

Operations Forum

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Water Pollution Control Federation

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► Photo Finish:
This Year's Challenge

TAKING "IT" BACK TO OLE' VIRGINNY

Ches-Eliz Lightning Keeps the Challenge Cup

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Thirty-three teams met at this year's Operations Challenge in Toronto, Canada, on October 8, all poised and ready to defeat the reigning champion or just achieve a personal best. After the smoke cleared, Virginia WPCA's "Ches-Eliz Lightning" from the Hampton Roads Sanitation District had successfully defended its title as champion by capturing 474.50 out of a possible 500 points.

Virginia's "Team Atlantic", also from Hampton Roads, dazzled challenge participants with its skill, not to mention its

For the second year in a row, Hampton Roads' "Ches-Eliz Lightning" takes the challenge cup. Team members, starting third from left, are Russell Craig, Tim Bell, George Gregory (Coach), Rob Luma, and Richard Roberts. Trophies and team certificates were presented by WPCF Past-President Chuck Kaiser (far back), and Challenge Committee officers Al Goodman and Doug Miller (far left).

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colors, and went on to capture second place overall with 443.60 points. Third place overall went to Michigan's "Waste Watchers II" from Kalamazoo, which earned a total of 430.50 points.

The teams were judged on their performance in five events—pump maintenance, collection systems repair,

laboratory, process control, and safety. In response to concerns about having the events reflect the variety of operational situations that exist in today's treatment plants, three of the events were revised: pump maintenance, laboratory, and process control.

The pump maintenance event now



Keeping it all in the family, Hampton Roads' "Team Atlantic" came dressed to win and captured second place overall.

requires teams to take a progressing cavity-type pump out of service, replace the packing, remove the stator, check the rotor for wear, replace the drive belts, check the pipe and suction housing for blockages, connect the pump and piping, and place the pump back in service.

In this year's Process Control Event, participants solved problems from four of eight types of operational wastewater technologies that were disclosed to them at the pre-competition meeting. For the Laboratory Event, teams performed three of ten designated laboratory procedures. The selected three were also disclosed during the pre-competition meeting.

The Collection Systems Event, in which teams cut out and repair a simulated break in 8-in. clay pipe, and the Safety Event, in which two team members repair a chlorine tank leak while two other members resuscitate a Red Cross dummy who has been overcome by chlorine gas fumes, were not revised.

As added evidence that the challenge is evolving, another major revision took place in response to concerns about basing scores on time was to use "equal weighting" for all events. Each event was weighted at 100-points, and a mechanism was developed for converting the real time taken to perform

