

NASA SE7ENS CHALLENGE™

Official Rules

1 Definition and Claim

The **NASA SE7ENS CHALLENGE™** (7C) is an affordable and competitive racing series, offering a complete progression from training to full racing. It is primarily focused on wheel-to-wheel road racing, but also provides a time trials format as well as driver training.

The series shall function as an advertising and marketing tool for the series sponsors, the independent sponsors of each team, as well as the official sanctioning body of the series. The trade name "**NASA SE7ENS CHALLENGE™**" and these rules are the property of the National Auto Sport Association, Incorporated® located at P.O. Box 21555, Richmond, CA 94820; 510-232-NASA (6272).

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"SCCA" is recognized as being registered to SPORTS CAR CLUB OF AMERICA, INC. CORPORATION CONNECTICUT P. O. BOX 791 WESTPORT CONNECTICUT

The National Auto Sport Association makes no claims on the marks described herein. These marks are used in these rules for reference purposes only.

1.1 Intent

The intent of the NASA Se7ens Challenge is to provide National Auto Sport Association (NASA) members and owners of Lotus Seven type vehicles a fun and safe venue in which to experience and enjoy the performance of these unique cars to the fullest possible extent, i.e. wheel-to-wheel road racing. The Lotus Seven was designed by Colin Chapman to be highly responsive and fast. On public highways it is becoming increasingly difficult to develop driving skills and gain full experience with the capacity of these cars. The NASA Se7ens Challenge offers a place to do both. For people who want track time on a road course here is that opportunity. These events will also provide for the beginner who simply wants to learn what these experiences are all about. NASA Time Trial will provide Se7ens Challenge participants with a transition opportunity between high performance learning and actual racing.

1.2 Series Development

1.2.1 The Major Issue

Even in the on-track environment, safety and enjoyment difficulties exist when sharing the track with many non-Lotus 7-type vehicles. These difficulties derive from the Lotus'

small size, low weight, and incredible cornering speeds. Consider that most of the cars sharing the track with a Lotus 7 weigh at least twice as much. The Se7ens Challenge provides the opportunity to run races and time trials with small lightweight sports racers of similar speed and weight. It is NASA's intent to group all Se7ens Challenge series classes in one group and run them on the track only with other light-weight race cars whenever possible. However, in order to maximize track efficiency, NASA reserves the right to grid the Se7ens Challenge with any group it deems appropriate.

It is to be understood that these rules are offered in order to provide a working document for the development of Lotus Seven style racing in North America. In order to promote this development, the people who support the series by actual participation in the events are encouraged to make constructive contributions to the evolution of the series. Proposed classes are offered as some sort of logical starting point. Experience will be used to indicate any needed modifications. NASA event administrators are authorized to grant exceptions on a case-by-case basis in the interest of increasing the numbers and enjoyment of participants at specific events. However, the final classification of a given car will be determined by the NASA national administration. NASA may revise these rules at any time to alleviate difficulties that it identifies with their administration. Se7ens Challenge participants are encouraged to communicate any suggestions they have to NASA's Regions and Headquarters.

1.2.2 Driver Eligibility/Training

Participation in NASA Se7ens Challenge races requires drivers to be in possession of a valid NASA Super Se7ens Competition License.

1.2.3 High Performance Driving Event (HPDE)

For those not having a regular NASA competition license or other acceptable competition licenses, NASA, through its High Performance Driving Event (HPDE) program, provides one of the most cost-effective, user-friendly means of gaining the experience and skills necessary for a competition license.

To quote from the HPDE Rules and Regulations, "The purpose of a High Performance Driving Event is to provide NASA members with a non-competitive and controlled environment, where they can enjoy their cars more safely, and with the hopes that they will improve their driving skills. Novice drivers are required to successfully master the basics before they are allowed to drive in an intermediate level group. All drivers are required to operate their vehicles within the rules, and within the limits of the marked course. Failure to do so compromises the integrity of the program and will not be tolerated. The NASA administration strives to promote qualities like good judgment, responsibility, and safe driving, both on the track and on the highways. The HPDE program has proven that drivers of young and old alike, can share the tremendous enjoyment of 'pushing the envelope' while learning just as much about themselves, as they do about their cars."

