The tanker units at McGuire AFB, N.J., pump the gas that helps fuel USAF's global reach and power.

Jersey Pipeline

Contact is just moments away as the crews of two KC-10 Extenders from the 305th Air Mobility Wing line up their aircraft on a refueling training mission.

Photography by Guy Aceto, Art Director, and Paul Kennedy

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by Guy Aceto

Nobody flies without gas. McGuire AFB, N.J., has three wings—one active duty, one Air National Guard, and one Air Force Reserve Command—that conduct aerial refueling operations. The 305th Air Mobility Wing (the active and host unit) and AFRC's 514th AMW share KC-10s and C-141Bs. The New Jersey ANG's 108th Air Refueling Wing flies the KC-135E.

At right, one of the KC-10s returns from a sortie. Although the KC-10's primary mission is aerial refueling, it can perform the tasks of a tanker and a cargo aircraft simultaneously.





At left is a KC-135E Stratotanker from the 108th ARW. The Air Force's fleet of nearly 600 KC-135s provides aerial refueling support for Air Force, Navy, Marine Corps, and allied nation aircraft.

Most of the 108th ARW's KC-135s have now returned from extended overseas deployments in support of Operation Iraqi Freedom.

Since 9/11, the refuelers at McGuire have been operating virtually nonstop.







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The wing also refuels aircraft engaged in Operation Noble Eagle,

within the United States.

The 108th became a tanker wing in September 1991. Less than four months later, the wing flew its first operational mission, refueling an aircraft bound for the Persian Gulf. It got its combat-ready certification in December 1992 and immediately deployed to spearhead the air bridge for Operation Provide Hope. Since then, the operations supported by the 108th have included Restore Hope, Deny Flight, Northern Watch, Enduring Freedom, and Iraqi Freedom.



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The KC-10's dual capabilities refueling and airlift—keep the 305th and 514th AMWs in high demand.

At right, a Tunner loader moves carefully into position at a KC-10's side loading door. KC-10s can transport up to 75 troops and nearly 170,000 pounds of cargo over 4,400 miles without refueling.







Above, Amn. Laura Caballero guides the Tunner to the loading spot and (at left) uses the KC-10's powered rollers and winches inside the cargo compartment. With no passengers, the cargo compartment can accommodate 27 pallets.

The average age of the KC-10 aircraft is more than 17 years. Maintenance crew members at McGuire work hard to keep each heavily tasked aircraft in good flying order. At right, a crew checks over the center engine, mounted high up at the base of the vertical stabilizer.



Refueling missions send McGuire airmen all over the world. Survival technicians at the base seek to familiarize crew members with difficult situations, including use of an inflatable raft (right). A live tarantula and boa constrictor are also on display at the life support shop.



The boomer's position in the KC-10 is different from that in the KC-135. It is more like an office, in which the operator sits in a seat instead of lying on his stomach. The KC-10 boom operator has two refueling options—an advanced aerial refueling boom or an independent hoseand-drogue system. With these two systems, the KC-10 can refuel aircraft from each service and US allies. At right, boomers train on a simulator.





The KC-10 boom operator can see the aircraft being refueled through a wide window. During boom refueling operations, fuel is transferred to the receiving aircraft at a maximum rate of 1,100 gallons per minute. The hose-and-drogue refueling maximum rate is 470 gallons per minute. The KC-10 has also been modified with wing mounted refueling pods. The KC-135Es of the 108th ARW are among the oldest tankers in the USAF inventory. The average Stratotanker is 43 years old. KC-135s provide almost 86 percent of USAF tanking capability. The 108th has more than 1,300 members and 20 Stratotankers.





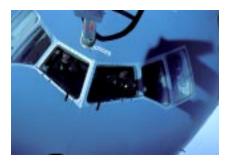
MSgt. Joseph Lamantia, a KC-135 boomer, gets into a prone position and readies himself to refuel a "customer."



Lining up for refueling is an F-16C from the 177th Fighter Wing, New Jersey ANG. Ongoing missions in the US and Southwest Asia keep the 108th humming. For its efforts in 2001, the 108th ARW was selected as that year's best ANG unit within 21st Air Force.



The KC-10 is the only tanker that can be refueled by its own type, a capability that greatly increases its delivery range. This made KC-10s particularly important in the recent air operations over Southwest Asia. The Extender can also take on fuel from a KC-135. At right and below, a KC-10 maneuvers to refuel another KC-10.



The tanker fleet contains just 59 KC-10s. Pictured below is the flight deck of the KC-10, which is 88 percent common with commercial DC-10 aircraft.







These Total Force units are key to effectively fighting the global war on terror. Their efforts keep the air bridge strong, fighters over major US cities, and coalition aircraft in the skies above Southwest Asia.