ORC

World Leader in Rating Technology

Annual General Meeting held on 9th November 2010
Athens, Greece

INDEX

Chairman
Bruno Finzi
Viale Giustiniano 10,
20129 Milano, Italy

Mobile: +39 335 8036602
Fax: +39 02 29512533

E-mail: b.finzi@finzi-ceas.it

Secretariat
c/o Vivian Rodriguez
Casella Postale 21,
07026 Porto Rotondo (OT), Italy

Mobile: +39 347 6029085
Fax: +39 0789 398034

E-mail: secretariat@orc.org

MINUTES of the Annual General Meeting of the Offshore Racing Congress, Ltd. held at 13.30 on 9th November 2010 in Athens, Greece.

Congress Members Present:	Bruno Finzi (Chairman)	Italy
	Wolfgang Schäfer (Deputy Chairman)	Germany/Austria
	Jose' Frers (Deputy Chairman)	Argentina
	George Andreadis	Greece
	Jean Louis Conti	France
	Sten Edholm	Sweden
	Don Genitempo (Honorary Treasurer)	USA
	Philippos Georgakis	Cyprus
	Nuno Goncalves Henriques	Portugal
	Zoran Grubisa	Croatia
	Giovanni Iannucci	Italy
	David Irish	ISAF
	Noboru Kobayashi	Japan
	David H. Lyons	Australia
	Vadim Mekhanikov	Russia
	Enrique Molinelli	Spain
	Alessandro Nazareth	Italy
	Ab Pasman	The Netherlands
	Christian Plump	Germany
	Peter Reichelsdorfer	USA
	Abraham Rosemberg	Brazil
	Veiko Rosme	Estonia
	Lazaros Tsalikis	Germany
	Yuri Vlasenko	Ukraine
	Ecky von der Mosel	Germany
	Godwin Zammit	Malta
	Hans Zuiderbaan	Holland
Alternate Members:	Henrik Andersson substituting Patrick Lindqvist - Finland	
	Jean Louis Conti substituting Jean Bertrand Mothes-Masse - France	
	Eva Holmsten substituting Thomas Nilsson - Norway	
	Emilio Feliu substituting Manuel Torres Simon – Spain	
	Wolfgang Schaefer substituting Bruno Frank – Switzerland	
Apologies for absence:	H.M. King Harald V of Norway	Honorary President
	June Lee	Korea
	Martin Hannon	New Zealand
	Albert Rozin	Latvia
	Gerd Schmiedleitner	Austria
Officers present:	Vivian Rodriguez	Secretary
	Nicola Sironi	Chief Measurer
Observers:	Antonis Assimacos	Greece
	Dobbs Davis	USA
	Emanuela Donati	Italy
	Roula Galani	Greece
	Boris Hepp	Germany
	Yannis Kalatzis	Greece
	Paolo Luciani	Italy
	Antony Matush	UK
	Dan Nowlan	USA
	Panayotis Papapostolou	Greece
	Fabrizio Pirina	Italy
	Edoardo Recchi	Italy
	Konstadina Sfakianaki	Greece
	Marina Spirideli	Greece
	George Sykaris	Greece
	Christos Theodossis	Greece

1.00 CHAIRMAN'S REPORT

Chairman Bruno Finzi welcomed all to the Annual General Meetings, and introduced the alternates present among the Congress delegates: Henrik Andersson substituting for Patrick Lindqvist (FIN); Jean Louis Conti substituting for Jean Bertrand Mothes-Masse (FRA); Eva Holmsten substituting for Thomas Nilsson (NOR); Emilio Feliu substituting for Manuel Torres Simon (ESP); and Wolfgang Schaefer substituting for Bruno Frank (SUI).

The Chairman noted there has been a growth in both the breadth and depth of ORC racing around the world in 2010, which combined with the relatively few submissions this year indicates the ORC rating systems are performing well. He thanked the ITC for its continued hard work in improving the ORC's VPP, noting the racing in ORC championships was closer than ever, a testament to the accuracy and strength of the VPP.

A report was given on the status of Submission 133 from the ISAF Executive Committee to the ISAF Oceanic and Offshore Committee, where ORC is being recognized by ISAF for its current Rating and Measurement systems and classes, to have sole authority to establish and administer 5 ISAF/ORC classes, and to manage and administer an annual ORCi World Championship and a biennial ISAF Offshore Teams Championship. The Chairman noted there was support for this measure and anticipated it to pass in both the Committee and Council.

He also noted that the discussions with RORC on a merger proposal are ongoing, with the common goal of having a global rating authority. There is still much to do before any details can emerge on how this single authority will operate and the details of its rating products, but he said the discussions are proceeding in an atmosphere of mutual trust and confidence.

2.00 THE TREASURER'S REPORT AND AUDITED ACCOUNTS

The Audited Accounts for 2010 were sent to all Congress Members for approval. They were approved by mail vote. The Treasurer also circulated to the ManCom the Income & Expenditures of 1st, 2nd & 3rd quarter 2010. They both are well within the 2010 budget.

Payment of 2009 levies are mostly settled as well as 50% of the 2010 invoices issued in 2010. Bank balances have remained fairly constant. The budget for 2011 was prepared for submitting to the Congress.
This budget is based on the assumption to maintain unchanged levies for ORC certificates. The budget was unanimously approved by the Congress.

Levies were confirmed unanimously by the Congress as follows:

ORC Int.:	€70
ORC Club:	€42
IOR:	€42 ORC Club certificate for free

Web services:	
Speed Guide & Stability Datasheet:	€75 charged to user, €25 credit to local RO
Certificate copies and trial certificates:	€10 charged to user, €3.33 credit to local RO with minimum order of €50

3.00 APPOINTMENT OF AUDITORS

A motion to re-appoint Hays McIntyre as auditors for the coming year was seconded and unanimously approved.

4.00 APPOINTMENT OF HONORARY TREASURER

The Chairman made a motion to re-appoint Don Genitempo as the Honorary Treasurer of the Association.
The motion was seconded and unanimously approved.

5.00 MEMBERSHIP OF COMMITTEES

The following changes were agreed with effect from 10th November 2010:

- ITC Research Associates
Axel Monhhaupt is stepping out from the Research Associates.

- Measurement Committee
Michiel Woort is joining the Committee in substitution of Javier Mendez.
Robert Jacobsen is joining the Committee in substitution of Gerd Kall.

- **Offshore Classes & Events Committee**
Martin Billoch (GP26 Class representative) to step out of the Committee.
Eva Holmsten is joining the Committee in substitution of Hans Broman.
Vadim Mekhanikov is joining the Committee as representative of the Sportboat Class.

- Race Management Committee
Joachim Majander is joining the Committee in substitution of Timo Sarainmaa.

- **Promotion & Development Committee**
Don Genitempo to step out of the Committee.
Vadim Mekhanikov is joining the Committee.

The above changes were unanimously approved by the Congress.

REPORTS & RECOMMENDATIONS OF COMMITTEES

6.00 INTERNATIONAL TECHNICAL COMMITTEE

ITC Chairman Alessandro Nazareth reported.

6.1 Allocated Submissions

6.1.1 SUI 1 - FURLING MAINSAIL CREDIT

ITC agreed about introducing a different treatment for these kinds of masts with furling mainsails if the mast weight has not been recorded. A reference weight of the mast will be introduced, with a 20% higher tube weight (that will accounted for in the larger tube profile and internal furling system), while rigging and VCG will remain unchanged:

TUBE WEIGHT = DEFAULT TUBE WEIGHT *1.2
RIG WEIGHT= DEFAULT RIG WEIGHT
TUBE VCG = DEFAULT TUBE VCG
RIG VCG= DEFAULT RIG CG

The gyradius adjustment will be computed using the above mast weight and VCG compared to the normal default weight. ORC Club boats that have no measured flotation and heeling moments will have a new reduced RM that will be computed by subtracting from the total displacement and VCG the default mast weight, and then adding the reference weight of the furling mast computed as explained above.

The committee suggests to all owners having a furling mast (that normally have mainsails with no battens and thus a negative roach) to measure the girths and hence obtain a smaller sail area compared to the default area assigned by the VPP.

6.1.2 ESP 1 - MOBILE BOWSPRIT

The committee is in favour of allowing the mobile bowsprit, and in fact some years ago for ORC CLUB a boat's TPS was considered as an SPL and the certificate was issued. The Chief Measurer proposed as a simplification that when measuring this kind of boat the TPS will be recorded as SPL and hence the boat will be considered as being "Asymmetric on pole."

6.1.3 ESP 2 - ORC RULE 206.4 – CLARIFICATION

The current rule allows the use of both pole and sprit, thus declaring both SPL and TPS.
The only thing to do is to correct rule F7.2 that is misleading, as it refers to an asymmetric spinnaker while it should address every kind of spinnaker (symmetric and asymmetric).
The clarification of tacking point for symmetric, asymmetric, code0 (TPS) and jib (J) is not necessary as it is already in the rule.

