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## Press Release

Schickler Tagliapietra begins preliminary design for the new IACC 90 foot race yachts. The goal of this work is to position the design office out in front of this class, ready to make valuable performance gains in the short design cycle available. Because the final details of the class remain under debate, a number of key research areas have been anticipated. Utilizing parametric modeling techniques, the preliminary design can be prepared and updated as more information becomes available.

The overall length and draft have been chosen; evidence that the next IACC rule will be a box rule. The intent is to speed the boats up considerably, therefore an improved DLR has been targeted. The hull form itself has been totally parametrically generated and improved through several iterations toward a balance between easily driven planing off the wind and ultra-high pointing. The bow profile is the result of pushing to the maximum dimension of box rule length, while eliminating all extraneous material.

The minimum drag appendage package has been established based on the idea that the race course and boats will be altered to make downwind performance of far greater importance. The possibility of two rudders has been accounted for in the preliminary design. With extensive experience designing state-of-the-art canting and lifting keel systems, Schickler Tagliapietra are poised to apply highly evolved engineering concepts and techniques to the highest level of inshore racing in the yachting world.

The close interaction of boat, rig, and sail aerodynamics already begun in the 32<sup>nd</sup> AC will be even more crucial in the 33<sup>rd</sup>. Based on previous versions of the IACC rule, it is expected that the design space in the area of spars and rigging will be fairly open. This is an excellent area for development, offering large performance gains for each design cycle completed. Schickler Tagliapietra anticipate greater latitude for mast rotation. Controlling this rotation and utilizing fairings and other movable components can create a highly tunable wing mast/sail combination. The two spreader millennium wing mast pictured is an elegant solution to the structural and aerodynamic challenges of the new class of yachts. It includes newly developed concepts for applying twist to the mast tube, thus developing a highly refined and efficient foil.

Crew numbers near 20 will be needed to provide the horsepower necessary for the powerful sailplan. Close collaboration with leading deck hardware manufacturers will prove valuable in this, as other, America's Cup cycles. Schickler Tagliapietra bring new concepts and the most advanced parametric design and verification techniques for customizing the hardware, along with the standing and running rigging, to the next level. Sail handling above and below deck will require continual development to make these larger, faster boats able to maneuver quickly without costly errors.

Schickler Tagliapietra is ideally positioned to perform research, design and development of the newest generation of the IACC. The company, formerly known as SYDE, is a general partnership between Douglas Schickler and Davide Tagliapietra. With a combined yacht design experience of 20 years, they draw on experience with a wealth of race boats – from mini to IMOCA, and from VO60/70 to America's Cup v4 and v5. They operate from an office in Amsterdam, Holland and from Valencia, Spain.