

Operations Forum

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Virginia's "Ches-Eliz Lightning" Takes the Challenge

A record 34 teams from across the U.S. competed in this year's Operations Challenge during the 63rd WPCF Annual Conference in Washington, D.C. Vying for a chance to take home the winner's cup, each team demonstrated its skill in safety, collection systems, pump repair, laboratory, and process control. At last, Virginia WPCA's "Ches-Eliz Lightning" from the Hampton Roads Sanitation District emerged as the overall winner with a combined time of 38.48 minutes. Second place overall went to the 1988 and '89 winners CWPCA's "Bay Area Bashers" with a time of 40.74 minutes. The "Raging Reclaimers" from the Irvine Ranch Water District in Orange County, Calif., captured third place overall with a time of 42.73 minutes.

George Gregory, superintendent for the Chesapeake Elizabeth Plant and coach of "Ches-Eliz Lightning" attributed the team's success to practice and a stringent exercise program. The team, which placed 15th last year, allotted 2 to 4 working hours a week to practice and often worked out during non-working hours.



(left) Hours of practice paid off for "Ches-Eliz Lightning." (above) The team accepted the 1990 winner's cup from Al Goodman (far left), chairman of the Operations Challenge Committee. Team members include, from right to left, Richard Roberts; Russell Craig, team captain; Rob Luma; Tim Bell; and George Gregory, Coach.



"After working and practicing hard, we went to D.C. with the feeling that we could win. I think the exercise program had a lot to do with helping us win the competition," said Gregory.

Gregory felt the pump maintenance event was most favored because of the amount of available information. "We practiced with a pump very similar to the pump used in the competition. This allowed us to have a realistic simulation for that portion of the competition," he said. He also mentioned that the other events had more unknown factors which made it difficult to prepare for.

Challenge Events

This year's safety event was new and definitely improved. The event required two of the four team members to rescue a worker overcome with chlorine gas exposure and then return to repair the leaking chlorine tank. While the tank was being repaired, the other two team members performed CPR on the rescued victim (stand-ins provided by the American Red Cross). "Ches-Eliz Lightning" finished first in this event with a time of 2.27 minutes. California's "Raging Reclaimers" from the Irvine Ranch Water District and New York WPCA's "Nassau County State Champs" both finished with the next best time of 2.38 minutes. The Louisville MSD "Cards and Cats" of the Kentucky/Tennessee WPCA placed third with a time of 2.67 minutes.

The collect systems event was



Overall Winners, 1st-5th

Rank	Team	Time
1	Va. WPCA "Ches-Eliz Lightning"	38.48
2	CWPCA "Bay Area Bashers"	40.74
3	CWPCA "Raging Reclaimers"	42.73
4	Mich. WPCA "Kalamazoo Wastewatchers II"	44.47
5	Va. WPCA "Team Atlantic"	47.61

Collection Systems Winners, 1st-5th

Rank	Team	Time
1	CWPCA "Bay Area Bashers"	0.99
2	Va. WPCA "Ches-Eliz Lightning"	1.01
3	NYWPCA "Suffolk County O&M"	1.13
4	NYWPCA "Nassau County State Champs"	1.16
4	Fla. PCA "City of Tampa"	1.16
5	Va. WPCA "Team Atlantic"	1.22

conducted in much the same way as in years past. Teams were required to repair a section of clay pipe as quickly and efficiently as possible. Teams were also scored on leakage from the repaired section. The "Bay Area Bashers" finished in just under a minute (0.99 minutes to be exact) and took first in this event. "Ches-Eliz Lightning" came in a close second with a time of 1.01 minutes, and New York WPCA's "Suffolk County O & M" took third by finishing in 1.13 minutes.

In the Laboratory event, teams replaced a dissolved oxygen probe membrane, counted fecal coliform colonies on membrane filters, and performed standard dilutions from stock solutions. First place went to Virginia WPCA's "Team Atlantic" from the Atlantic Plant in Virginia Beach with a time of 5.91 minutes. The "City of Tampa" from the Florida PCA followed with a second place time of 6.47 minutes. "Ches-Eliz Lightning" placed third with its time of 6.77 minutes.