6.1.4 FRA 1 - CREDIT FOR FURLING GENOAS

ITC agrees with the submission but prefers to apply the credit to all boats with a furling jib with LPG> 1.1 J as many cruising boats have furling jibs with LPG below 1.35 J but above 1.1 J.
For the boats with LPG<1.1 J it is correct not to apply the credit as they almost never reduce area up to 20 kts TWS.
The rule will be written in a way that would avoid any exploitation (e.g. measuring a jib with a 135% overlap to obtain the credit and race with a 105% Jib).

6.1.5 FRA 2 - CODE 0 - FRA 3 and FRA 4-- CODE 0 ONLY CONFIGURATION

When only a code0 sail is declared, the VPP currently performs a full run (upwind and downwind) with this kind of sail with the AMG at 75% of the ASF. Then the code0 performances are compared with the jib-only performances (upwind) and with the spinnaker-only performances when present (downwind) to obtain the fastest result.

The committee observed also that the current code0 sails have AMG girths not bigger than 55-60% of the foot to be used as true upwind sails, while a spinnaker with 75.1% mid girth is almost impossible to be used as an upwind sail with good results.

So, ITC believes that the current treatment of code0 sails should be kept unchanged. Code0's with 74.9% AMG are not common sails in the racing field, and the committee feels comfortable in making no change to avoid the possibility of having a range where it is not possible to measure sails (as it is now below 55% and above 51% of LPG).

The committee noted that the artificial increase of the AMG to 75% of the foot for configurations with only a code0 used as a downwind sail is over-predicting its performance. So next year a new way of treating code0 configurations will be applied: two downwind runs will be made, one with the actual code0 area and one with an asymmetric tacked on the centerline with the same surface of the code0 without any artificial increase of the mid girth at 75% of the foot. This will return a better handicap for a code0-only configuration and no large jump in reaching conditions with an asymmetric spinnaker and a code0 with an AMG in the range of 75% of the foot.

6.1.6 FRA 5 - TWIN KEELS

Next year boats with this configuration will be allowed to race in ORCi (it is already possible in ORC CLUB).

The double keel will be coded into 2011 VPP taking into account the following inputs:
- fin distance from bow
- span
- top and bottom chords and thicknesses
- y-offset (distance from CL of fin)
- angle of fin

The scheme for force prediction is:
- viscous drag with the transitional flow scheme
- induced drag: existing scheme applied for double rudders and canards

6.1.7 FRA 6 - STABILITY EFFECT

ITC is fully convinced that the current treatment of stability by the VPP has adequately addressed the unanimous request coming from sailing constituency of not favouring boats with low stability. After 3 years of adoption of this new stability scheme in the VPP it seems that the effect is working in the correct direction, yet there are some claims that this is still not enough. Going back to 4 years ago in the stability treatment could make some low stability cruising boats more competitive, but will oblige the majority of the fleets currently racing to reduce their stability to remain competitive. So the committee has decided not to support this submission.

6.1.8 FRA 7 - ADDED SCOOP

After the Delft meeting the French chief measurer sent to the committee the offset files of the test boat with and without a scoop. The first thing that was noted was that the lengthened boat (with 28 cm scoop added) was not presenting the manual rudder as the shortest boat did. So adding the manual rudder to the lengthened boat reduced the GPH variation at 16 sec/nm about (instead of 25 sec/nm).

The committee is revising the transom drag effect (see below par.3.4.) so the ITC believes that the fine tuning of the treatment of transom drag will reduce the handicap dependency from LOA.

6.1.9 GER 1 - VPP DOCUMENTATION

The 2010 version of the VPP Documentation has been double-checked by the programmer Davide Battistin and Andy Claughton and published on ORC web site during the meeting.

For future years ITC would like to have the possibility to publish updated documentation as soon as possible after the final release of the ORC VPP.

6.1.10 GER 2 - ILC SINGLE NUMBER HANDICAPS

ITC agrees that the single number to be used in inshore races should be changed, as the Olympic triangle is no more used, while the WW/LW course is used in the majority of cases.
So the committee proposes to change the new inshore time-on-distance coefficient as a weighted average of WW/LW handicap with the following weights:
25% WW/LW 8
40% WW/LW 12
35% WW/LW 16

Inshore TCF, PLT, PLD and triple number scoring coefficients will be changed accordingly.

6.1.11 GER 3 - MAINSAIL DEFAULT VALUES

Mainsail default girths values are used only for ORC CLUB certificates when girths are not measured. So ITC proposes to change the default girths to have a more faired leech curve on the default mainsail, while keeping the same surface.

The new mainsail default girths will be:

HB = 0.05 * ***E***
MGT = 0.25 * ***E***
MGU = 0.41 * ***E***
MGM = 0.66 * ***E***
MGL = 0.85 * ***E***

Regarding the definitions of areas, the current rule is almost self-explanatory:
• Measured areas are those computed on the measures taken on the sails
• Rated areas are the areas used by VPP
• Default areas (used only for spinnakers - for mainsails and jibs only default measures are used) is the minimum area of the spinnaker. If a spinnaker's area is below this limit its rated area is the average between the measured and the default.

From next year, for the sake of simplicity, for measured spinnaker areas below the default – that will be called "minimum" from next year - the rated area will be the same as the default, that will be then called minimum area.

6.1.12 GER 5 - WBV AND CEXT

Regarding the definition of Water Ballast Volume, IMS rule E5 clearly states that it is the volume of water ballast that can be measured with a double inclining (E5.2 to E5.4), or taken directly by the measurer.

Regarding the definition of CEXT (crew Extension), ORC Classes rule 4.2 c) is correct, but the option to include it to the ORC Rating Rules will also be taken in consideration.

6.1.13 GER 6 - DIRECT INPUT OF PIPA IN ORC CLUB

The current option of entering PIPA and PRD at the same time (being an invalid measurement procedure) will be corrected.

For ITC the direct input of PIPA should not be encouraged.

6.1.14 GER 7 - SECOND FIELD FOR ISP

ITC agrees on the proposal, but defer to the Measurement Committee for final decision on how to handle with this double measurement.

6.1.15 GRE 1 - SPINNAKER AT SMALL TWA

The problem of a spinnaker used at reduced TWA's has been partially addressed last year and the ITC worked the whole year on this subject:
• The whole set of spinnaker coefficients (symmetric, asymmetric on CL and on pole) has been revised

below AWA=60.
• A new depowering system has been introduced with a reefing factor fixed at 0.85 *Area Default/Area Spi and a maximum heel angle fixed at 28°.
• The introduction of a VMC (see par. 2.1 below) concept will mainly affect the crossover zone between jib and spinnaker.

6.1.16 NED 1 – NON-SPINNAKER RATING

The current formulation of non-spinnaker configurations (boats that are treated with an asymmetric sail on centerline with the same surface as the genoa or jib) is considered correct by ITC, who has made a further investigation on this subject.

Looking at the different ways the two areas (of jibs and spinnaker) are computed, it was discovered that measuring a jib or genoa as a spinnaker returns an area 3.5% larger than the jib.

Therefore ITC has proposed to rate the non-spinnaker configuration with a spinnaker of area that is 3.5% greater than the largest jib/genoa, but has also accepted a proposal to further evaluate the VPP beta version with data of boats from the Netherlands fleet before making its final decision.

The Committee would like to advise that an important consideration is the scoring system used when some of these boats are racing: if the race is scored with single number systems (GPH, TCF, triple number etc.) and if the race has a very reduced number of downwind legs, or if with the wind is particularly strong and a lot of boats didn't use spinnakers, the boats rated with no spinnakers are undoubtedly favoured, so other scoring systems should be used (PCS, PLS, etc).

6.1.17 RUS 1 - FRICTION DRAG

The current Friction Drag is computed at various heel angles taking into account different wetted areas as described in VPP at par. 5.1.1, so the submission is already accomplished.

6.1.18 Preparation of an "all effects" test run and a beta VPP for immediate release

After the meeting the ORC programmer prepared an "all effects" test run and a 2011 beta VPP with all major modifications approved (see chapt. 6.7 below), to be distributed right after the next AGM in Athens.

It will be important at the same time that ORC will appoint reliable and skilled beta testers (among rating officers, designers, DVP subscribers) that will debug the new code.
This debugging will enable ORC to issue certificates from the 1st of January without having to make any later fixes during the season (as happened in the previous years) that would oblige rating offices to re-issue already issued certificates.

The proposals of the Committee to the submissions were unanimously approved

6.2 Aerodynamics

6.2.1 <u>Introduction in VPP of VMC (Velocity made good along the course) concept - Jib-Spinnaker crossover (spinreef issue)</u>

A different approach for handicapping reaching conditions will be introduced, as the test runs were satisfactory and the committee felt comfortable in inserting it into next year's VPP.
This is based not only on estimated performances but will take into account the so-called VMC (Velocity Made good along Course) concept very often used in long offshore races, where the best combination of different courses is used to get the fastest time to the mark.
This is a completely new approach that illustrates how ORC International is a handicapping system and not just a pure VPP, one that separates the concept of performance from handicap.

