<u>Background for F5 Ad Hoc Committee Class Survey For F500 Participants</u> (2014 - 2015 - 2016 Preparers / Owners / Drivers)

<u>Background</u>: The F5 Ad Hoc Committee was formed at the request of the CRB following the Daytona Runoffs to provide class feedback on the many specific requests for performance and aerodynamic adjustments received at that time.

Leon Mitchell chairs the Committee, which consists, in addition, of Steve Jondal, Carl Maier, Cory McLeod, Dan McMahan, Calvin Stewart, Russell Strate, Dave Vincent, Jack Walbran, and James Weida. Among us, in differing combinations, four have two stroke cars, three motorcycle engine cars, and two both; and three have sports car nose cars, four open wheel cars, and two both. We have 494 Rave, 493, 593 and various motorcycle engines.

Recommendations to date:

To date, following the CRB adjustment of the motorcycle engine restrictor to 30 mm effective December 1, 2015, we have recommended:

- 1. Making use of the intake plenum/resonator balance tubes optional for Rotax 493 and 593 engines, which became effective March 1, 2016.
- 2. Prohibition of motorcycle engine dry sumps and crankcase vacuum pumps, effective June 1, 2016.
- 3. Required retention of motorcycle engine stock water pumps, effective June 1, 2016.
- 4. Prohibition of the "removal" or "addition of any component" to motorcycle engines, effective June 1, 2016.
- 5. The attached revision of the F5 Bodywork rule which is proposed to be made effective for 2017. Generally, the revisions limit the use of ground effects to achieve aerodynamic downforce. The revised Bodywork rule was published in the June 2016 FasTrack for member comment.

Competition Monitoring:

After reviewing available information, the Committee determined that there are no on track performance data that have not previously been considered that would support further objective competition adjustments at this time, whether between the motorcycle motors and the Rotax 593, or between and among them and the other Rotax motors, specifically including both the Rotax 493 and 494 RAVE (considering on track performance this year). Accordingly, the Committee has recommended that the F/SRC and CRB monitor on track performance through the June Sprints (when, we understand, the F600 Challenge group will race in the F5 race), and immediately thereafter, with Committee inputs, consider any indicated competition adjustments for implementation for the 2016 RunOffs at Mid Ohio.

EFFECTIVE FIRST DAY OF THE MONTH UNLESS OTHERWISE NOTED

June 2016

Recommended Items for 2017

The following subjects will be referred to the Board of Directors for approval. Address all comments, both for and against, to the Club Racing Board. It is the BoD's policy to withhold voting on a rules change until there has been input from the membership on the presented rules. Member input is suggested and encouraged. Please send your comments via the form at www.clubracingboard.com.

F5

1. #19530 (Formula/Sports Racing Committee) Bodywork revisions Thank you for your letter. The CRB recommends the following changes/revisions to the F5 bodywork rules. Change 9.1.1.D.9 to read as follows:

9. Bodywork

- A. All mechanical components of the car, forward of the roll cage, shall be covered by suitable bodywork. Exceptions are the wheels, brakes, front suspension components, and the cockpit. The driver's seat shall be capable of being entered without the removal or manipulation of any part or panel.
- B. Sports car noses are recommended provided they do not extend beyond the outside edge of the front tires, do not stand taller than the top of the front tires, and their rearward most portion does not extend beyond an imaginary line drawn from the center of the front wheel, forty (40) degrees forward from vertical. A sports car nose shall be closed across the front and top except for air duct openings ducted to heat exchangers, provided that ALL air directed to heat exchangers shall pass through those exchangers, except for ducts directed at brake assemblies.
- C. Bodywork behind the front wheels and forward of the rear wheels shall extend to within one (1) inch of a line connecting the outer edges of the front and rear wheels. In a horizontal plane, it shall begin within 2.5 inches of the rear-most part of the front tire in the completely turned position and extend to within 4.5 inches of the front of the rear tire. The sidepod(s) shall be continuous from the outside edge of the main bodywork, at a minimum height of nine (9) inches, maximum twelve (12) inches measured from the bottom plane of the car. The sidepod(s) shall be closed across the front except for air duct openings to heat exchanger(s), but ALL ducted air shall pass through those exchanger(s). The sidepod(s) may be open to the rear. Sidepod(s) is (are) intended to restrict wheel entanglement between cars.
- D. Lateral protrusions of the bottom of the nose or of the floor of the required sidepods, beyond the shape of the nose in front of the front tires and beyond the floor under the required sidepods, are allowed, provided that they do not extend, respectively, more than one inch beyond the shape of the nose or beyond the floor under the required sidepods, and provided that the overall length and width of the car conforms to the dimensions provided in these rules. (The areas between the rear of the front tires and the front of the sidepods, and between the front of the rear tires and the rear of the sidepods, are exempt from the one inch maximum, but any protrusions in those areas must not violate the minimum distance requirements between the sidepods and tires.)
- E. The purpose of these rules is to *limit* the use of "ground effects" to achieve aerodynamic downforce on the vehicle. Thus, for full width of the body between the front and rear axles, the lower surface (surface licked by the airstream) shall not exceed 2.54cm (1 inch) deviation from the horizontal through that surface. (This is not to be interpreted as requiring a floor pan beneath the motor or rear axle.) Except for rub strips within that 2.54cm (1 inch) deviation rule, the bodywork shall not extend below the surface of the tub or chassis floor to the rear of the front axle. Seat bucket or other protrusions shall not circumvent this rule.
- F. It is not permitted to duct air through any part of the bodywork for the purpose of providing aerodynamic downforce on the car. It is not permitted to duct any air through the downward facing surface of the nose of the car or through the lower surface of the car between the front and rear axles.
- G. Ducts through the side or top of the body and/or sidepods to duct air to and through heat exchangers or to allow cooling air into the engine compartment are permitted, provided that they are not used to generate aerodynamic downforce. Engine air intake ducts and scoops are permitted, provided that they are not used to generate aerodynamic downforce.
- H. Wings are prohibited.
- I. Diffusers are allowed, with or without strakes, provided that the overall length and width of the car conforms to the dimensions provided in these rules.
- J. Splitters are allowed, provided that they extend at least to and do not extend more than one inch beyond the line(s) defined by the leading edge(s) and corners of the nose and the sponsons of the sports car nose, and provided that the overall length and width of the car conforms to the dimensions provided in these rules.