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THE PULSE OF THE HELICOPTER INDUSTRY



**A NEW ERA**  
ERA TRAINING CENTER



Era instructor Chris Gellene works with a pilot in the Frasca-developed Eurocopter EC 135P2+ FSTD.

# A NEW ERA IN TRAINING

DEDICATED TO SAFETY AND QUALITY INSTRUCTION, ERA TRAINING CENTER DRAWS STUDENTS FROM AROUND THE GLOBE — INCLUDING, IN THE AUTHOR'S CASE, HAWAII.

Story by Richard A. Patterson | Photos by Mike Reyno

Many of us are aware that Era Helicopters is at the forefront of the oil and gas support industry with its fleet of aircraft providing personnel transport services to both the shallow and deep water oil and gas fields in the Gulf of Mexico and Alaska. Others know Era as a provider of air medical transport services within the United States, and of leasing services to third parties worldwide. Where Era's reputation is less well-known — but growing quickly — is as a leader in helicopter training.

I recently had the pleasure to experience Era Training Center's (ETC's) new, technologically advanced, 7,694-square-foot facility. Located at the Lake Charles Regional Airport, near Era Helicopters' headquarters in southwest Louisiana, the center features two new, state-of-the-art helicopter flight simulation training devices (FSTDs) manufactured specifically for ETC by Frasca International.

The FSTDs are impressive, as are ETC's classrooms and instructors. I was equally impressed, however, by the unparalleled customer service exhibited by the center's staff, who agreed to provide me with a customized training experience right after Christmas and during the New Year's holiday season. While many businesses were closed on New Year's Eve and Day, ETC was steady at work, ensuring that my training needs were being met. In today's market, there is no substitute for professionalism and customer service, and ETC's staff exhibits both. Their commitment to safety and excellence was what first drew me to train at this new facility, traveling all the way from the warmth, sunshine and awesome waves of my home in Hawaii.

## WHY THE BUZZ?

Era Training Center celebrated its grand opening in June 2008 with its first U.S. Federal Aviation Administration (FAA) approved Level 6 FSTD, modeled after a Eurocopter EC 135P2+ with a center panel display system. The EC 135 FSTD is an exact cockpit replication — duplicating the single-pilot instrument-flight-rules configuration Era

currently operates — and allows for training in simulated offshore-support environments, as well as winter operations in Alaska. Later that year Era received its second FSTD, a Eurocopter AS 350B2.

Deliveries of additional FSTDs are expected in years to come, including a Sikorsky S-76C++ from Frasca. Era also recently entered into an agreement with AgustaWestland for two AW139 Level 6 FSTDs, the first of which is scheduled to be installed by 2011.

Both of the center's current FSTDs have received CFR (Title 14 Code of Federal Regulations) Part 60 Level 6 qualification from the FAA. When the second qualification, for the AS 350 FSTD, was announced on Dec. 18, 2008, Paul White, ETC's general manager, remarked: "This is an important achievement for Era Training Center, especially when we have seen an increase in interest in training services for industry-wide safety and excellence, such as those offered



# Company Profile



**TOP** An aerial view of the Era Training Center at the Lake Charles Regional Airport.

**MIDDLE** Prior to commencing flight in the FSTD, students are well briefed on systems, emergencies and procedures.

**BOTTOM** Virtual reality at its finest: a student wearing night vision goggles conducts a realistic training mission in the AS 350B2 FSTD.

by ETC. Quality training is more important than ever to operators and regulators.”

Substantial training and implementation went into achieving the Level 6 FSTD certification, which first requires an extremely realistic simulation of the actual aircraft. The FSTD’s extensive visual system (with a 220-degree field of view) is exactly that, and, personally, I found it to be the perfect platform for becoming acquainted with the helicopter.

Beyond all the focus on technology, though, is true training acumen — ETC is a designated Part 142 training center. Under this certificate, its new FAA-approved EC 135 airline transport pilot (ATP) curriculum allows it to issue pilot certificates upon successful completion of ground academics, flight training in the applicable FSTD and aircraft evaluation. Plans are already being implemented to add additional courses to the certificate, said White.

While Era Training Center caters, in particular, to corporate, air medical and law enforcement operators, it has also recently attracted considerable interest from individuals like myself, who desire additional training from reputable organizations. In 2009, ETC trained over 2,500 pilots at its facility, and between 4,000 and 5,000 pilots are projected to pass through its doors during the 2010 fiscal year.

## **THIS IS A SIMULATION?**

Assisting in my own educational needs were chief of flight standards Christopher Di Diego and check airman Neil Collins. Both are veteran ATPs with experiences in offshore and emergency medical service (EMS) operations in Alaska, Texas and the Gulf of Mexico.

