



May 31, 2016

New Division Structure for ARML

Dear ARML Coaches,

As I am sure that you are aware, the size imbalance between Division A and Division B has grown appreciably over the past several years. The current rule, which defines our Division A for each year reads as follows.

“The top seven teams from Division B in the previous competition must compete in Division A for the next three competitions. Any team scoring better than the seventh place team in Division B during the previous competition must compete in Division A for the next three competitions.”

This is the rule that will be in place during the 2016 ARML competition.

The intention of this rule, when it was first implemented, was to allow teams to rotate into Division A as they become stronger each year. Teams that tend to be very strong from year to year compete against each other for a minimum of three years under the current rule. If the design were working as we envisioned, teams would also rotate out of Division A and into Division B where they can compete against other teams of similar strength.

If we look at the results from the past few years, we see that teams are rotating into Division A but are seldom rotating out to Division B. The result is that Division A is growing each year and Division B is shrinking each year. The end result is the healthy competition that we desired in Division B is not being realized.

The ARML Executive Board discussed this undesirable effect and it was determined that a change to the rule which defines Division A is needed. We discussed the need for a rule that is responsive to the current trending strength of the teams. Teams which contain many very strong students should be honored under the new rule. Below is what we came up with **for the 2017 ARML competition and beyond.**

Each year, regions will be ordered by the highest score achieved by a team in that region. All teams in the top 20 regions will be required to compete in Division A. The remaining regions may choose the division in which all of their teams will compete. Students on the top teams in each division will receive software and/or book prizes. During the award ceremony, we encourage all students from the same regions as the

top teams to come forward to celebrate their team's performance, and we will have additional prizes for these students as well.

This change to the division structure will help control the current expansion of Division A and depletion of Division B. Had we implemented the rule this year based off the results of 2015, 68 teams would have been required to compete in Division A, and 64 teams could have opted to compete in Division B. Had we implemented the rule in 2015 based off of the results from 2014, 66 teams would have been required to compete in Division A, and 68 teams could have opted to compete in Division B. We believe this will keep the relative sizes of the two divisions closer to what the original rule had intended as ARML continues to expand.

This rule change also removes the confusion regarding division eligibility for teams by basing it off of only one result (the previous year's contest) and has all teams from a region competing in the same division which removes the need to shift Division B teams mid-contest that outperform Division A teams from the same region. The one type of team this rule change appears to affect the most would be a Division B team from a region that splits teams across both divisions to give their lesser teams a chance at prizes in Division B. However, under the previous divisions rule, that team would then enter Division A the following year at which point teams rarely re-entered Division B, even when the three year requirement elapsed. We also attempt to ameliorate this issue by recognizing all students from winning regions at the award ceremony.

The rule change also means that there will be potentially be repeat winners in Division B from year to year. This might appear to be unfair to some, particularly because Division B has been a place where new teams were winning every year. We would point out that under the previous rule system, the top team in Division B was regularly falling lower and lower in the overall rankings of all teams from both divisions as teams were getting promoted year to year into Division A with infrequent movement back to Division B, so the Division B prizes were for the most part for the best teams who had simply not won anything previously. We believe the new division structure will provide a more sensible recognition of top teams in both divisions.

The teams of a brand new region may compete in Division B in the region's inaugural year. The exception to this rule is if the new region is generated via the expansion, merging, contraction, or splitting of an already existing region. If a region expands or merges with another region, the new region will have the most restrictive division requirement of any component region. Similarly, if a region contracts or splits, these new regions will retain the same division restrictions as the original region. All new ARML regions and their division placement are subject to approval by the Executive Director.

The new division structure will be discussed at the coaches' meeting at your site this year. Your feedback is always welcome. We are hopeful that this new division structure will encourage a positive competition environment each year for all of our participants.

Thank you and see you soon!

Michael Curry
Executive Director