6.2.2 <u>Jib-Spinnaker crossover fine-tuning (spinreef issue)</u>

The crossover sailing point between the jib and the spinnaker is a known problem to the ITC, and this year the Committee devoted a long time in discussing this issue, making different tests to verify various approaches.

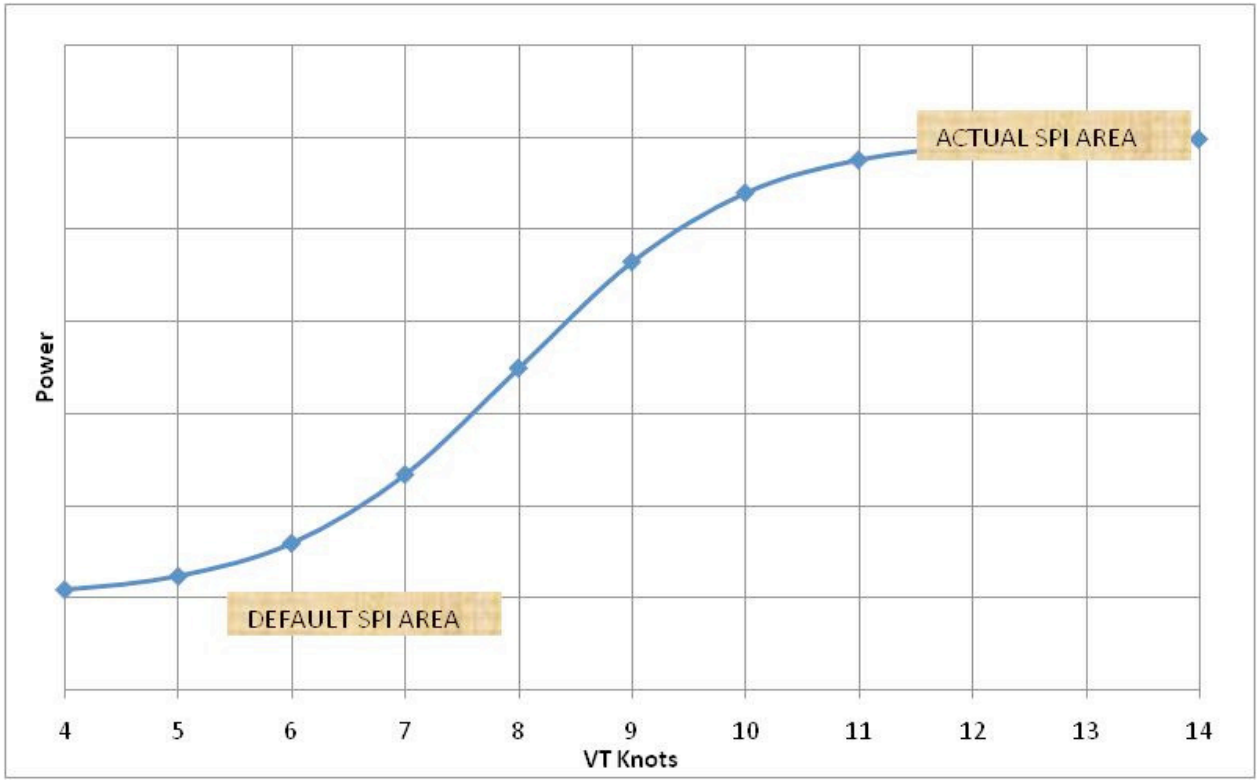
During the last meeting various tests runs were presented, and at last an agreement was reached taking into account the following modifications to the aerodynamics:
a) Spin coefficients (lift and drag) were changed at low Apparent Wind Angles (AWA) to better address the loss of efficiency at low AWA;
b) Max heel angle with spinnaker was fixed at 28°. The VPP will shift from the Spinnaker to the Jib earlier because of the maximum heel angle reached with the spinnaker on;

c) Max reef factor fixed at 0.85* Spin Area/Default Area will prompt the VPP to shift to the Jib earlier and not have the possibility to fly the spinnaker with a big reduction in speed.

The test runs confirmed the overall shift of the crossover point to wider AWA's than in the present VPP, so the Committee decided to implement the above modifications into the 2011 VPP.

6.2.3 **Small spinnaker type-forming assessment**

After this issue was introduced by the chairman in the Delft meeting, Andy Claughton prepared a "shape function" that is based on the ratio AREA DEFAULT/AREA SPI to take into account the loss of efficiency of big spinnakers below 12 kts of true wind speed (TWS).
The shape function will reduce the area of the spinnaker bigger than default area with the transition represented in the following plot.



For spinnaker area below default area, no further reductions will be made, while the maximum reduction will be limited to 75% of measured area.

Test runs showed the effect in the direction expected so ITC decided to implement the above formulation in 2011 VPP.

6.2.4 **SPL/TPS blanketing function validation and loopholes**

Last year a function that could take into account the blanketing of the mainsail over the spinnaker was introduced based on the ratio SPL/SMG and/or SPL/AMG and/or TPS/AMG, according to the sail configuration.

Since it is always possible to have an inventory list with more sails than those that are actually on board when racing, handicaps could be done with the most favoured sails but which may be left on the dock.

For this reason ITC has made a new approach in which the blanketing function is no longer based on SPL/SMG (and SPL/AMG and TPS/AMG) but on the ratio of SPL (or TPS) with an average girth of the spinnaker (Area Spi/ISP).

This will avoid also extreme exploitation making wide spinnakers in correspondence with only the mid girth measurement.

6.3 Hydrodynamics

6.3.1 Delft Tests Update

Three new models have been built during this year to be tested in the TU Delft tank. Two have been designed to be part of the systematic series, on the light side (high LVR) similar to the most aggressive boats on the racing fields (not only ORCi). These two models will be possibly inserted into the regression for the Residuary and heeled drag to improve the accuracy for lighter boats.

The third has been designed with a shape as close as possible to a late-generation TP52.
This is the status of the tests:
• TP52 model has been tested with trim moment applied
• The two light models have been tested with no trim moment applied

The following tests will be made (the exact schedule will be decided by TU Delft according to the tank's availability):
• The two light models will be tested upright with trim moment applied
• All the models will be tested heeled
• The two light models will be tested upright with the truncated transom at the same overhang of the TP52

The tests with trim moment applied are fundamental to obtain consistency with a correct residuary regression formulation.

6.3.2 Delft Database ITC management

At the end of the year Axel Mohnhaupt will retire from ITC after more than 20 years of membership and cooperation and very important contributions to the development of IMS, which 3 years ago became ORC INTERNATIONAL.

The ITC and ORC want to thank the great and always important work made by Axel in all these years.

Axel has been managing the very big database of Delft tests developing all the main hydrodynamic formulations related to this large amount of experimental data. So, with the approval of TU Delft,

ORC Management Committee and the agreement of Axel Mohnhaupt too, this large database will be handed to ITC member Kay Enno Brink that will work in close cooperation with the ORC programmer.

6.3.3 Investigation on influence of leeward crew weight position

In light winds it is common to put the crew on the leeward side to heel the boat. The VPP does not take this into account, so some boats (mainly the slab-sided or "boxy" boats) get an advantage as they heel, allowing for a decrease in their wetted surface as they also become longer.

For this reason Davide Battistin has prepared some different test runs where the transverse position of crew weight is taken into account. The ITC, after an analysis of the results, chose to implement (only in downwind conditions) the one that starts with crew weight on the leeward side ending with the crew on the rail at 18° of heel, with a smooth transition between the two positions as heel increases.

6.3.4 Truncated sterns treatment and Fn Transition. Fine tuning and increase of LPP routine robustness. Investigation of the influence of longitudinal crew weight position

A fine-tuning of the method of assessing the frictional resistance of the immersed transom (introduced last year) has been performed during the year.

The committee wanted to avoid some exploitation of stern-down trim to obtain an advantage, but at the same time keep protecting those boats with actual transoms in the water.

The programmer Davide Battistin discovered that the tail effect (that was apparently removed last year with the introduction of this new formulation), is still in a minor way affecting the length of the boats with immersed transom, with an extrapolation of the area curves up to zero value, thus increasing the integrated length.

This extrapolation will be removed for next year.

Axel Mohnhaupt worked also on two other parts of this transom immersed area drag routine.
The first is on the effect of LVR (length/volume ratio) on the wave height that is used to compute in

dynamic conditions the portion of immersed transom, smoothing its effect.

Another small adjustment in the trim will be introduced to avoid extreme stern down exploitation. In computing the wave height the difference in trim due to the forward movement of the crew weight of 10% of LSM1 will be subtracted.

