Psychological warfare, as conducted by ANG's Commando Solo unit, means taking control of the airwaves.

## Do Not Adjust Your Set



what the heck is that?" Such, invariably, is the way onlookers react whenever an EC-130E Commando Solo arrives on the scene. The Air Force has only six of these aircraft, and they all belong to the 193d Special Operations Wing, an Air National Guard outfit at Harrisburg IAP, Pa. "You have to admit," Maj. Dave Lively, a 193d SOW navigator, told an interviewer, "the aircraft are pretty strange looking."

Aboard their highly sophisticated aircraft, special ops crews broadcast "alternate programming" into world hot spots, using 10-kilowatt transmitters to overwhelm "competing" TV or radio signals anywhere. They also receive and monitor signals.

The 193d SOW conducts psychological warfare, usually done in the shadows. The 193d is the only ANG unit in Air Force Special Operations Command and one of the most heavily used; it participates in 12 to 15 major exercises or deployments a year. The 193d (named best ANG unit for 1997) also rates as one of the most specialized units in the Air Force.

The EC-130E itself is unique. It features four fin-mounted, TV-antenna pods, two ax-head-shaped blade antennas slung under the outer wings, and two bulky pods containing VHF/UHF broadcasting equipment. Those unfamiliar with the aircraft sometimes mistake the latter for pontoons.









The primary mission of the 193d is to provide an airborne broadcast platform for virtually any contingency, whether it is a state or national crisis, natural disaster, or military emergency, on a moment's notice, anywhere in the

The Commando Solo fleet carries out psychological operations and civil affairs broadcast missions in the standard AM, FM, HF, TV, and military communications bands. The aircraft fly at maximum possible altitudes to achieve optimum propagation patterns, and they do equally well in day or night. Secondary missions include commandand-control communications countermeasures and limited intelligence gathering.

In early 1998, during the crisis over Iraq's defiance of UN weapons inspectors, DoD ordered deployment to the Gulf of two EC-130E Commando Solo aircraft. In September 1997, it sent three Commando Solos to Brindisi, Italy. From there, they flew missions around Bosnia to help curb the broadcast of violent rhetoric on Serb TV and radio. DoD gave advance notice of the deployment in what turned out to be a successful effort to influence the Serbs. It was an uncharacteristically public display for a unit that usually does things much more quietly.

The 193d also took part in Operation Urgent Fury in Grenada in 1983, Operation Just Cause in Panama in 1989, and the Gulf War of 1991. In 1994 it was one of the lead units to deploy and conduct operations over Haiti during Operation Uphold Democracy.





Commando Solo is a heavy aircraft—118,000 pounds dry. Usually, the aircrew members take off with less than a full load of fuel. Shortly after takeoff, they rendezvous with an orbiting tanker and fill up. System automation is such that, if the initial broadcast emanates from the right of the airplane, equipment automatically switches the broadcast to the left side on the next leg of the pattern. Missions can last up to 14 hours, requiring an augmented flight crew and aerial refueling.

While the aircrew flies a racetrack pattern at an altitude of 18,000-20,000 feet, the mission crew either broadcasts a message or engages in passive surveillance.



The mission crew sits on each side of a central aisle in what is, in effect, a broadcast studio located in the aircraft's cargo hold. All of the broadcast equipment is purchased off-theshelf, and thus the Guard can upgrade the equipment relatively easily as the technology improves. The aft two-thirds of the hold is filled with rows of transmitters, power supplies, and related equipment that go all the way to the paratroop door. Space is at a premium.

On deployments to Saudi Arabia and Turkey during Desert Storm, the Commando Solos broadcasted the US-produced "Voice of the Gulf" and other programs intended to convince Iraqi soldiers to give up and helped bring about mass Iraqi defections and surrenders. In Grenada, these airborne radio stations kept US citizens on the island informed about the military action. The wing conducted similar types of missions in Panama and Haiti. The fast pace of operations seems sure to continue.



