



## AWWA ACE Competitions - Rules and Regulations

### METER MADNESS

#### DISCLAIMER

**D-1.** AWWA specifically does not endorse products manufactured by sponsors and takes no position concerning the adequacy of such products or their compliance with any AWWA standard.

**D-2.** Each competitor will be required to complete the proper waiver and registration documentation prior to competing in any event.

**D-3.** This contest is officiated over by very competent officials who are striving for fairness in their judgement for the events so that all contestants are judged as equally as possible. Fair and equal treatment for each and every contestant is the goal of this contest. There is no intention to provide anyone with an advantage. This contest is for the fun and enjoyment of the participants and spectators.

**D-4.** Interested in joining the Meter Madness Subcommittee? Submit an application to the operator involvement committee through the AWWA website at <http://www.awwa.org/membership/get-involved/volunteer.aspx>.

#### ELIGIBILITY

**E-1.** The Meter Madness Competition ("Competition") is an individual Competition. Each qualified participant ("Competitor") is solely responsible for his/her performance.

**E-2.** Each Meter Madness Competitor shall be an AWWA member. This membership may be an individual membership, as an Active or Affiliate Member of AWWA, or the competitor may be a regular employee of a Utility Member or Organization Member of AWWA. Each Section is responsible for verifying this membership requirement before entering the competitor in the contest.

- A.) The Utility with a returning National Champion may compete at the Section level with a different employee from the same Utility. That competitor will be eligible to represent the Section at the National level in addition to the returning National Champion.
- B.) Each Section is permitted to send two representatives to the National level or three should the returning National Champion represent that Section. It shall be the responsibility of the Chair or his/her designee in each Section to determine who their representative(s) will be.
- C.) The Host Utility may enter a contestant in addition to any section representatives or returning National Champion. Should the designation of Host Utility apply to more



than one utility, then those utilities as a group must select a single contestant to act as the representative of the Host Utilities.

- D.) International Competitors – International competitors who are interested in competing may do so as a representative of their countries. Two representatives per country will be permitted and will be treated as though they were Section representatives.
- E.) Should more than two competitors from one country request to compete, the available positions will be filled on a first-come, first served basis. Although two representatives from a single utility may be permitted, should three competitors register to compete (two being from a single utility), priority will be given to the competitor from another utility in the interest of fairness.

## **INTRODUCTION**

**I-1.** The Competition is a measure of an individual's skill at assembling a meter quickly, totally, and accurately. All parts will be assembled in proper manner and the re-assembled meter shall be tested by the Judges for ability to meter water and for water leakage from the meter.

**I-2.** This is a test of skill for individuals. To facilitate a large number of Competitors, groups of four (4) to six (6) persons may be placed together in a single round. The START will be simultaneous for all Competitors in that round, but each Competitor will be timed separately by an Official to record his/her raw time in assembling the meter.

**I-3.** Each individual Competitor will be required to completely assemble a water meter commonly utilized by water utilities for residential customers. The event is timed with multiple Competitors assembling the meters simultaneously.

**I-4.** Each Competitor will be furnished with a bucket, or other suitable container containing the completely disassembled meter. In addition, the contents of the bucket will contain three (3) to six (6) miscellaneous unrelated parts, metallic and non-metallic items from other types of meters. This will ensure that the Competitor must be thoroughly familiar with all parts of the meter he/she is assembling. All Competitors shall receive exactly the same number and type of extraneous parts for their turn.

**I-5.** A time period of no more than five (5) minutes shall be allowed for each Competitor to complete his/her turn. TWO TURNS shall be allowed for each Competitor with the faster of the two times being used for their Official Time.

**I-6.** Each individual Competitor shall be ready to compete and at his/her assigned station ten (10) minutes prior to their assigned time. Competitors absent from their stations at their scheduled time



shall be assigned a new starting time or forfeit their turns at the decision of the Head Official.

## COMPETITION ENTRY AND CONFERENCE REGISTRATION PROCEDURES

**R-1.** To enter, follow the instructions on the Meter Madness web page. **No registration is available onsite. To allow proper determination of the number of rounds required, AWWA must be informed by the Sections before May 1 of any anticipated late team registration each year.** Each competitor must attend Mandatory Contestant's Meeting at Staging Area prior to the start of the competition. Among other things, the timing and order of competition will be determined at this meeting.

