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A PRIVATE

RACECOURSE

CONVERTS TO VRF



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A Private **RACECOURSE** Converts to VRF

Tom Bogert at Monticello Motor Club.

If you're a supercar owner from New York City, the congested boulevards around Times Square are hazardous, the Long Island Expressway is torturous, and the New Jersey Turnpike is a speeding ticket waiting to happen.

So, what's a driver to do with all that horsepower?

Not all is lost for those in the Big Apple with a need for speed. The comparatively sleepy town of Monticello, N.Y., may provide some high-revving consolation. If you can afford the car, you can probably spare the \$65,000 needed to cover base initiation fees at Monticello Motor Club, dubbed the world's premier automotive playground.

Membership to the club provides access to 4.1 miles of beautifully paved, closed-course racetrack, a beautiful clubhouse, professional driving instruction, a private chef, two helipads, vehicle storage space, concierge service, and a host of other amenities. If you don't own a track-worthy vehicle, the club has more than enough BMWs, Porsches and other exotics to go around.

As expected, the services and facilities are all second to none. All except the now-replaced HVAC systems, that is.

Late last year, as driving season culminated, Bob Bogert, owner

of Alpine Air Heating & AC, was contacted about upgrading the heating and cooling systems that served the main building at Monticello Motor Club. The club has been an Alpine Air customer for seven years at least, and Bogert has worked closely with the club's general contractor, Woodstone Development, on a number of different club projects.

✂ HELICOPTER INBOUND ✂

"The 10,000 square-foot clubhouse is actually several different facilities under one big roof," said Bogert, whose 14-person mechanical firm primarily serves the Orange County, N.Y. area. "There's the clubhouse proper, kitchen, a training facility, garages, locker rooms, etc. Woodstone was expanding the facility, and the club wanted to take the opportunity to replace the existing heating and cooling systems."

Four grossly oversized rooftop units, installed 12 or 13 years ago, served the clubhouse. These totaled about 60 tons of cooling capacity and about 1MMBTU of propane-fired heating, connected to a system of ductwork. The primary complaints about the system were lack of zoning and comfort, and the fact that they were ridiculously loud.

"The training space is comprised of classrooms where new rac-



Erik Nieto and Tom Bogert check a VR condensing unit.

Club.

ers can learn the ins and outs of driving at extreme speed before actually putting rubber to asphalt,” said Bogert. “The noise from the rooftop units, in the training rooms specifically, was so loud you couldn’t hear yourself think. It literally sounded like a helicopter was landing on the roof.”

Working closely with Woodstone, Bogert suggested replacement of the existing systems with a VRF heat pump system.

❖❖ COLLABORATIVE EFFORT ❖❖

“Heat pump installation is the fastest-growing portion of our business,” said Bogert. “Fossil fuels are going away, and this is the future. We wanted to present the motor club with a cutting-edge system that could solve all of their needs, and a VRF system was the best way to do that.”

Alpine Air is a Fujitsu Elite Dealer, and has been installing mini-splits since the company was founded 15 years ago. Most of their work is residential, though light commercial projects call for VRF installations from time to time.

Bogert prepared a design with the help of John Resso, at rep firm Wales Darby, and Karol Tomaszewski, VRF sales and technical adviser at Ferguson Enterprises. Bogert has worked with Resso

on mini-split heat pump installations at Monticello Motor Club in the past, with great success.

“Resso was my first call, as usual,” said Bogert. “He brought Karol into the conversation. These guys offer phenomenal support and are always quick to answer questions. Together we built a preliminary plan, and Karol ran it through the design simulator,” said Bogert. “We met with the GC and further tweaked elements of the design to reflect ideal zoning of the space. Maintaining aesthetics was also part of the discussion.”

❖❖ IMPROVED ZONING ❖❖

The clubhouse originally had four zones. Alpine Air installed 13 zones. Three, eight-ton Fujitsu Airstage VRF condensing units were mounted on the roof. The indoor units consisted of ceiling cassettes and medium- and high-static ducted units. The old, oversized ductwork was removed entirely.