In making this thorough revision it was also noted that the biggest percentage of gain when trimming the boat stern down is more due to the change in residuary drag than to the transom drag. In fact in the 2009
VPP, when transom drag was not applied, all the boats with stern down trim gained in GPH a very high percentage (more than 70%) of the total compared to the new formulation for 2011.

So it was decided that the completion of the work on the extreme aft trims will be completed next year when the full revision of upright residuary drag will be performed (see below).

The second part of Axel's work was based on the fact that the immersed transom drag is a frictional resistance and a correct computation of residuary drag should be made, taking also into account this small drag obtained when subtracting the frictional resistance from total measured resistance.

This an excerpt of a detailed description of this last modification made by Axel Mohnhaupt:

FROM AXEL MOHNHAUPT DOCUMENT

Some further Thoughts On Immersed Transom Drag

1. The addition of the result of the current calculation of the drag of the immersed transom to the Rr and Rf does not consider the presence of the same drag component during the model testing.

2. The immersed transom drag is according to the Hoerner formula related to the frictional resistance of the hull and the ratio of immersed transom area and AMS1. Since the frictional drag is scaled according to the Re-Number also the immersed transom drag has to be scaled in the same fashion.

Hoerner formula applied to immersed transom pressure loss:
$Cd_{transom}$ = .029 * (ATR / AMS1c)^(3/2)/ Cdhull^0.5, with ATR being the immersed transom area AMS1c the midship section area in sailing trim, and
$Cd_{hull} = Rf_{hull} / (rho/2 * v^2 * AMS1c)$, with Rf_{hull} being the frictional resistance of the canoe body

3. To do things right, the following scaling procedures have to be devised:

a) The total model resistance has to be split into three components i.e. frictional drag, immersed transom drag, and residuary resistance.
b) The frictional and residuary resistance should be scaled to the standard IMS L sailing length.
c) The residuary resistance should be corrected by the Froude number transformation to that of a standard overhang length, since there are systematic differences in overhang length of the various model series tested.
d) The resulting Rr values are to be used for the calculation of the regression coefficients.
e) For any boat to be handicapped, the current methods for Rr estimate, Rf calculation, Fn-transformation for differences in overhang length, and immersed transom drag assessment should be applied.

4. All required tools to change the current treatment of the resistance to the outlined one are available. The only task to be done is to calculate once the immersed transom areas for all models for the Fn's 0.2 to 0.6. The calculation of the immersed transom drag of the models can then be done in the model resistance scaling sheet and subtracted together with the Rf from the measured total resistance.

5. The general effect will be a small reduction in Rr, with the result that the whole test fleet will be predicted to be faster.

This work thus involves a revision of upright residuary resistance, and so various regressions with different set of models were tested, but ITC was not completely satisfied by the test runs for the following reasons:

a) The impact on the fleet was potentially significant with big GPH variations
b) Some reference boats were not moving in the correct direction

c) Some additional tests (see par. 3.1 above) could be valuable in better assessing the Residuary Resistance

ITC's aim would have been to implement a new residuary regression into the 2011 VPP because the current model has been changed in 1999 and then modified and smoothed with some extrapolation work not connected to tank results.
This will be done hopefully next year and the new formulation could also take into account the possible adoption of different polynomials with different parameters.
This new formulation could be very effective in addressing some issues like high Cp and aft LCB boats (and stern down trim as said above) and would be possible to implement if the impact on the whole fleet is not disruptive.
For the committee this one-year notice on future modifications to the VPP is very important because, as said above, the aim is to implement a new regression formulation better related to Residuary Resistance tests. This was almost done this year, but remains uncompleted due mainly to time problems.

6.4 Appendages:

6.4.1 Induced drag CFD research for multi-appendage configurations

In 2009 Philippe Pallu began a study to better address different combined appendage configurations to obtain a refined evaluation of induced drag that would not change the current treatment for a conventional configuration (fixed keel + rudder).
After a long discussion during this meeting, the ITC decided to not continue this project. The current way of computing effective draft on the more immersed appendages at various heel angles is dealing adequately with the unconventional appendage configurations (for eg, double rudders, canting keels, forward appendages, etc.).

6.4.2 Revision of resistance of High Volume/Surfaces with strakes keels; Possible evaluation of interference drag

In 2009 Manolo Ruiz de Elvira began a study on keels with:
a) Big volume
b) Big area
c) Wide strakes at canoe body interception

According to Manolo the main factor that should be addressed is Residuary Resistance of the keel at the intersection with canoe body, as frictional resistance should be correctly addressed by the revision of Cf made some years ago for extreme thick fins, while interference drag would surely increase the overall resistance of this kind of keel.

So it was decided that in the case where the first stripe of the keel will be 1.5 times longer than the average of the rest of the fin keel, a reduction in residuary drag will be applied in a similar way as for long bulbs.
This correction proved to be effective on this kind of keel configuration and will be implemented in the 2011 VPP.

6.5 New ORC Offset Editor – Separate appendages measurement – Offsets from Designers – New LPP

Panayotis Papapostolou made a presentation of the new Offset Editor release. This new release has powerful new tools that can handle and merge different files representing a boat's canoe body, keel and rudders.

A technique is under development to measure appendages with horizontal profiles or waterlines – this will be very important for editing designer offset files that have been accepted last year to issue new ORC INTERNATIONAL certificates. This was widely appreciated by the sailing community and favoured the adoption of ORCi as handicap system in new areas.

Now some new tools to help designers and RO's to prepare a valid offset file are under final testing and will soon be made available to users. These include:

a) A RHINO3D script that transforms the tri-dimensional Rhino file of a hull into an offset file. This will be very helpful as RHINO3D is a widely used design programme;

b) A pre-processor that transforms 3D DXF files into an offset file.

Finally, the availability of the above software (Offset Editor and Off files converters) was very important for the ITC to suggest that the new LPP rewrite is no longer necessary and could be separated from the main body of the VPP, allowing for the possibility to run it as a stand-alone module being able to collect LPP data before they are used by the VPP iterations.

The ITC together with ORC staff will develop the list of outputs needed for this LPP stand-alone.

6.6 New Test Fleets

The database of all ORCi issued certificates in the world will constitute the new test fleet. This new test fleet will be augmented by some of the boats included into the present test fleet that have been considered of interest even if they don't have a valid 2010 ORCi certificate.

The above fleet has been purged of the boats of the same kind with same offset files, so the final test fleet is composed of about 900 boats.
A smaller test fleet of about 100 boats will be created to be used for the further development of the Rr prediction methods. Additional program features of the ITC-version of the VPP will be the option of reading new experimental coefficient tables, thus enabling anybody at anytime to examine new ideas on Rr.

6.7 Summary of proposed changes to the 2011 Beta VPP and recommendations to the Congress:

a) Truncated stern fine tuning (removal of tail, new wave height)
b) Crew on the leeward side in downwind conditions
c) Modification of long keels root chord Residuary Resistance
d) Double keel coding
e) VMC (Velocity Made good along Course) introduction
f) Spinnaker coefficient revision below AWA=60°
g) New min SPIN REEF=0.85 (smoothed by Adef/Aspin<=1), and MAX HEEL=28° to increase accuracy in crossover between jib and spinnaker
h) Introduction of the spinnaker SHAPE FUNCTION to deal with inefficiency of big spinnakers in light winds.
i) Updated Blanketing function for spinnaker with average spinnaker girth
j) CODE0 different treatment with double run (one as code0 and one as asymmetric on CL)
k) Non-Spinnaker configuration handled with an asymmetric on CL with an area 3.5% higher than the jib
l) Furling mainsail new gyradius adjustment
m) Furling Jib different set of coefficients only for jibs with overlap > 110%
n) Possibility to install Mobile Bowsprit that will be treated as pole of equivalent length
o) Change of mainsail default girths for ORC CLUB boats with mainsail not measured
p) Possibility to adopt lenticular rod (for windage calculation a 25% diameter of normal rod will be assumed)
q) Carbon construction gyradius adjustment equivalent for C/R and Performance divisions
r) New ILC handicap based on WW/LW courses (and correspondent TCF, PLT, PLD and triple number variations)

The above modifications represent the list of Recommendations to the Congress.

ITC strongly suggests that the new beta VPP will be widely distributed immediately to expert RO and DVP users for beta testing. Former ITC members have also expressed their availability to be part of the beta testers too.

Using this method of beta testing and debugging performed before the end of the year should enable the ORC to avoid having to issue new versions of the VPP during the 2011 season.

6.8 Strategic planning for work after this meeting; Main projects for 2011

– New residuary Resistance
– Heeled drag increase in accuracy
– Jib-Spinnaker crossover increase of accuracy
– Update of documentation

6.9 Any other Business

6.9.1 <u>Carbon gyradius adjustment</u>
An inconsistency in gyradius adjustment between boats built in carbon for the C/R and Performance Divisions has been discussed, and it was agreed to unify it at the value of the current adjustment for the Performance division.
In the past the difference was due to the fact that there was a minimum panel weight for bulkheads in the C/R division, which was removed last year with the revision of the Accommodation Regulations, so this is no longer needed.

