

Pete McGrath Retires After Four Decades of Service



This December, we bid farewell to one of MSC's earliest team members, Pete McGrath, who has been part of our story since 1980. As one of the first people hired after our founding in 1978, Pete has been more than just a colleague – he's been a cornerstone of our company culture and a keeper of our history.

Pete's remarkable career evolved alongside MSC's growth through the decades, from leading major HVAC and process cooling installation projects to becoming a key figure on our sales team, where he excelled in designing and selling complex projects. Even during his decade running his own successful company, Freedom Mechanical Contractors, Pete never truly left the MSC family, and we were delighted when he returned in 2013.



Throughout his years at MSC, Pete has shared countless stories about the company's early days when he worked in the field servicing refrigeration systems for gasoline vapor recovery. His tales of challenging projects and lighthearted moments from those early years are legendary and preserve important memories from our company's beginning. Pete's knack for storytelling is reflected in his gift for writing, which he's shared through his many thoughtful contributions to our company blog.

When Pete is not collaborating with his peers and working with clients on complex HVAC solutions, you might find him pursuing his passion for writing short stories or surf fishing along the Jersey Shore. He and his wife, Sue, are the proud grandparents of four.

As Pete begins this new chapter of his life, we're not just losing a valued colleague – we're saying goodbye to a friend who has helped shape our company from its earliest days. His technical knowledge and hard work will be missed, but it's his warmth and wisdom that we'll miss most.

Please join us in thanking Pete for his years of dedicated service and wishing him joy in his retirement. After more than four decades in the industry, he has certainly earned his time for fishing, writing, and making memories with his grandchildren.



MSC Team Celebrates the Season with Axes and Awards



The MSC team came together on December 7th at Stumpy's Hatchet House to celebrate yet another successful year. Our crew traded in our usual tools for throwing axes, combining friendly competition with holiday cheer. Festivities included scrumptious food and prize drawings for themed baskets, gift cards, and other exciting prizes. The event exemplified what makes MSC special – our ability to work hard, have fun, and maintain our strong One Team spirit. A great time was had by all!



Mid-Atlantic Buildings and Facilities Management Trade Show

Last month, MSC returned to the New Jersey Convention and Exposition Center in Edison for the 18th Annual Mid-Atlantic Buildings and Facilities Management Trade Show (MABFM). Our team once again connected with key decision-makers and facilities professionals throughout the region, strengthening existing relationships while establishing promising new industry partnerships. We look forward to developing these connections into lasting relationships that benefit our clients and partners alike.

MABFM2024



WISHING YOU
JOY & PEACE
THIS HOLIDAY
SEASON FROM
OUR FAMILY
TO YOURS!



MSC's partnership with a New Jersey pharmaceutical manufacturing complex began when we were selected to manage preventive maintenance for a newly constructed 80,000 sq ft research and development facility. Based on our proven performance, the client requested assistance with another building within the multi-facility campus – a troubled 105,000 sq ft laboratory/office facility that was experiencing significant operational issues after just ten years of operation.

Critical Challenges

The existing facility faced multiple problems affecting both operations and occupant comfort:

- Frequent freeze stat trips
- Equipment and VFD malfunctions after power fluctuations
- Inconsistent temperature control with hot/cold spots
- Static pressure and air measurement issues
- Motor and fan bearing problems
- Control systems defaulting to manual operation mode
- Escalating operating costs

Our Initial Assessment

MSC implemented retro-commissioning protocols, beginning with a comprehensive two-day facility review that included operator and occupant interviews per NEBB standards. The team gathered critical data about all systems, reviewed maintenance history, and analyzed original design drawings and balancing reports. We also collected various readings and samples collected from throughout the building.

Hydronic Systems Restoration

Investigation of the chilled water and hot water systems revealed extensive issues affecting system performance. Our team discovered heavily loaded strainers and coils with sediment deposits in the bottom rows, explaining many of the freeze stat trips, low flows, and stratification issues. To restore proper operation, we implemented a number of corrective measures:



- Performed a complete system blow-down
- Conducted thorough cleaning with trisodium phosphate (TSP)
- Filled the system with clean water containing a rust inhibitor
- Restored glycol heat recovery loops from 4% to the original design specification of 15%

After completing these steps, our technicians cleaned all coils and drain pans before proceeding to balance the chilled water, hot water, and glycol loops.

Air Systems Testing and Balancing

After completing hydronic system restoration, we moved on to comprehensive TAB (testing, adjusting, and balancing) of the air systems. Several preparatory repairs and improvements were necessary:

- Repaired multiple AHU filter rack issues
- Cleaned all air handlers thoroughly
- Installed new filters throughout the system
- Adjusted occupied/unoccupied schedules to optimize energy savings
- Referenced original air balancing information to verify proper settings
- Performed a complete system testing and balancing

Systems Enhancement and Controls Upgrade

Throughout the retro-commissioning process, our team implemented various upgrades to ensure long-term efficiency and reliability:

- Cleaned and reprogrammed all VFDs with auto restart capability
- Performed comprehensive vibration testing
- Installed shaft grounding rings on large fans and pumps
- Enhanced BAS graphics with new VFD information
- Modified sequences of operation
- Refined alarm parameters
- Installed new instruments where existing ones were inaccurate and could not be calibrated

Results and Training

All systems were carefully trend-logged and fine-tuned as needed to verify optimal performance. Once the retro-commissioning process had been completed, MSC provided comprehensive training to the facility staff on system functionality. These improvements resulted in significantly enhanced building performance, energy economy, and operational efficiency. Based on the success of this project, MSC was awarded the preventive maintenance contract for this facility.