Do to the extremely high performance capabilities of the Seven, it is our intent, where possible, to provide instructors who have a high level of familiarity with these cars.

Please refer to the NASA HPDE Rules and Regulations for complete details of this program.

1.2.4 NASA Time Trial (NASA TT)

To quote from the NASA TT Rules and Regulations, "NASA Time Trial is an automobile competition series focused on time trial style competition..." "NASA TT provides a venue

for spirited on-track competition with a high degree of both safety and convenience. NASA TT allows qualified individuals to compete in a 'best lap time' format in a prepared car and bridges the gap between HPDE and wheel to wheel racing."

NASA TT events for Se7ens Challenge drivers will be scored on the same basis as the Se7ens Challenge racing classes.

2 ELIGIBLE MODELS

2.1 General Eligibility

For the purposes of the NASA Se7ens Challenge Time Trial participants, HPDE safety rules will be in effect, while scoring will be done according to the racing classes.

NASA Se7ens Challenge *racing* events will be open to original Lotus 7 Series 1, 2, 3, 4, Birkin S3, Caterham 7, as well as any other Lotus Seven replica (provided that it is a *close* approximation of the original Lotus Seven design in size, weight, and appearance, and meets the criteria listed below).

All classes will utilize either a stock, tube-frame chassis as produced by a recognized constructor, with no modifications of either the chassis or suspension pick-up points, or a "home-built" chassis that replicates an existing design produced by a manufacturer. "Home-built" chassis will be subject to rigid inspection to insure safety and adherence to the spirit of these regulations.

All cars must have a wheelbase of between 85" and 93" and not exceed 1500lbs dry weight.

All cars shall be of a two-seat configuration, although fitting of the passenger's seat is required only in the Touring class.

All cars shall be front-engine and rear wheel drive.

All cars shall have the fuel tank located aft of the cockpit.

All cars are to be powered by a normally aspirated, gasoline fueled engine.

All cars shall conform to the NASA Club Codes & Regulations (CCR) safety requirements.

Specific class requirements are listed separately.

It is our specific intent to disallow the construction of the one-off specials that are possible via loopholes in some race series rules such as the SCCA "Production" Category Specifications.

All cars must be prepared in accordance with these rules.

2.2 Classes

In order to provide a somewhat "leveled" competitive playing field, there will be five classes. The NASA Se7ens Challenge is intended to be a "gentleman's" series, thus

adherence to engine specifications is on each participant's honor. NASA reserves the right to introduce a "Success Weight" formula similar to the SpeedVision World Challenge and British Touring Car Championships, in order to promote close competition. Class specific regulations are discussed later, but the classes briefly are:

2.2.1 Push Rod Class

This class will be for all push rod engine powered variants including BMC A series, Ford Pre-crossflow, and Crossflow engines.

2.2.2 Touring Class

This class is for cars powered by engines of approximately 160hp maximum output.

2.2.3 Clubman's Class

This class is for cars powered by engines of approximately 200hp. These cars represent significantly increased performance, but are short of an all-out racecar.

2.2.4 Open Class

This class is for cars that are powered by engines exceeding approximately 220hp and/or are prepared for maximum performance in other areas.

2.2.5 Motorcycle Class

An invitational class, this class is for cars that are powered by motorcycle engines. If this class is not in effect then normal motorcycle class entrants may run in the Open class.

3 REQUIRED SAFETY EQUIPMENT

3.1 Conformance to the NASA Club Codes and Regulations (CCR)

3.2 All cars and drivers must conform to NASA's *Club Codes and Regulations* (CCR). Where different, the information in the NASA Se7ens Challenge rules supersedes the CCR. If participating in HPDE or TT, then refer to the appropriate sections of the CCR for safety equipment requirements. The following regulations only apply to race events.

3.3 Cage/Rollover Protection

An acceptable roll cage option will be the SCCA GCR Section 18 "Low Front Hoop Option."

3.4 Drive Shaft Safety Loop

It is required that drive shaft safety loops be installed on all cars.