6.9.2 <u>Lenticular rigging</u>
A request to allow lenticular rigging in ORC INTERNATIONAL was issued.
The committee unanimously agreed to allow lenticular rigging for ORC INTERNATIONAL, but reducing their windage calculations for this rigging type by 75% of the conventional rigging windage.

7.00 RATING OFFICERS COMMITTEE

Rating Officers Committee Chairman, Jean Louis Conti, reported

7.1 New offset editor

Panayotis Papapostolou presented the new Offset file editor which includes a complete set of new features such as: movement of complete offset file in any x, y, z direction, trimming the boat by changing heel or pitch, clipping appendages, station interpolation, overlay one offset file over another existing offset file and merging both offset files. Offset files can be viewed in perspective 3D view with stations, water lines and buttocks. It was noted that a scaling function was missing. Panayotis agreed to add it into the editor. Once this will be done, the Rating Officers will have in their possession the most power tool they ever had to create or modify offsets files.

7.2 ORC Web Services

Panayotis Papapostolou presented following ORC Web services:

a) DXT files database
b) OFF files finder and database
c) RMS files on the web
d) Certificates copies on the web
e) Trial VPP runs on the web

The committee supports all ORC web services. During the discussion many valuable proposals were made. Panayotis Papapostolou will take all suggestions and will continue to work together with other ORC Tech Staff in an attempt to have the first beta version of ORC Sailors Services ready soon after the release of the VPP 2011 and ORC Manager 2011
All along in the discussions during these presentations it has been stressed by committee members on the absolute necessity to supply the Rating Offices with some sort of a comprehensive User Guide. Panayotis has acknowledged this strong request from the floor and will start working on this important project (and not so easy) as a matter of prime importance.

All members thanked Panayotis for his excellent work.

7.3 Allocated submissions:

7.3.1 FRA 8 – BOAT GRAPHIC REPRESENTATION
The Committee supports this submission. When both symmetric and asymmetric spinnakers are present, the one with the largest area will be represented on the drawing and both areas will continue to be printed.

7.3.2 GER 4 – ORC CLUB TEST CERTIFICATE
The Committee supports this submission to allow the test certificate format to be an option selected by the Rating office according to their preferences.

7.3.3 GER 6 – DIRECT INPUT OF PIPA
The Committee supports this submission, finding that current inputs of propeller measurements may be misleading. Therefore it is proposed that basic propeller measurements - PRD, Propeller type and

Propeller installation - are always active while additional propeller measurements are the activated by the user and PIPA will also then be calculated by the ORC Manager.

7.4 Confidentiality declaration form and contracts with MNA'S

Confidentiality declaration forms have be sent to all rating officers and shall be signed by the National Rating Officer, National Chief Measurer, all measurers appointed by the MNA and any other person having access to any data, such as hull lines or any protected construction or design feature, which may be protected by the intellectual property rights of the designer(s).

A draft of a standard contract between the ORC and the MNA's will be sent to all RO's. Comments and opinions will then be considered before writing the final draft.

7.5 Any other business

NED proposed to have a discount on the ORC levy for all certificates issued at least 3 months prior to the validity date printed on the certificate. The Committee supports such proposal.

The Committee also agreed on the importance to organise new seminars for both Rating Officers and Measurers.

8.00 MEASUREMENT COMMITTEE

Measurement Committee Chairman, Nicola Sironi, reported.

8.1 OFF files structure and checking

OFF file format has been reviewed together with new measurement methods available with use of Total Station instrument and new software developed by the ORC Tech Staff which significantly improves working with OFF files and hull measurements.

8.2 OFF files acquisition techniques

Several examples of TS use in the last few years were presented with different measurement procedures. It was shown that now it is possible to measure appendages separately with taking horizontal as well as vertical sections on the hull. New features of the Offset editor includes a GSI editor where data collected by the TS measurement can be visualized and edited in order to prepare the offset file.

8.3 OFF file developments

A script for Rhino 3D design software to generate OFF files from IGS files has been presented.

8.4 Stability measurement and alternatives to double pole inclining for large boats

It was noted that stability measurements for big boats is difficult to perform with standard inclining test procedures due to the large amount of weight needed to heel the boat to the required angles. Therefore, alternative methods are suggested, such as using the mainsail boom to suspend the weights; one inclining test using the mainsail boom had been performed with 990 kg on a 48-footer. Some tests performed with smaller boats also showed very close results of measurements performed with poles as with booms.

This method will be further tested in hope to be standardized during next year.

8.5 Matters arising from ISAF

The Chief Measurer reported on the discussion at the ISAF International Measurers Sub- Committee in reply to the two Submissions received, intending to extend the status of International Measurer to Rating Systems in addition to recognized Classes. The Committee supported the way the matter has been addressed at the ISAF Sub-Committee meeting, recognizing that the function and skills required for a measurer for a Rating System are not the same as that required for One Design classes.

However, Rating Officers were asked to put together a list of names of known measurers with international experience that could in the future be presented as candidates to become ORC

International Measurers within the general scheme of ISAF International Measurers.

8.6 Allocated submissions:

8.6.1 ESP1 & ESP 2 - ARTICULATED BOWSPRIT
The Committee agreed with the ITC proposal to allow an articulated bowsprit by taking the TPS measurement as SPL in case the bowsprit can be moved sideways.

8.6.2 GER 7 - SECOND FIELD FOR ISP
The Committee agreed with the proposal that has already been accepted by the Tech staff and it will be implemented in the new version of the ORC Manager.

9.00 SPECIAL REGULATIONS COMMITTEE

Please refer to ISAF Special Regulations Sub-Committee Minutes.

10.00 OFFSHORE CLASSES & EVENTS COMMITTEE

Offshore Classes & Events Committee Chairman, Don Genitempo, reported.

10.1 Report of Championships

10.1.1 Mr. Genitempo, the ORC representative at the ORCi World Championship reported that the 2010 event in Flensburg, Germany was a huge success. The championship was organised by the Flensburg/Segel Club and held at their facilities in Gluecksburg September 5 through September 11. 55 entries from 8 nations participated in 2 divisions. 7 inshore races and 2 offshore races were completed – winds were consistently above 16 knots, and even topped 35 knots at times on the long Offshore race.

Alpha Division was won by Christian Plump's modified Rodman 42 "Beluga sailing team" while Jurgen Klinghardt won Beta Division in his X332 "Patent 3," which was also the Corinthian Champion.

10.1.2 The 2010 European Championship was reported by ORC representative Dobbs Davis. The event was held in Cagliari, Sardinia over July 5 – 11 and organized by LNI Cagliari. 34 entries from 4 countries sailed in two divisions. Seven Inshore and two offshore races were completed in predominately light conditions and flat water. Division A was won by "Man," a GS 42, while Division B was won by "Alvarosky," a GS 40 RC. There was no Corinthian division, but Alvarosky did win the Owner-Driver Award.

10.1.3 The ISAF/ORC team world championship for the Sardinia Cup was reported by ORC representative Bruno Finzi. The event was organised by Yacht Club Costa Smeralda from 28 June through July 3. 8 teams of 2 boats each (a Farr 40 and a Melges 32) competed, and 6 of the 9 scheduled races were completed in light to medium winds with no discards.

Team Germany won the event, followed by Italy and the US.

10.1.4 The ORC European Sportboat Championship was reported by Don Genitempo substituting for ORC representative Nicola Sironi. This event is especially notable in that it is the first ORC championship organised and hosted by the Russian Federation. The event was held in St Petersburg July 3 through July 10. This first Championship attracted 25 yachts from 6 countries, where 9 races were completed. Vlas Kadetov, former Federation Vice chairman, won the event in a Ceccarelli GP26 design built in his own boat yard. The Lithuanian yacht "Levante" was second.

The success and enthusiasm surrounding the event ensures further events for the area.

10.2 Report from ORC Classes

10.2.1 GP42 Class report
Paolo Massarini, Manager of the GP42 Class, gave a report of the class's activities during the 2010 season. The class continued to participate in the Med Cup Circuit along with the TP 52, although with a reduce number of Yachts competing. An average of 5 GP42's and 10 TP52's were present at the 5 scheduled events. Massarini cited a weak economy and the cost of participation as causes for the reduced numbers especially among non-sponsored entries.

A number of the non-MedCup yachts were enjoying success in handicap events, so the class has elected to form their own circuit for 2011, foregoing the MedCup format.

Massarini also reported the class association with ORC input will be making modifications to Class rules effective January 1st 2011. A discussion as to how ORC should assist the class to grow resulted in a working party being formed by chairman Finzi. It was also decided to form a second working party to explore creation of additional ORC classes as was done in the past with the IMS 600, 670 etc.

10.2.2 GP33 Class report

There was no new and noticeable GP33 Class activity in 2010, other than continued racing among the three designs in Japan and the one design from Poland in Baltic-based events.

