

# Ambitious Flight Plan

Ex-Air Force chief is hoping his geothermal firm becomes an industry giant.

BY JOHN VASTYAN

**C**hris Ellis, 28-year-old president of Oklahoma City-based Comfortworks Inc., is building a successful geothermal business, one satisfied customer at a time.

“My goal is to be one of the largest geothermal installation firms in the nation,” says Ellis, whose company is a 40-person, full-service mechanical contracting firm. “We’re working on the plan every day, and if the last year or so is any indication of where we might be able to take this thing, I’d say we’re on the right path.”

## Steady Growth

The roots of Comfortworks go back more than 30 years. C&S Heating and Air Conditioning was established in Oklahoma by John Beller in 1975. The full-service HVAC and geothermal company differentiated their offering by providing in-house geothermal loop design, installation, and drilling. Ellis acquired the firm last year.

Ellis is intent on keeping the firm’s family structure and—though they’ve broadened the scope of the full service HVAC firm to include radiant floor heating, pool heating, and domestic hot water—he’s focused their work, expertise, and investment chiefly on new residential and light commercial geothermal installations.

“It’s the geo-to-radiant work, with domestic water, that we’ve been doing so much of lately,” Ellis says.

Currently, they’re one of the largest geothermal systems installers in all of Oklahoma.

Comfortworks billings stem from a mix of varied residential new construc-

tion work, including geothermal (60%), commercial HVAC with solid geo and water-to-water involvement (30%), and residential retrofit entirely devoted to geothermal (10%).

“Almost all of our commercial and residential work involves geothermal in some fashion,” Ellis says.

## Flight Path

After high school, Ellis joined the Air Force for four and a half years. He served as an F-16 crew chief at his last duty station in Japan. After leaving active duty service, he joined the National Guard, changing his career path to HVAC, while looking for a full-time job. He found a position at Stillwater, Oklahoma-based Air-O Heating & Air Conditioning.

“I loved it,” Ellis says. “I’d finally found my niche.

Shortly after Ellis earned his journeyman’s license, he opened and ran Air-O’s Oklahoma City branch. Soon, he found inspiration in one of the leading “green” movements that came to affect the area: geothermal.

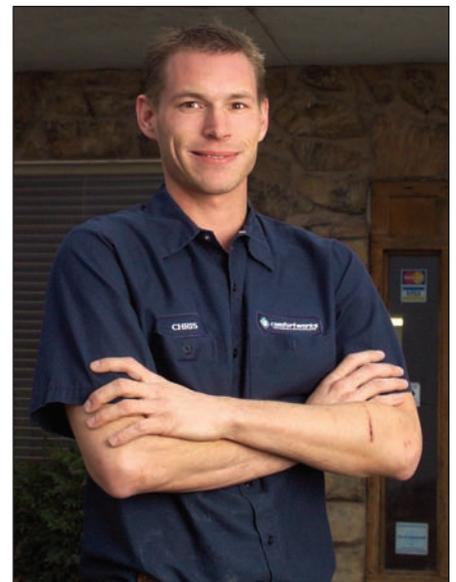
“My natural inclination was to move in that direction,” he adds. “Soon we were putting 100% of our effort into geothermal work.”

After four years at Air-O, Ellis sought the financial advice of a savvy business friend. Ellis wanted to become his own boss, and they found a way to accomplish it.

## All in the Family

When he acquired C&S Heating and Air in 2007, Ellis took ownership of two well-outfitted drilling rigs, a broad equipment and materials supply inventory, an arsenal of tools, and an automated sheet metal shop with plasma cutters and duct folding machines. In addition, he was quickly adopted by a finely tuned crack battalion of 40 per-

Chris Ellis, Comfortworks Inc. president



sonnel to put the equipment and long-term customer relationships to best use.

“There are many advantages to acquiring an established firm with a solid group of dedicated employees and a good reputation,” Ellis says. “Equipment inventory, the customer database, tools, and a facility are among the obvious advantages. But one of the true surprises for me has been the work ethic and honed relationships of the employees here, all of whom have welcomed me into *their* family, so to speak.”

