl Officials installed on the left side of the roll cage. The foot protection bar must be located at, or in front of, the pedal assembly, when viewed from the side and above. The foot protection bar must be completely welded to the left front roll bar leg (#2A) and extend forward and be completely welded to the main frame rail or front sub-frame.

Exhibit 1: Mandatory Jack Stands



Exhibit 2: Transponder Mounting Location



Crate Engine Owner _____ Team # _____

Driver _____ Division _____

2021 NEWLONDON WATERFORD SPEEDBOWL CRATE ENGINE REGISTRATION

ALL COMPETITORS USING A CRATE ENGINE TO COMPETE IN ANY NLWS EVENT MUST COMPLETE THE FOLLOWING AGREEMENT:

Crate Engine Serial Number: _____

Seal #1: _____ Seal #2: _____ Seal # 3: _____

By registering and signing this agreement, you will be allowed to compete and receive prize money and points at New London Waterford Speedbowl-sanctioned events. There will be NO prize money or points issued without registering crate engine with the NLWS Office prior to competing.

AGREEMENT:

1. I agree to the policies regarding the NLWS crate engine program, as outlined in the NLWS rules and regulations. This registration, or any other requirements in which division this motor is competing in.
2. I understand that the NLWS Crate Engines are not to be tampered with unless specified in my divisions rules. Any unauthorized breaking of the seals or unauthorized freshening or altering in any way is a violation of the NLWS rules.
3. I understand that by registering my crate engine(s) and using it/them to compete in any NLWS-sanctioned event, I, or my assigned driver(s), are subject to any and all penalties which might be imposed from time to time by the NLWS organization.
4. I agree to abide by the NLWS policy that a crate motor may be confiscated for inspection at any time. If the integrity of the said motor is not fully in compliance with the NLWS rules and regulations, I further understand that I am subject to penalties which may be imposed by NLWS, and my privilege to compete may be forfeited.
5. Failure to comply with the demand of the NLWS Official in Charge to confiscate a crate motor for inspection purposes will result in penalties. Team will be responsible to place motor in truck or trailer of NLWS choice for transport to builder inspection facility. Cost of inspection and delivery will be borne by NLWS if found legal, and all costs will be the responsibility of competitor if found illegal.

I understand and agree to the terms and conditions as outlined above.

Crate engine owner

Date: _____

Crate Engine Driver

Date: _____