4 CLASS SPECIFICATIONS

4.1 Push Rod Class

4.1.1 Engine

"Push rod" engines such as BMC A series, Pre-cross flow, and Cross flow Ford engines. Engine preparation level is free, but must use normally aspirated carburetor induction.

4.1.2 Transmission

Production car based, max 5 speed "H" pattern.

4.1.3 Wheel Size

Max Width 7".

4.1.4 Tires

Must use Spec tires. If no tires are specified by the administration, then the tires are unrestricted.

4.1.5 Road/Weather Equipment

Windshields and other weather equipment may be removed.

4.1.6 Minimum Weight

1100 lbs without driver, immediately following all qualifying and race sessions. Leeway as per the CCR.

4.2 Touring Class

This class is intended to accommodate cars that are legitimately street driven. Ideally, competitors in this class will be able to drive their car to the circuit, race successfully, and drive home without having to subject their car to excessive stripping or gutting. All cars in this class must be fitted with a passenger's seat.

4.2.1 Engine

The intention is to produce an engine with approximately 160HP maximum. The engine must be equipped with a wet sump. Engine management is unrestricted. Induction must be normally aspirated but is otherwise unrestricted.

4.2.2 Flywheel

Must be ferrous or aluminum, and must use the standard starter ring gear and must accommodate a "standard" clutch as defined below.

4.2.3 Clutch

Standard size and type of clutch, minimum clutch diameter 8 ½". No multi disc clutches.

4.2.4 Transmission

Production car based, maximum 5 speed H pattern shift. Older cars may be updated to the current standards.

4.2.5 Wheel size

Maximum wheel width is 7".

4.2.6 Tires

Street legal, DOT rated (No R Rated). Must use Spec tires. If no tires are specified by the administration, then, other than the street legal, DOT requirement, the tires are unrestricted.

4.2.7 Minimum Weight

1300 lbs without driver, immediately following all qualifying and race sessions. Leeway as per the CCR.

4.2.8 Road/Weather Equipment

Cars will be raced with headlights and windshield in place.

4.3 Clubmans Class

This class is for cars of significantly increased performance, but short of an all-out racecar.

4.3.1 Engine

The intention is to produce a normally aspirated engine of approximately 200HP maximum. Must have wet sump oiling.

4.3.2 Flywheel

Flywheel must be ferrous or aluminum, and must use the standard starter ring gear and must accommodate a "standard" clutch as defined below.

4.3.3 Clutch

Standard size and type of clutch, minimum clutch diameter 8 ½". No multi-disc clutches.

4.3.4 Transmission

Production car based - max 6 speed H pattern shift.

4.3.5 Wheels

Max wheel width: 8".

4.3.6 Tires

DOT "R" rated or higher wear rating. Must use Spec tires. If no tires are specified by the administration, then, other than the DOT "R" or higher requirement, the tires are unrestricted.

4.3.7 Road/Weather Equipment

Windshields and headlights may be removed.

4.3.8 Minimum Weight

1200 lbs without driver, immediately following all qualifying and race sessions. Leeway as per the CCR.

4.4 Open Class –intent

This class is for cars that are prepared for maximum performance. This class will also serve as a "catch-all" for cars that do not otherwise meet the specifications of other classes.

4.4.1 Engine

Normally aspirated engines built to exceed 220HP. Dry sump systems are allowed, clutch and flywheel are unrestricted. This requirement is meant to classify engines of extreme output. However, cars with significantly less power may find themselves classified in this class due to other modifications.

4.4.2 Transmission

Unrestricted origin, max 6 speed.

4.4.3 Wheels

Max width 10".

4.4.4 Tires

Tire type is unrestricted. Must use Spec tires. If no tires are specified by the administration, then the tires are unrestricted.

4.4.5 Minimum Weight

1100 lbs without driver, immediately following all qualifying and race sessions. Leeway as per the CCR.

4.5 Motorcycle Class

This class is for cars powered by 4 cylinder, 4 stroke, normally aspirated motorcycle engines. This class is offered as an invitational class with the detailed class rules to be determined by consensus of the competitors.