



USAF photo by 2nd Lt. Logan Clark

*An instructor guides a student through a training mission on an MQ-1 simulator. The Air Force is relying more and more heavily on simulators to train RPA operators in an environment where the intelligence, surveillance, and reconnaissance demand is insatiable.*

# 21st



*Lt. Gen. Darryl Roberson, commander of Air Education and Training Command, speaks at JBSA-Randolph, Texas, in August. Roberson wants to double the number of undergraduate RPA pilots by 2017.*

USAF photo by TSgt. Joshua Strang

**T**he way pilots train in both the manned and unmanned worlds is changing. The Air Force is trying to adapt to the demand for more pilots flying remotely piloted aircraft by increasingly relying on simulators, and USAF is also increasing the role simulators play in manned flight training, to prepare airmen for next generation threats.

Leaders from multiple major commands outlined the need for a new generation of training across the Air Force, a need to prepare the next generation of pilots for new challenges—and help the greater Air Force address shortages that could limit where and when the service could fight.

“We’ve got to be able to think quickly, we’ve got to be able to change direction when necessary,” Air Force Chief of Staff Gen. Mark A. Welsh III said at the Air Force Association’s Air & Space Conference in National Harbor, Md., in September. Airmen are “remarkably talented and they can [remain adaptable]

## USAF seeks to reinvent training for its pilots and RPA operators. Simulations will play a key role.

and families. Air Combat Command sent 3,366 surveys to officers and enlisted airmen at RPA bases to pinpoint specific causes of stress and overwork in the career fields. Dozens of officials visited bases to speak with airmen and produced a report for ACC and Air Force leadership to review and plan a way forward in an attempt to alleviate the problems. Leadership will review the report and decide what steps to take later this year at a Corona conference of top Air Force leadership this month.

### SUSTAINED TRAINING

The steady drumbeat of training requirement doesn’t stop when the RPA pilots leave AETC and are assigned to their first operational post, however. Operational pilots have been dealing

for missions beyond intelligence gathering and close air support, said Maj. Jason Willey, MQ-1 and MQ-9 functional manager for the RPA capabilities division at headquarters Air Force. Both aircraft can play a pivotal role in global precision attack and even personnel recovery operations.

### VIRTUAL IMPORTANCE

Going forward, much of the training for pilots—especially those in manned aircraft—will need to be virtual, or of a combined live-virtual construct, to help airmen face missions that cannot be replicated in a physical training environment.

“We have the technology,” Welsh said. “How else are we going to put them together? It’s really not all that expensive and there are a lot of people here that can help, and they’re ready, willing, and able to help. We’ve just got to be willing to have the conversation.”

By Brian W. Everstine, Pentagon Editor

# Century Training

as long as we invest the money and the resources into education and training. We cannot take a dime out of this effort. In fact, we should add to it.”

The Air Force’s remotely piloted aircraft pilots and sensor operators have been under unrelenting pressure as the demand for intelligence, surveillance, and reconnaissance has steadily and unrelentingly increased.

The Defense Department attempted to provide some relief this summer, authorizing the Air Force to decrease its required 65 combat air patrols per day to 61 as a way of relieving instructors to train more RPA pilots, said Lt. Gen. Darryl L. Roberson, commander of Air Education and Training Command.

The service’s goal is to double the number of undergraduate RPA pilots it trains by next year, from 192 now to 384. The command wants to hit its maximum capacity by 2017, a needed move to “sustain requirements and crew for the foreseeable future,” Roberson said.

The Air Force is also wrapping up a grassroots review of personnel issues among RPA crews, with a look at the stress the job has exerted on both airmen

with a constant pressure to stay on the job, sometimes working six days on and one off, or even seven days on and no days off. The long hours are necessary to keep up with the constant operational demands that stem from Operation Inherent Resolve—the air war against ISIS terrorists in Iraq and Syria—along with other operations around the globe.

Gen. Herbert J. “Hawk” Carlisle, commander of ACC, said the service needs to find a way to give these pilots time to train, so they can both stay proficient in different mission sets and work with the airframes to conduct new missions that have so far been unattainable.

“It’s not just a capability to counter ISIS,” Carlisle said. “There’s potential for the MQ-9 in a variety of different mission sets we’ve never been able to train to.”

Carlisle said he wants to see remotely piloted aircraft increase their role in high-level training exercises, such as Red Flag, where pilots can have a chance to try different things than are possible in their regular operational flights.

Both the Predator and Reaper have demonstrated in exercises capabilities

The pilots of the future will need this training early on, and the ability to simulate missions accurately and with high fidelity will drive one of the service’s biggest procurement decisions—the next generation trainer.

The Air Force will award the contract for the coming T-X trainer, set to replace the aging T-38 currently in use for pilot training, not just on the aircraft’s flight performance, but also on how well the winning contractor can build simulators. Tomorrow’s pilots need to be ready to perform in threatened environments, requiring simulators with high enough fidelity to replicate anti-access/area-denial situations.

“We in AETC are focused on getting the state-of-the-art capability in the virtual constructive environment so we can, from the beginning, train to a level that’s going to allow us to fight in that [high-threat] environment,” Roberson said.

The goal is that a pilot in a simulator will be focused on a mission to the level that he can’t tell “he’s not out flying in the airplane for real,” Roberson said. ☛