From the first day of introductions, I was made to feel as though I was a part of the Era family, starting each morning with a fresh, steaming cup of coffee and some local favorites: Louisiana doughnuts. Once in the classroom, I was impressed with the multitude of full-color training materials, including training slides, checklist supplements and flight manuals. In the next classroom, I could see preparations under way for another course starting the following morning, obviously for an overseas operator of the EC 135. (The international clientele that travels to ETC is impressive, with operators coming from as far away as China, Australia, Brazil and Europe.)

Both instructors took turns each day working with me to ensure all of my questions were answered and that I gained proficiency in the AS 350B2 FSTD and aircraft. During the first three days, we covered all aviation systems, along with emergencies, warning panel annunciators and operating characteristics of the helicopter. Actual parts — including blades, rotor hubs and tail-rotor gearbox sections — were brought into the classroom to provide further hands-on instruction, and to illustrate commonly missed checklist items. On days four and five, we completed extensive training in the FSTD, and I found out how realistic this could be.



Check airman Neil Collins monitors a student's progress in the Frasca AS 350B2 FSTD, while another student receives procedural training in the EC 135P2+ model.

“What is the local airport code where you fly most often?” asked Di Diego. I told him, and, with the push of a button on the control panel at the FSTD’s instructor station, I found myself sitting on the runway at Lihue Airport in Hawaii. I could not believe what I was seeing: I was actually able to point out where I fly air tours. I showed Di Diego my home base and the local airport I use to fly skydivers as well. Di Diego assured me that the detail could be programmed even more accurately, but explained that Lihue was not a commonly used airport on this simulator.

From there, we did several rooftop hospital landings, and practiced pinnacle approaches and scene responses as an EMS helicopter. Again with the push of a button, police cars emerged on a highway, while an ambulance team treated an injured car-accident victim on the ground. I made sure to do a thorough high and low reconnaissance of the scene, staying clear of obstructions and landing safely in the landing zone. Then, off we went to a scenario I felt very confident in: instrument flying (I had just finished my certified flight instructor - instrument helicopter add-on rating the week prior).

Di Diego programmed the scene to an overcast evening, with marginal weather that quickly deteriorated to less than a half-mile visibility and a 200-foot ceiling. With inadvertent entry into instrument meteorological conditions being a leading cause of helicopter EMS accidents, I was pleased to be able to practice this scenario. I was able to quickly program the appropriate instrument approach from the provided approach plate and flew the glidepath using a state-of-the-art horizontal situation indicator and a Wide-Area-Augmentation-System-capable Garmin 430 GPS receiver. Once that was completed, we did several more IFR approaches and flew “in the clouds” for another 15 minutes.

The following day in the FSTD, Neil Collins covered platform landings in the Gulf of Mexico, providing me with realistic scenarios that required me to abort landings. He gave me various caution-panel emergencies while over the ocean to see whether I would decide to abort a flight and return to the original departing platform (where repairs may or may not have been able to be completed) or opt to continue the flight back to the mainland.

Once the platform scenarios were completed and we

returned to land, tail-rotor failures were next, followed by various other emergencies: everything from hydraulics failures to chip lights. We also practiced emergency run-on landings, often completing the approach to land in a slip. Once I felt competent, Collins even completed a simulated Part 135 company check ride.

I was very impressed at the multitude of training scenarios that could be accomplished within the FSTD — all without fear of damaging the airframe or losing my job.

#### WHAT'S IN STORE?

Once the simulator training had been accomplished to Era’s standards, we went outside to the ramp to do a preflight inspection of an actual aircraft and discuss items commonly missed on inspection. What I found particularly impressive was the diversity of aircraft I had hands-on access to: sitting on the ramp was an AS 350B, an EC 135, an S-76C+ and an AW139, among others. This is what makes ETC more than just a simulator-based facility: the actual aircraft you are learning to fly are only a brief walk away, sitting patiently on the ramp awaiting their next student.

What lies ahead for Era Training Center? An expansion into the European and South American markets seems likely, and the center has seen strong interest from Asian operators, too. ETC also plans on putting one of its AW139 FSTDs in Brazil to better cater to its large client base there. And, it is looking at adding additional airframes, including Eurocopter EC 145 and Bell 407 FSTDs, as well as exploring night-vision-goggle training programs.

For myself, I’m already looking ahead to my next trip to Era Training Center: not only for additional training, but to visit with my newfound friends. Hopefully it won’t be a long wait, and I’ll still be standing upright and capable of making smooth collective inputs!

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