10.2.3 GP26 Class report

Vadim Mekhanikov reported that interest in the GP26 was gaining momentum in Russia. Three boatyards have announced new plans to begin production on Russian designs of the class. Dobbs Davis reported he has been contacted to do a design review of a second generation GP 26 in Sydney, Australia.

There is also a new Jim Donovan design in Connecticut USA coming to market, along with GP26's migrating north from Argentina and a Brooks Dees design on the US West Coast. This nascent US fleet has a US GP26 association website is up and running. It was agreed that ORC needs to find a proper approach to coordinate and assist the grass roots momentum in the class.

10.3 Allocated submissions

10.3.1 CRO 1 – GREEN BOOK SCORING COEFFICIENT

Scoring coefficient for all races to be 1 with no discards.

10.3.2 SLO 1 – OFFSHORE RACE COEFFICIENT AND DISCARD

Offshore race should be discardable. Discard after 6 races

10.3.3 ITA 1 – GREEN BOOK PROGRAMME FOR CHAMPIONSHIP

Revision (lengthening) of schedule and modification of coefficient in distance races.

Each of these three submissions concern modifications of the scoring coefficient of races and discards in some part, so they were therefore discussed as a group. Many options were suggested by various committee members and observers, resulting in a long and thorough analysis of the system. In the end, it was decided to withhold support of the submissions and maintain the system as currently stated in the Green Book, with the exception of the ITA 1 proposal of extending the schedule. The committee agreed to extend the schedule to 8 days rather than to the 9 days proposed in ITA 1.

10.3.4 ITA 2 - NUMBER OF SAILS USED DURING THE CHAMPIONSHIP

The committee does not support the submission. It feels the current paragraph 7.1 of the Green Book is appropriate and expresses its intentions.

The proposals of the Committee to the submissions were unanimously approved

10.4 2010 Calendar of 2011 events

A discussion of upcoming events centered around the announcement of the RORC and ORC joint venture and how it will impact future events, most specifically the World Championship for 2011 and 2012. Continental and regional events should not be affected at this time.

A decision on the continuance of the 2011 Cres Word Championship will be taken by the end of ISAF meetings. The request for the 2012 event in Finland will be tabled for an indefinite period.
The 2011 European Championship is scheduled for Hanko, Norway in August, and a Mediterranean Championship is scheduled for Punta Ala in June 2011. A tentative request for the Sportsboat 2011 Championship is expected from Russia.

10.5 Other business

Mr. Lindqvist, Mr. Lopmeri and Mr. Andersson from Finland gave a detailed and informative presentation, with brochure, of Helsinki as the proposed site of the 2012 World Championship, which was much appreciated by the committee.

10.6 Result of GP 42 WP and recommendations to Congress

The GP 42 ORC WP completed its work and recommends the Congress to approve the following rule changes:

1) Bowsprit instead of Spin pole
2) Reduce crew weight
3) Increase righting moment
4) Allow square mainsail and double backstays
5) Tighter sail limitation

Items 2 and 3 will be finalised after consultation with the ORC Technical Staff and Design offices.

11.00 RACE MANAGEMENT COMMITTEE

Race Management Committee Chairman, Ecky von der Mosel, reported

11.1 Allocated submissions:

11.1.1 ESP 3 - GPH-BOX IN CERTIFICATE
The RMC does not recommend changing the GPH to the Inshore figure. Owners and Race Managers are accustomed to the current factor. Also major changes are expected anyhow in the next years and we do not want to confuse the users.
It was reported by ORC staff that it is possible to change the single-number Windward/Leeward factor to represent equal-weighted upwind and downwind ratings, and this change was welcomed by all.

11.1.2 GER 8 - MAXIMUM CREW WEIGHT COMPLIANCE
The RMC supports this submission regarding compliance with maximum crew weight, but is not sure if a supplement to Rule 305 is the right place for this clarification. The Committee would like to leave it to Zoran Grubisa to find the right place for this amendment.

The proposals of the Committee to the submissions were unanimously approved

11.2 Any other business

a) The above submission lead to an exchange of experiences about the methods of weighting and using the crew-weight figure in the measurement. This leads to the following recommendation for the race organisers: Check the weight before the first race; give everyone the chance to re-weigh before the first race; recommend to the owners to put tolerances on their crew-weight (at least 5 to 10 kg) to avoid disappointments; avoid weight checks during the event, but if it is necessary it should be clear that the boat will be disqualified (no penalty, no tolerances, no second try etc.) if the crew weight is over the declared limit.
b) Ab Pasman reported on the use of the Triple Number System for W/L and short distance races in the Netherlands. It is still considered to be a very good compromise between the "complicated" PCS system and the too-simple single number scoring.
c) Ecky von der Mosel and Christian Plump (2010 ORC World Champion) reported on the scoring methods used in the last Worlds in Flensburg. The organisers used single number offshore factors for the two long distance races with fixed W/L courses taken from PCS. This system was generally accepted.
d) Akis Tsalikis asked about a clarification in the publication of ORC about the variety of scoring options, and the pros and cons of each. Dobbs Davis will take this idea for an article about the recommended scoring methods under ORC.

12.00 PROMOTION AND DEVELOPMENT COMMITTEE

Promotion & Development Committee Chairman, Dobbs Davis, reported.

12.1 General Considerations

The reported increase in certificates in new areas such as Australia, the eastern Baltic, and Russia, as well as numerous inquiries in non-ORC regions such as the USA, Hong Kong, New Zealand, South Africa, and elsewhere, indicates the recent efforts made in promotion and development have been successful at reaching these new potential markets. This has been done through website stories, ORC columns in Seahorse, editorial contributions in numerous national and international publications, press releases, a monthly newsletter included in the Seahorse online edition.

A caveat was also made that activities and promotions made in 2011 and beyond may have to be amended or modified in light of the proposed merger between RORC Rating Office and ORC.

12.2 Promotion products

The year's activity was summarized with a brief review and examples presented of media and promotion products:

12.2.1 Website

This is the primary communication resource tool for ORC activities and events. Its news content has been updated on average 3-4 times per week, with stories from major inshore and offshore events, design reviews, class news, as well as significant ORC activities of interest to the overall ORC community. Website tracking reveals improving interest in the ORC website and its utility as a delivery tool for news and promotions. New content is posted in this site on average of three times/week, and the average number of "unique visits" is approx. 700/day. This compares favorably with similar statistics among other popular European blogs and websites.

Suggestions have been made to enhance the appearance and content on the site, which include links, more analytic articles such as design reviews and ITC minutes, and a new additional links section.

New efforts will be made to reach out to all committee and other ORC members to provide quality information on race results and reports. This was moderately successful in 2010, but still fell short of expectations to have news from *all* major ORC events listed on the right side of the ORC homepage, not just the championship events.

12.2.2 Newsletter

This has been created monthly and added to the online edition of Seahorse. However, it has been agreed to make this available and distributed more widely to the subscriber base.

12.2.3 Press releases and publications

Releases to mainstream and sailing media have been made throughout the year in accordance with the promotion of ORC Championship events and other significant news, such as new product launches and availability of the annual ORC publications (IMS Rules, Green Book, GP Rules, etc). An English version of Giovanni Iannucci's ORC Club Guide will be translated and made available on the website.

12.2.4 Yearbook

A final draft of the 16-page ORC Yearbook was presented, with content agreed to be a combination of promotional and basic explanatory information of ORC rating systems, box rules, calendar of events, notices and photos taken from major ORC events of the year; contact information has been left out for inclusion on the website. It has been decided that the promotional value of the yearbook is great enough that a limited number of yearbooks should be printed in addition to being available online, with details of cost and distribution to be determined once the interest is known among interested parties.

12.3 Other initiatives:

12.3.1 Seminars

There were was one Measurement seminar held in 2010, held in Lithuania in February, where a new Rating Office was also established in this country. Another measurement seminar has been proposed for 2011, pending developments in the RORC/ORC merger project.

12.3.2 Presentations

A presentation was made on ORC to the West Florida PHRF fleet in April, with moderate interest in its adoption for their next season. Getting adequate information on the measurements of this mostly cruiser/racer fleet is the current challenge.

12.3.3 Dual-scoring
Given the current status of negotiations with RORC, it was decided to not do any dual-scoring efforts targeted against IRC, but that it should continue for analytic purposes. A common theme of "Science, Simplicity, and Transparency" will be used in promotional materials for newcomers to ORC rating systems, including an "Adaptive and Flexible" theme for race managers and scorers.

12.3.4 ORC History
An initiative to archive information about the ORC's long history and importance to offshore sailing, including an exhaustive list of past champions, will start as soon as possible in order to document this history in digital form and make it available for download off the ORC website.