Team members competed in the process control event behind closed curtains. Each team solved a process control problem from an activated sludge plant with advanced waste treatment processes using available plant data. The "Bay Area Bashers" finished first in 20.58 minutes, followed by the "Raging Reclaimers" and Michigan WPCA's "Kalamazoo Wastewatchers," both of which had a time of 21.17 minutes. New



England WPCA's "Green Mountain Boys" finished in 21.60 minutes, taking third.

Pump maintenance seems to be the most popular challenge event—for the third year in a row. According to Todd

McGovern of Team Atlantic, "All the other events are the playoffs but pump maintenance is the Super Bowl. Every team wants to win the pump event because it is most like what we actually

Safety Winners, 1st-5th

Rank	Team	Time
1	Va. WPCA "Ches-Eliz Lightning"	2.27
2	CWPCA "Raging Reclaimers"	2.38
2	NYWPCA "Nassau County State Champs"	2.38
3	Ky./Tenn. WPCA "Cards and Cats"	2.67
4	NJWPCA "Devils"	2.90
5	CWPCA "Bay Area Bashers"	2.92

Laboratory Winners, 1st-5th

Rank	Team	Time
1	Va. WPCA "Team Atlantic"	5.91
2	Fla. PCA "City of Tampa"	6.47
3	Va. WPCA "Ches-Eliz Lightning"	6.77
3	Fla. W&PCOA "GR4U"	6.77
4	Mich. WPCA "Kalamazoo Wastewatchers II"	6.79
5	NJWPCA "Pioneers"	7.23



The safety event offered competitors new challenges this year. Two team members from the North Charleston Sewer District's "Pipe Line Express" demonstrate their CPR skills on a victim of chlorine gas exposure.

do on the job." First place in the pump event went to "Ches-Eliz Lightning," which finished in a speedy 6.05 minutes. California's "Torpedoes" from Hyperion WTP came in second place with the next best time of 8.44 minutes. The "Bay Area Bashers" placed third in 8.95 minutes.

Behind the Scenes

The challenge proceeded relatively smoothly, thanks to the cooperative efforts of everyone involved and vastly improved physical conditions. The layout of the competition afforded ample room for competitors and spectators alike.

Bleachers flanked one side of the competition, and there was enough room remaining for spectators to roam freely.

To compete in Operations Challenge, many competitors must make sacrifices. According to several operators, many districts will not cover expenses, compensate for time off, or permit practice time during working hours. Other districts are more lenient, however, and many MAs provide travel expenses for their teams.

According to Al Goodman, chairman of the Operations Challenge Committee, the Challenge offers operators an opportunity to demonstrate their skills

and, on the local level, it is effective in boosting public relations. "There is more to being an operator than opening and shutting a valve," he said. He said this year there has been much more interest on the MA level in the competition, with better local publicity. "In the last 3 years, we've seen times get better and better."

The Operations Challenge '90 organizers would like to thank the following vendors, municipalities, and organizations for their contributions.

Fairbanks Morse
John Crane
T.B. Woods's Sons
American Ductile Iron Pipe
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Washington Suburban Sanitary Commission
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Grand Glaize WWTP
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PIMA County Wastewater Management
National Clay Pipe
Superior Clay Corporation
Ridge Tool Co.
Mine Safety Appliances
American Red Cross
Jones Chemical
John Krantz Associates
Buchart-Horn
YSI

Pump Maintenance Winners, 1st-5th

Ranks	Team	Time
1	Va. WPCA "Ches-Eliz Lightning"	6.05
2	CWPCA "Torpedoes"	8.44
3	CWPCA "Bay Area Bashers"	8.95
4	NYWPCA "Nassau County State Champs"	9.13
5	NYWPCA "Suffolk County O&M"	9.18

Process Control, 1st-5th

Rank	Team	Time
1	CWPCA "Bay Area Bashers"	20.58
2	CWPCA "Raging Reclaimers"	21.17
2	Mich. WPCA "Kalamazoo Wastewatchers II"	21.17
3	NEWPCA "Green Mountain Boys"	21.60
4	Va. WPCA "Ches-Eliz Lightning"	22.38
5	Fla. W&PCOA "GR4U"	22.42