**R-2.** Each team must make its own travel and lodging arrangements. AWWA will not make travel or lodging arrangements for any team.

## HOW YOU WIN

**H-1.** Prior to the pre-designated start time, each Competitor will assume a "ready" posture of their choice. The Head Official will count down to "GO" to initiate the Meter Madness event. EACH COMPETITOR ASSEMBLES HIS/HER WATER METER AND THEN RAISES HIS/HER HAND TO SIGNIFY HE/SHE IS FINISHED WITH THEIR TURN. All other Competitors in that round must continue their turns to complete assembly of the meter to have a qualifying time of record.

**H-2.** OFFICIAL TIME for the Competitors' turns will be the raw time to assemble the meter plus any penalty seconds the Judges deem necessary after testing the meter. The Competitor with the fastest OFFICIAL TIME registered in that heat/round shall be declared the winner of that heat/round.

**H-3.** Three Officials Timers will time each contestant during each heat and the middle time of the three will be the official raw time.

**H-4.** The winner will be determined by the best "official" time as determined by a "head to head" heat following two preliminary rounds and one semi-final round. The fastest four "official" times from the first two preliminary rounds will be eligible to compete in the semi-finals. The two fastest "official" times from the semi-final round will be eligible to compete for the championship. The fastest "official" time in the championship round will determine the meter madness champion.

## WHAT WINNING TEAM RECEIVES

**W-1.** It is the intention of the Meter Madness subcommittee to provide opportunities to compete for all interested AWWA members. It is not our intention to implement a "world cup" type event. We welcome international competitors to the Meter Madness contest; however, due to the considerable cost of international travel, AWWA will not be able to reimburse international competitors for travel and



accommodations should they return as national champion. Additionally, AWWA and the Meter Madness subcommittee are not committing to participate in potential international Meter Madness competitions outside the continental United States or Canada, should a contest be developed. This does not apply to Canadian, Mexico and Puerto Rico Section representatives, as they are official Sections of AWWA.

## **COMPETITION**

**C-1.** There is no such thing as faulty meter. All meters were received in good working order prior to the meter madness competition. **THE METER MUST REGISTER WHEN TESTED OR PENALTY WILL BE INCURRED** as described in P-5.

- A.) All meters utilized in the meter madness competition are new or nearly new and in perfect working condition prior to disassembly.
- B.) Any tools, equipment, and other supplies provided for this competition that are broken will be considered to be broken by neglect of the individual and will not be replaced during their turn.

**C-2.** The work area for the meter madness competition shall be large enough to accommodate all competitors and judges and their equipment. Equal space must be provided for each individual. A minimum of 10' clear area in all directions around the tables shall be provided to allow the officials to roam freely in officiating with competitors. This clear area will also help to provide a safety area between the spectators and the competitors to protect from any tools or materials that may accidentally slip from someone's grasp.

**C-3.** All work shall be conducted on a suitable size table to provide each of the competitors adequate room to move about freely to assemble their meters without crowding. It is preferred, but not required, to have some type of partition between competitors to secure their individual work.

**C-4.** The area for the meter madness competition shall be large enough to accommodate all competitors and their work areas. Equal space must be provided for each competitor. Every effort must be made to provide equal work opportunities for all competitors.

**C-5.** Meters will be totally disassembled with the exception of the sealed magnetic drive assemblies and the registers. All the meters used by every competitor will be identical.

**C-6.** No Competitor will be allowed to examine the contents of the bucket prior to the start of the contest. A meter fully assembled may be examined by each competitor if he/she chooses. Each bucket shall always contain the total parts required for complete assembly of the meter.



**C-7.** The Competitor shall be positioned immediately in front of the bucket of parts on the table at the instruction of the head official just prior to the start of the event. All necessary tools will be pre-positioned on the table alongside the bucket prior to the start. No meter parts may be handled by the competitors prior to the start of the event, but they will be allowed to position the tools where they want. Both hands must be empty and not touching any tool or bucket just prior to the start of the event.