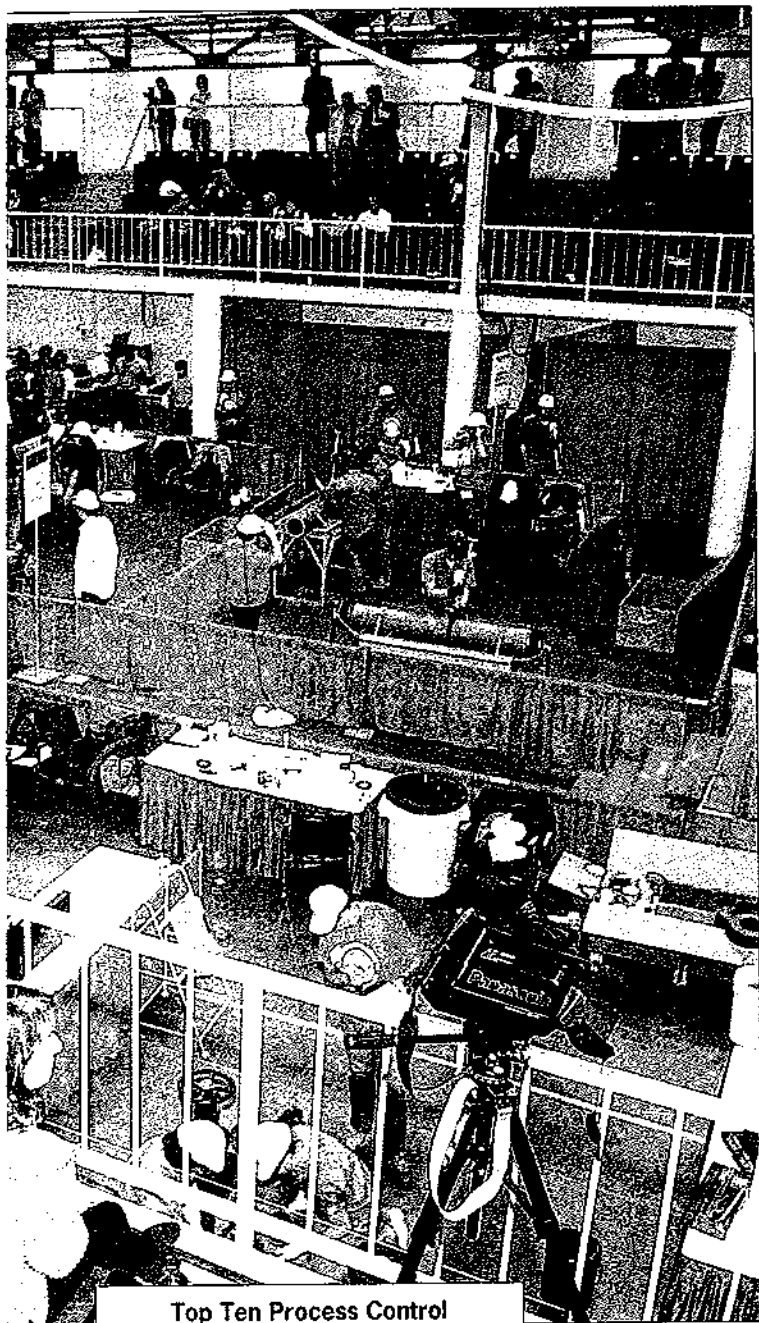


Top Ten Pump Maintenance Event Finishers

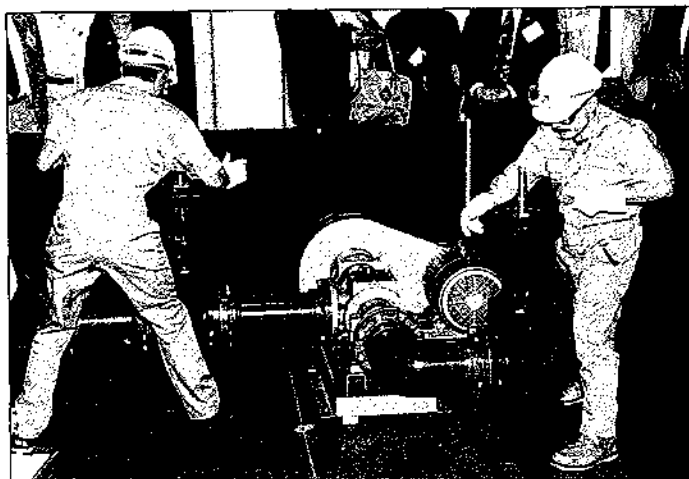
Team	Points	Time
Va. Ches-Eliz	100.0	553.10
Calif. Raging Reclaimers	91.5	718.41
Calif. Screaming Midgets	90.4	740.62
Va. Team Atlantic	89.9	749.68
New Engl. Green Mt. Boys	89.5	757.30
Ga. Swat Team	85.4	839.00
Chesapeake Bay Riders	85.4	839.00
Ontario NERDS	85.3	840.97
Ark. Sludge Hawks	80.9	925.44
Va. ASA Rookies	79.9	945.94

Top Ten Laboratory Event Finishers

Team	Points	Time
Ohio CWA	100.0	659.00
Mich. Kalamazoo	98.9	672.00
Va. Team Atlantic	97.6	696.00
Va. Ches-Eliz	96.9	695.00
Ky. Earthlings	95.5	710.00
Va. ASA Rookies	91.3	759.00
N.Y. Rockaway	90.4	769.00
Fla. Light'n Bolts	88.0	796.00
Central States Shovelers	85.1	830.00
N.J. Pioneers	84.8	833.00



Members of the third place overall team, the Kalamazoo, Mich., "Waste Watchers" relax with a bird's-eye-view of the challenge.



Although the Laboratory and Process Control events proved to be much less of a challenge for Ohio's "CWA", team members gracefully place their pump back in service.



Ontario's "Channel Apples" listen to Safety Event instructions. For both Ontario teams, this year's challenge was a first.