12.3.5 Non-English languages
Work must continue to improve the reach into non-English markets, as well as solidify the communications within current ORC cultures, so a select group of ORC publications and communications will be made available in 2011 in Italian and Spanish. These include newsletters, press releases, some select web stories, measurement and scoring guides, Yearbooks, etc. Official rules will remain in English. Emanuela di Mundo has been assisting in this regard, and will continue to assist.

12.3.6 Merchandise
A discussion was made to explore the option of expanding the ORC brand through merchandise made available through a licensed third-party vendor.

12.3.7 Regatta support
This can be an important tool in promoting use of ORC, particularly in regions where there is infrequent, yet important, activity and use of ORC rating systems. Nicola Sironi attended the Entel PCS Chiloe Regatta in Chile, for example, and there are other events where ORC presence would be important to give support for knowledge and use of the systems.

12.3.8 New markets
Interest has come from Hong Kong and New Zealand on use of ORC in their local fleets, both for ORC Club and ORC Sportsboat classes. These are being pursued currently with some in-house scoring for the Hong Kong fleet by the Chairman with help from Nicola Sironi.

13.00 MANAGEMENT COMMITTEE

Management Committee Chairman, Bruno Finzi, reported.

13.1 ISAF submissions and ORC report to ISAF

ISAF submissions regarding offshore sailing and rating systems were reviewed by the Committee.
ISAF submission 133 will be monitored in its way to the approval by the ISAF Council.
The ORC report to ISAF was sent together with the reports of the various events. (Report attached to these minutes).

13.2 ORC/RORC relationship

The following Press Release was circulated on 3rd November 2010:

"The Royal Ocean Racing Club (RORC) and Union Nationale pour La Course au Large (UNCL), joint owners of the IRC rating rule, have been in discussion with the Offshore Racing Congress (ORC) about the possibility of creating a unified organization to govern yacht ratings worldwide. This initiative to bring the world offshore rating systems together was endorsed by ISAF following its AGM in 2009 in
Korea.

"The intention is for RORC/UNCL and ORC to create a joint venture company which would run the existing rules, IRC and ORC and then in time, using the combined knowledge and resources, evolve new rating systems that combine the benefits of IRC and ORC to create fast, fun and seaworthy boats for unified competition all over the world.

"Bruno Finzi, Chairman of ORC, working alongside Vice-Chairman Wolfgang Schaefer, is enthusiastic and confident about working with the RORC. "We appreciate the work and friendship

with RORC and we believe it is finally time to get back to the IOR era and to the ORC founding spirit, when only one single rule was recognised as 'the international' rule in offshore sailing."

"Chris Little, Admiral of the RORC, working with Commodore Andrew McIrvine agree that it is time to bring the development of rating systems under one umbrella. "We have received strong support from a number of countries and potential owners to develop a rule that will allow us to recreate the international yacht racing circuit and we shall continue to work towards this goal.""

13.3 ORC/US Sailing relationship

Aside from a small fleet using ORC Club in Texas that is administered directly by ORC staff, there remains no current use of ORC ratings in the US. An approach made to US Sailing to offer use of ORC Club was rejected; currently PHRF, IRC, Portsmouth, and ORR are used, and the addition of yet another rule was regarded to be too complex for the market.

However, there are discussions in a Rating Rules Committee of the New York YC to examine what future options are available to reduce this 'clutter' of rules options, and ORCi and ORC Club are being considered among the options. An advisor to the Committee, Stan Honey, is also a US Sailing Board member, and has advised that ORC should be considered for the top tier of a 3-level system of handicapping because it fulfills the desired qualities of being scientific, transparent, and available to all.

And while US Sailing is not a party in the proposed merger with RORC, they have expressed interest in wanting to keep apprised developments in this matter. Don Genitempo has been appointed by US Sailing President Gary Jobson to represent the US on the ORC Congress.

13.4 Fleet Statistics & Update on Levy payments & Invoicing from and to MNAs

13.4.1 Fleet Statistics

Fleet statistics has been presented based on number declared by the rating officers (CRO, EST, FRA, GRE, MLT, RUS, SLO, SUI, SWE) while for other countries numbers for data feed were used. Total number of certificates is showing increase over previous year and some more certificates may be expected by the end of year. Current fleet statistics will be presented to the Congress at the AGM

13.4.2 Levy invoicing

Vivian updated on Levy Payments & invoicing. 3rd quarter invoices were already issued at the beginning of October. At 30th September approx. 50% of levy payments have been received.

13.5 Update about ORC rating offices and relationship with MNA's

A Confidentiality Declaration form has been sent to all Rating officers with some of them already replying by returning signed forms. Confidentiality Declaration forms will be also discussed together with the contracts with MNA's on the Rating Officers Committee meeting on Sunday, November 7th.

13.6 Promotion and marketing report and ORC Publications, Yearbook, Website

The reported increase in certificates in new areas such as Australia, the eastern Baltic, and Russia, as well as numerous inquiries in non-ORC regions such as the USA, Hong Kong, New Zealand, South Africa, and elsewhere, indicates the recent efforts made in promotion and development have been successful at reaching these new potential markets. This has been done through website stories, ORC columns in Seahorse, editorial contributions in numerous national and international publications, press releases, a monthly newsletter included in the Seahorse online edition.

Website tracking reveals improving interest in the ORC website and its utility as a delivery tool for news and promotions. New content is posted in this site on average of three times/week, and the average number of "unique visits" is approx. 700/day; there are over 800 subscribers to ORC e-mail news and releases. This compares favorably with similar statistics among other popular European blogs and websites. Suggestions have been made to enhance the appearance and content on the site, which include links, more analytic articles such as design reviews and ITC minutes, and a new additional links section.

But work must continue to improve the reach into non-English markets, as well as solidify the communications within current ORC cultures, so a select group of ORC publications and communications will be made available in 2011 in Italian and Spanish. These include newsletters, press releases, some select web stories, measurement and scoring guides, Yearbooks, etc. Official

rules will remain in English.

13.7 Allocated submissions

13.7.1 ESP 3 - GPF BOX IN CERTIFICATE
The Committee does not agree to change the GPH mainbox but, as suggested by the ITC, inshore time on distance coefficient will be changed to 50% upwind and 50% leeward.

13.7.2 GER 2 – ILC SINGLE NUMBER HANDICAPS
The Committee supports the submission. See Submission ESP 3, second part only.

13.8 Paypal and services through ORC web

ORC Tech staff has completed all the web services that were presented in 2007 when new ORC operating system was designed such as:
- DXT files database on the web for the Rating officers
- Offset files database on the web for the Rating officers
- RMS files on the web
- Stability Data sheet
- Speed Guide
- Certificates copies on the web
- Trial certificates on the web

All web services will be discussed on the Rating officers Committee meeting on Sunday, 7 November

14.00 CALENDAR FOR 2011 – MEETINGS AND EVENTS

14.1 2011 Calendar
The provisional calendar of major ORC events is attached.

14.2 Meetings

AGM **-** The 2011 AGM will take place in San Juan Puerto Rico. Dates to be finalized.

Man Com - There will be 2 ManCom meetings, one in April and one in September, venues to be defined. Both dates are to be communicated.

ITC - The next ITC meeting is scheduled for mid March 2011 in Annapolis after the next Chesapeake Sailing Yacht Symposium, usually held on the third Friday and Saturday of the month. For this reason the meeting will be held on the following Sunday and Monday.

Observers are requested to contact ORC Secretariat if they wish to attend and to get meeting details.

15.00 ELECTION OF ORC CHAIRMAN

Bruno Finzi was proposed, seconded and unanimously voted Chairman of the Offshore Racing Congress for 2011.

16.00 ELECTION OF DEPUTY CHAIRMEN

Jose' Frers and Wolfgang Schaefer were proposed, seconded and voted unanimously as Deputy Chairmen of the Offshore Racing Congress for 2011.

17.00 APPOINTMENT OF CHIEF MEASURER AND SECRETARY

Congress reappointed unanimously Nicola Sironi Chief Measurer and Vivian Rodriguez as Secretary.