**C-8. EXTRA METER PARTS** - The total contents of extra parts shall be exactly the same for each individual, but shall consist of a minimum of three (3) extra meter parts. These parts may consist of duplicate parts for the meter or may be parts from other meters than the one used in the contest at the option of the host utility providing the contest assistance. The intent is to require the competitor to thoroughly know the total parts required to reassemble the meter utilized in this competition.

## **EQUIPMENT & MATERIALS**

**E-1.** All equipment is to be provided by a predetermined in-kind sponsor or AWWA.

**E-2.** Meters shall be of the type complying with AWWA C700, "Cold-Water Meters – Multi-jet Type, Bronze Main Case." The size shall be 5/ 8" x 3/ 4". Each year the meter manufacturer and model may vary and will be announced in adequate time prior to the competition.

**E-3.** Tools provided include:

- A.) 1 - 1/2" Box End Wrench
- B.) 1 - Flat-Head Screwdriver - 4" x 3/16"
- C.) 1 - Special Tool (IF REQUIRED BY CERTAIN METERS)

## **JUDGING**

**J-1.** The officiating and supervision of each event shall be the responsibility of the head official who shall have extensive experience in water meter maintenance and total familiarity with the type and manufacturer of the meters to be used in the competition. There shall be one official for each competitor.

**J-2.** The number of competitors for each round shall be limited to the space available for the competitors to perform adequately or to the number of officials available for each round.



**J-3.** The officials shall be responsible for timing the events with the head official being the one to announce the START and STOP of the event. Each competitor's time as recorded by the official, plus any penalties accrued, shall be used to determine the official time for each contestant. The head official shall be in charge of the competition and after consulting with the other officials of any infraction of the rules shall make the ruling as required by the circumstances for any penalties to be assessed.

**J-4.** The head official shall see that all tools, materials, and competitors are in the required positions prior to starting the event. He/She shall also ensure the work area is free from any obstructions or spectators.

**J-5.** The officials shall watch for safety violations during the actual events and assess appropriate penalty times as required. During the time of the event not taken up by the actual competition, the officials shall see that all preparations for the event are accomplished in a safe manner.

**J-6.** No timing official will be assigned to a contestant who works for the same organization.

## **SAFETY**

**S-1.** Normal water utility safety practices will be observed at all times during the competition. Any flagrant violations will be penalized by addition of time to the competitor's raw time as described in P-5.B, Procedural Violations.

**S-2.** Judges, Competitors, and/or Volunteers may not use, possess, or be under the influence of alcohol and/or illegal substances whilst performing duties related to the competition. To be determined at the discretion of the Meter Madness Competition Committee Chair.

## **PENALTIES**

**P-1.** Various penalties will be assessed by the head official for any infraction of the rules as described herein or for any flagrant violation of normal safety practices.

**P-2.** The penalties will be in the form of a predetermined number of seconds added to the total time of the team's event time which will then be the OFFICIAL TIME of that event.

**P-3.** In the event of any disagreement with penalty decision, the head official's decision is final.

**P-4.** There will be NO INSTANT REPLAY allowed for reversing any decision after the head official has made a final determination of any infraction in these rules.



**P-5.** Penalties shall be (seconds):

- A.) Safety violation such as throwing of tools, PPE penalty, etc. (+10 each)
- B.) Procedural violation by any member of the team. This is a general penalty for actions of the team that may not specifically be covered in these rules, but are of sufficient gravity to the Judges as to warrant a penalty. (+10)
- C.) Leaking connection, barely oozing water and just discernable to the judges (+4 each)
- D.) Slow, obviously dripping connection (+6 each)
- E.) Squirting, continuous leaking connection (+8 each)
- F.) Meter not properly put together and a part too loose (other than the bottom plate bolts described in P-5.H.) or falls off (+10 each)
- G.) Meter fails to register flow through meter when tested (+10)
- H.) Bottom plate bolts can be loosened without a tool (+10 each)

## **SPONSORS**

**S-1.** Requirements for meter company sponsorship in the Meter Madness Contest.

The meter manufacturer must:

- A.) Be an associate member of AWWA.
- B.) Exhibit at ACE.
- C.) Be an active committee member (assist with the contest, attend the committee meeting at ACE) for two years prior to being approved to sponsor the event.
- D.) Be in business in North America for five years.
- E.) Be willing to provide all meters and parts for the nationwide competition.