According to Ellis, business growth has been strong.

“We anticipate the year to end about 5% better than the firm was doing a year ago, and 10% better than where they were at two years ago.”

## Geothermal Boiler

“We buy ClimateMaster geothermal and water-to-water equipment, a decision that played nicely into our hand when they came out last year with the only high-temperature geothermal heat pump available in the U.S.,” Ellis says.

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**Chris Ellis** (right) completes a water-to-air installation with Chris Gilley for a home near Oklahoma City, Oklahoma.



**Ellis** discusses a job proposal with Comfortworks employees Brandy Jenkins (left) and Tyson Taussig (right).



“We call the new THW unit—which produces an unassisted temperature of 145°F—a geothermal boiler,” he adds. “We used a few THW systems for a recent home and pool installation. For the home, we connected the THW to in-floor radiant. For the pool, we added a heat exchanger so that when the pool’s sensor calls for heat, we divert THW heat to it. We’re very pleased with how well it works, and expect this type of install to lead to a lot of new business. Customer interest in this type of application is very high.”

The only downside, Ellis says, is the amount of time it takes to heat the pool with geothermal equipment. Thermal energy is in the ground, ready to be harvested, but it’s not like burning fossil fuels to produce heat.

The company’s most recent pool-heating job involved providing heat for a 20,000-gallon pool, a very common size. According to Ellis, it requires two or three times as much time to heat the water initially. But once that’s accomplished, it maintains pool heat smoothly and efficiently, especially if a solar blanket is used to contain the warmth.

## Habitat for Humanity

The community of Hope Crossing, about 250 blue-collar homes, is 10 miles northeast of Oklahoma City. The entire development is being constructed by Habitat for Humanity. As a testament to Ellis’ character, Comfortworks has been working there for almost two years.

“We’re involved with Habitat because it’s the right thing to do,” he says.

The entire development of 1100 to 1450-square-foot, three and four-bedroom homes has won LEED and Oklahoma Gas & Electric certifications for tax credits. Typically, Comfortworks installs a 2-ton ClimateMaster Tranquility 27 water-to-air geothermal system, fully ducted, wired, and ready to go.

The 2 through 6-ton Tranquility 27 line uses EarthPure (HFC-410A) zero ozone depletion refrigerant, a definite plus for LEED consideration. The systems offer efficiencies up to 31.5 EER (energy efficiency ratio) and 5.1 COP (coefficient of performance).

## A Future in Geothermal

“There’s a great future for those in geothermal business. We plan to grow steadily and at a pace that can be sustained,” Ellis says. “The biggest measure of our success won’t be annual sales volume, new acquisitions, territory growth, or profit margin. Number one on that list is customer satisfaction. We’ll measure it steadily. If it drops, we’ll apply the brakes and make adjustments. This will be behind every move we make.”

“Geothermal systems promise tremendous savings over the long term as compared to such traditional sources of energy as oil, electric resistance, natural gas, or propane. With geo, annual heating bills drop by 50% to 80%, depending on the system that is replaced,”

Ellis adds. “Simply, I tell customers that a geothermal installation pays you to own it. Geothermal energy is not subject to rising costs or unpredictable price swings.”

In addition to the huge cost and “carbon footprint” advantages, Ellis points out there are other key benefits that many geothermal contractors already know, including:

- **Comfort.** In homeowner surveys, geothermal systems are routinely ranked as “more comfortable” than traditional gas, oil, or electric systems.
- **Low-cost hot water.**
- **No equipment noise or exposure.** Geothermal systems also provide air conditioning with no noisy traditional outdoor unit required.
- **Responsibility.** Geothermal systems are totally non-polluting. In fact, installing a geothermal system to replace a fossil fuel system immediately cuts your personal emissions contribution by 50%, or the equivalent of taking several cars off the road.

“The whole experience—business ownership, working with a great bunch of professionals, strong customer relationships, and growth of the geothermal work I chose for a career—has been a dream come true,” Ellis concludes.

“It’s very exciting, and the way the market is moving, it’ll be swinging in our direction for a long time.” *WWJ*