APPENDIX I

2011 CALENDAR OF ORC INTERNATIONAL CHAMPIONSHIP EVENTS

June (dates TBA)	ORC Mediterranean Championship	Punta Ala (ITA)
18th – 25th June	ORC International Worlds	Cres (CRO)
10th – 16th July	ORC Camp. Italiano Assoluto Vela di Altura	Trieste (ITA)
6th – 13th August	ORC International Europeans	Hanko (NOR)

OTHER MAJOR ORC INTERNATIONAL EVENTS

15th – 22nd January	Circuito Atlantico Sur Rolex Cup	Buenos Aires (ARG)
27th April – 1st May	Coppa Carlo Negri - Regate Pirelli	Santa Margherita Ligure (ITA)
24th – 28th May	Rolex Capri Sailing Week	Capri (ITA)
13th – 19th June	Giraglia Rolex Cup	Sanremo/St Tropez (ITA/FRA)
18th - 26th June	Kieler Woche	Kiel (GER)
3rd – 9th July	Rolex Ilhabela Sailing Week	Ilhabela (BRA)
6th July	Eurocard Gotland Runt	Sandhamn (SWE)
30th – 6th August	Copa del Rey	Palma (ESP)
22nd – 28th October	Rolex Middle Sea Race	Malta

GP42 Class Tentative Schedule

24th – 28th May	Rolex Capri Sailing Week	Capri (ITA)
13th – 19th June	Giraglia Rolex Cup	Sanremo/St Tropez (ITA/FRA)
1st – 3rd July	Trofeo de la Reina	Valencia (ESP)
30th – 6th August	Copa del Rey	Palma (ESP)
13th – 16th October	GP42 Global Championship	Lanzarote (ESP)

9th, 18th November 2010
vr/dd

APPENDIX II

Annual Report – *ORC Rating* Systems *(ORC International and ORC Club) and ORC GP Classes*

November 2010 – Season Activity – from ORC

1. ORC Rating Systems:

The ORC Rating Systems (ORC International and ORC Club) are used in 42 countries and managed by 33 National Rating Offices and centrally by ORC for countries where a National Rating Office is not established.

The largest constituencies of ORC, with fleets in excess of 1000 boats, remain in Italy and Holland, where ORC fleets are the default baseline handicap system.

Nevertheless, the *ORC International* and *ORC Club* rules continue to enjoy wide acceptance among the constituencies that have for many years used IMS and ORC Club.
Use of ORC rating systems is also expanding in new countries as well, with substantial increases in Australia, Russia, and the Baltic countries, with a new Rating Office being set up in Lithuania.

ORC Rating systems are unique in measuring stability of offshore yachts, so the size and types of boats using *ORCi / ORC Club* is quite broad, ranging from the smallest end of very slow cruisers to the racing super-maxis.
All kinds of performance-enhancing devices are rated under ORC Rules, including movable ballast such as water ballast and canting keels, with all combinations of appendages, but also hiking devices as trapezes and straps.

Many of the world's prominent offshore races and regattas continue to use both ORC Rating systems, which, unlike single-number systems, offer unmatched scoring flexibility to race managers through use of the Windows-based CyAltura and Velum race management software packages available on the ORC website.
These races include several Rolex-sponsored events, including Rpolex Circuito Atlantico, Rolex Giraglia Cup, Rolex Ilhabela Sailing Week, Rolex Capri Race Week, and the Rolex Middle Sea Race.

And beyond the Baltic, Mediterranean, and South American cultures, ORC is also being used by now established fleets in Canada, the Black Sea, and the Far East.

As reported last year, the use of the International Offshore Rule (IOR) is resurging among selected fleets in the West coast of Italy, and persists in Russia in the lakes near Moscow.

2. ORC GP Classes

The GP42 class had their third full season circuit of racing, the second as part of the Audi MedCup, which was well organized in 5 different venues and attended by five boats from Spain, Gibraltar and Italy, all managed by professional-level programs and enjoying the global media exposure offered by the MedCup organization.
This class has experienced a slight decline in participation from last year due to lack of team sponsorship in the current economic times. Nonetheless, the class has announced a season schedule for next year that will make a tour of major events in the Mediterranean outside the MedCup.

The GP33 class has stalled in the growth it started to show last year, though the first of a new Japanese-designed and built production boat was launched and sailing by spring, as was a new Polish-built design based in the Baltic.

Besides the dozen or so already built in Argentina, the GP26's are still spread too widely to race as a class. Nonetheless, there are GP26's receiving increasing interest from a new North American market, where three new owners have formed a North American class organization as they complete construction on their boats. Two new GP26's are also built and racing among Sportboats in Australia, with tooling built to accommodate more orders.
The ORC Sportboat European Championship held in July in St.Petersburg, Russia, was won on ORC handicap by a GP26 designed by Ceccarelli and built on the Black Sea.

3. Developments & Submissions

ORC offers, in addition to the customized VPP information included on certificates in International and Club formats, a Speed Guide package of polar performance data for any ORC-measured boat, as well as a Stability and Hydrostatic Datasheet, which is of value to sailors and organizers to assess stability among entries in their offshore races and events. These can be ordered from the ORC website.

The complete documentation of the ORC VPP and ORC Rating Systems is also available for download from the ORC website. This is in addition to the Rules and guidelines publications that are updated and posted after each AGM.

The International Technical Committee (ITC) met in May in Winchester, in September in Delft, and November in Rome prior to and in lieu of meeting at the AGM in Athens.
Improvements made to the VPP by the ITC include a refined method to assess sailing length, improvements to the aerodynamic and hydrodynamic models, a proper evaluation of twin rudders, and other details available in the full ITC minutes.

22 Submissions have been received from many National Authorities that deal with the following areas: 3 for the IMS measurement system, 2 for the Race Management Committee, 4 for the Offshore Classes and Events Committee, 19 for the ITC, 3 for the Rating Officers Committee, and 2 for the Management Committee.
These deal variously with topics regarding the ORC Rating Systems, the ORC VPP, championship rules, and with general policies. It is a reduced number of submissions compared to previous years; this is a sign that the constituencies are happy with the system as is, and do not require many changes.

4. Measurement

The use of the Total Station to measure hulls has expanded, and now in Germany, Greece, Holland and Italy the respective Rating Offices have purchased a Leica Total Station, using it routinely to measure hulls.

The digital electronic inclinometer designed and manufactured in 2007 by Joakim Majander from Finland has been sold in many countries and continents and has not shown any sign of problems or measurement inconsistencies. This device is greatly enhancing the accuracy and repeatability of ORC inclining measurements.

5. Championship Events

The 2010 ORCi World Championship was a success in Flensburg, Germany, with 50 entries from 6 countries. The eventual winner of the event was decided in the Jury room, as the frontrunner was forced to withdrawal from the long-distance race. The European Championship event was in Cagliari, Italy and attracted a smaller number of boats, but the racing was quite tough, although the event was plagued by an unusual light weather. National Championships were regularly held in most of the countries where ORC rating systems are in use, with biggest participation in Italy, Germany, Holland, Greece, Argentina and Croatia.

The announced venue for the ORCi Worlds in 2011 is Cres, Hrvatska in early June. Cres is a port on the Dalmatian coast in the Northern Adriatic Sea, which has been a proven venue for several European and International events for many years.

6. ISAF Classification Code

The ISAF Classification code was applied for creating a Corinthian Trophy in many ORC events, with particular scrutiny used at the World Championship where interviews were made of some sailors and clarifications were made for a few, but there were no suspicious nor deliberate breaches of the letter nor spirit of the Code and the event organizers embraced the system and its application.

7. Fleet Statistics

	31.12.	2006	31.12.	2007	31.12.	2008	31.12.	2009	05.11.	2010
	IMS	ORC	IMS	ORC	Int	Club	Int	Club	Int	Club
ARG	57	139	37	114	27	107	24	38	39	139
AUS	41	0	15	0	20	0	32	0	53	1
AUT	6	191	6	53	5	27	8	37	7	28
BRA	55	141	45	109	77	88	75	85	36	49
CAN	0	0	0	0	0	22	0	63	0	78
CHI	0	0	116	18	114	19	102	38	77	8
CRO	94	202	147	150	142	148	102	151	63	140
CYP	13	12	1	1	0	0	0	29	1	30
ESP	388	211	328	154	253	123	226	202	328	193
EST	23	50	37	63	60	74	46	67	45	65
FIN	87	42	82	37	71	30	65	19	82	28
FRA	41	375	30	308	5	136	1	196	1	208
GER	337	415	314	448	287	456	259	489	327	453
GRE	367	221	350	255	367	269	293	343	297	398
ITA	577	1083	709	1018	706	1020	824	1037	876	1218
JPN	70	358	50	312	26	269	2	147	2	90
KOR	0	19	0	23	0	25	0	44	3	26
LAT	0	0	0	36	1	35	1	39	0	0
LTU	0	0	0	0	0	0	0	0	7	64
MLT	1	11	1	16	1	26	1	33	0	28
NED	267	1145	1	1353	4	1306	2	1281	3	1266
NOR	47	0	32	0	51	0	63	80	47	17
NZL	2	63	2	63	0	15	0	9	0	7
PER	5	0	15	0	18	0	20	0	93	0
POL	0	0	15	1	16	3	13	4	41	28
POR	23	11	22	124	18	131	24	127	24	163
ROU	0	0	0	0	0	14	1	30	1	0
RUS	0	0	0	25	0	42	4	101	34	91
SLO	0	0	4	27	7	31	4	29	3	17
SUI	0	251	0	232	1	234	0	242	2	230
SWE	59	133	67	58	70	30	53	17	42	10
UKR	2	55	0	48	5	12	0	18	0	14
USA	15	50	17	60	0	30	0	19	3	37
	2578	5197	2444	5125	2376	4723	2269	5053	2537	5124
		7775		7569		7099		7322		7661