Top Ten Process Control Event Finishers

Team	Points	Time
Ga. Swat Team	100.0	-294.88*
Ohio CWA	88.3	-0.41*
Mich. Kalamazoo	87.4	23.50
Va. Ches-Eliz	81.8	164.66
Calif. Screaming Midges	80.7	193.40
Pa. PSC Enviro.	79.8	215.22
Calif. Raging Reclaimers	78.1	257.59
Va. ASA Rookies	77.0	285.56
New Engl. Maine Force	76.1	307.69
N.J. Pioneers	75.0	9312.31

* Negative scores reflect bonuses earned that allowed time to be subtracted. The opposite was true in some cases when penalties were given.

Top Ten Collection System Event Finishers

Team	Points	Time
Va. Team Atlantic	100.0	60.15
N.J. Pioneers	97.7	67.18
Ga. Swat Team	97.7	67.25
Va. Ches-Eliz	95.8	72.97
Calif. Screaming Midges	94.6	76.59
Ky. Formanites	93.8	78.91
Ark. Sludge Hawgs	93.7	79.25
S.C. Regulators	91.6	85.69
N.Y. Rockaway	91.2	86.78
Calif. Raging Reclaimers	90.0	90.60

Top Ten Safety Event Finishers

Team	Points	Time
Va. Ches-Eliz	100.0	109.28
Fla. Dirty Water	97.6	116.44
New Engl. Maine Force	97.5	116.54
Ky. Formanites	95.2	123.47
Calif. Raging Reclaimers	92.8	130.97
Va. Team Atlantic	91.3	135.00
Ark. Sludge Hawgs	90.6	137.00
Va. ASA Rookies	89.8	139.28
Chesapeake Bay Riders	89.6	139.75
Mich. Kalamazoo	88.2	144.07



The Laboratory Event required that team members conduct three out of ten designated laboratory procedures. Here, all three Virginia teams, including newcomers the "ASA Rookies" (first table), test their skills (top). Teamwork, agility, and skill are a must in the Collection Systems Repair Event, as is demonstrated here by a Central States team (left).

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an event into points, with 100 points given to the fastest time.

Suggestion Box

The rapid growth in challenge participation from 22 teams when it first began in Dallas, Tex., in 1988, to 33 teams this year, is evidence that Operations Challenge is gaining popularity and respect. However, as with all aspects of life, change is inevitable. We witnessed it last year in the Safety Event and this year in several forms, and we're bound to see it again.

The Operations Challenge Committee serves as a suggestion box of sorts in which challenge participants' and onlookers' ideas, complaints, or opinions are retained for future consideration. Some of your suggestions and concerns are

being considered by the committee as proposed changes to the 1992 Rules and Regulations. These possible changes include:

- Changing the content of the Collections Systems Event to utilize more universal techniques, and to ensure safety.
- Changing the content of the Safety Event to emphasize technique.
- Working with the U.S. EPA to award certificates to the sponsoring plants of team members, possibly on the national competition level. This would help prompt local recognition of the contributions of the organizations from which the teams are drawn, and foster public appreciation and understanding of the wastewater treatment industry as a whole.

Special Thanks...

This year's Operations Challenge would not be possible were it not for the equipment and services contributions of the following companies and municipalities.

City of Toronto
 City of Ventura, Calif.
 Dufresne-Henry, Inc.
 Force Flow Equipment
 HACH Company
 Indian Springs Specialty Products
 Jenkins Canada
 JWC Environmental, Inc.
 Laerdal Medical Company of Canada
 L.E. Washington Sales, Ltd.
 Metropolitan Works Dept., Toronto
 Mission Clay & Rubber Corporation
 National Clay Pipe Institute
 Pima County Wastewater Management Dept.
 Ridge Tool Company
 Robbins & Meyers, Inc., Fluid Handling Group
 Stanchem, Inc.
 Superior Clay Corporation
 TREEO Center
 W.A. Stephenson Mechanical Contractors Ltd.
 Yellow Springs Instrument Co.

This would undoubtedly help increase challenge participation.

- Working with the Association of Boards of Certification (ABC) to include sets of questions that may be completed in a "Jeopardy" game type competition (similar to what has been done by the Rocky Mountain Region) as a variant of the hands-on challenge.
- Using a computerized model of process control situations instead of the paper and pencil test questions currently used in the Process Control Event.

While these are still only suggestions, they signify a wide and enthusiastic interest to make the challenge a top notch and universally accepted competition.