The show-ready garage space, with a total of six bays, is conditioned by three, three-ton ceiling cassettes. Each of the two classrooms is served by two, 30,000 BTU medium-static ducted units. In the kitchen, a two-ton medium static air handler is

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used, and the lounge, locker rooms and restrooms utilize either 12,000 or 18,000 BTU ceiling cassettes.

“The main area of the clubhouse has 11-foot ceilings,” said Bogert. “This space features the entry and a bar, and has a four-ton, high-static air handler. The height of the ceiling required us to change our original design.”

Initially, the plan that Bogert, Resso and Tomaszewski put together called for a medium-static air handler in the main area. After learning of the ceiling height, they changed the spec to include a high-static model.

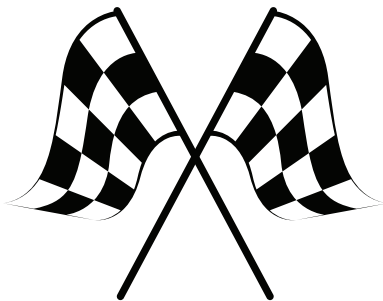
“We wanted to be sure that we’d get enough heat throw from the air handler,” explained Bogert. “The clubhouse is heavily used from April through October, so AC was the biggest consideration, but the club plans to begin utilizing the space for different events throughout the winter. Overlooking premium comfort during the heating season would’ve been a mistake.”

Each zone features touchscreen, wall-mount controls that communicate with a central controller in that main area. The system also provides facility managers with remote access.

The installation was seamless and straightforward. Resso and Tomaszewski were onsite for start-up in May, just in time for the bulk of driving season.

“We haven’t had a single callback,” said Bogert. “The raceway was happy to do away with propane, but more importantly, the building is more comfortable, stylish and quiet than ever before.”

With the success of the VRF installation, Bogert and Resso are looking ahead to other heat pump installations at the club. Woodstone Development is building custom homes for club members on the neighboring property, much like a country club. According to Resso, there’s great opportunity to install mini-split and single-phase VRF systems in homes adjacent to the raceway. ■■



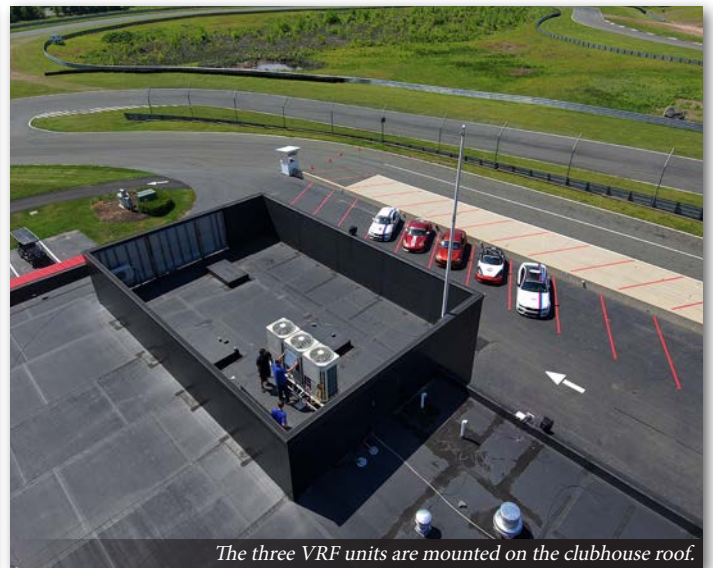
Tom and Jamie Bogert, of Alpine Air, program one of the new VRF thermostats.



Front row (L-R): Rob Inderwies (Ferguson VRF Division), Tom Bogert, project manager (Alpine Air), Jamie Bogert, Operations Manager (Alpine Air), Bob Bogert, Owner (Alpine Air), Mike Watkins, Owner (Woodstone Development), Erik Nieto, Installer (Alpine Air)
 Back row (L-R): Karol Tomaszewski (Ferguson VRF Division), John Resso (Wales Darby)



Three, eight-ton Fujitsu Airstage VRF condensing units were mounted on the roof to supply heating and cooling to 13 zones in the clubhouse.



The three VRF units are mounted on the clubhouse roof.