



The first two F-15Ks delivered to Korea fly over the Pacific Ocean on their way to Guam before making the final leg of the 8,600-mile journey to Daegu Air Base in South Korea.

KEVIN FLYNN PHOTO

# Year of the Eagle

## F-15K recovers strongly from midyear setback

By CHRIS HADDOX

As easily as he can recall his children's birthdays, Steve Winkler can rattle off milestones associated with the F-15K, the all-weather aerial combat tactical fighter being built by Boeing for the Republic of Korea. F-15K flight

evaluations began Oct. 2, 2000. Korea selected the F-15K as its F-X fighter on April 19, 2002. The first F-15K was delivered to Korea on Oct. 10, 2005.

For Winkler, current F-15 production programs director and former F-15K program manager, the date Dec. 19, 2006, when the 18th F-15K was accepted in Korea, is the most memorable. Not because it's the most recent, but because it closed a remarkable year. It was a year highlighted by meeting the 14 scheduled deliveries (six more than the original contract required) to

Korea, while overcoming a two-month delay following the tragic June 2006 crash of an F-15K that killed two Korean pilots.

"To say it was a challenge would be an understatement," Winkler said. "Getting 14 aircraft to Korea even without a two-month delay was daunting enough, because that's the most we've delivered in one year since the late 1990s. It took many extra efforts and personal sacrifices to pull it off, but the whole team came together and made it happen. We learned a lot during this experience, and now the program

**Strike Eagle reaching its stride**

The F-15K is in full production for the Republic of Korea Air Force, and the F-15SG for Singapore is in the initial phases of production. But they aren't the only F-15s making news.

In September, the F-15E Strike Eagle became the first aircraft to carry the Small Diameter Bomb (SDB) into combat. The Strike Eagle now has nine smart-attack-weapon stations, allowing it to carry up to 28 SDBs or seven Joint Direct Attack Munitions.

"The Strike Eagle's unique ability to carry an array of precision weapons a long way and then remain on station for hours in hostile territory makes it the jet of choice for planners and warfighters in the global war on terror," said Bob Martyn, with F-15 business development for Israel and Saudi Arabia and an F-15 Weapons Officer with the Missouri Air National Guard.

Deploying the SDB is just the latest enhancement to the venerable aircraft to help maintain its title as the world's leading multirole fighter.

The U.S. Air Force is pursuing a modernization program for the Strike Eagle through programs such as high-bandwidth data links, the Active Electronically Scanned Array radar, digital Radar Warning Receiver, and the Joint Helmet Mounted Cueing System

A new Advanced Display Core Processor currently is being introduced to the fleet. The ADCP supports the continued growth in precision-weapon delivery and continued expansion of network-centric warfare capabilities. The F-15E also has demonstrated advanced network and targeting technologies, wide-band data link/IP networks, and precision image registration. That's resulted in the F-15 Integrated Product Team creating an evolutionary upgrade of the architecture for 2012 and beyond.

Equipped with a Fighter Data Link terminal, which connects to the military's Link 16 network (a secure, high-capacity, jam-resistant data link for all U.S. military forces), the F-15E has been the Air Force's leader in developing network tactics and aircrew interface network operations. The newest

software capability release (in the ADCP) includes receipt of imagery through Link 16.

From its first flight in 1986 to its most recent flight to support the global war on terror, the Strike Eagle has outperformed every fighter aircraft on the battlefield. How? "Through continuous improvement of an already outstanding multirole fighter," said Dick Banholzer, director, Business Development, Fighters and Weapons. "The Strike Eagle best satisfies the warfighters' needs when it comes to range, persistence, payload, survivability and rapid response."

In December 2005, Singapore selected the F-15SG, the most advanced Strike Eagle to date. It will receive the first of up to 20 aircraft in 2009.

"The Strike Eagle and its derivatives are the premier multirole fighters in the world, and they will remain the best for decades to come," Banholzer said. "You don't do that by resting on your laurels and relying on your reputation. That is not our plan."

—Chris Haddox

is well-established to continue to meet the customer's expectations with on-time, high-quality jets."

At the time of the crash, four F-15Ks had been delivered to Korea, all in 2005. Ironically, the first two deliveries of 2006 arrived on the same day as the crash.

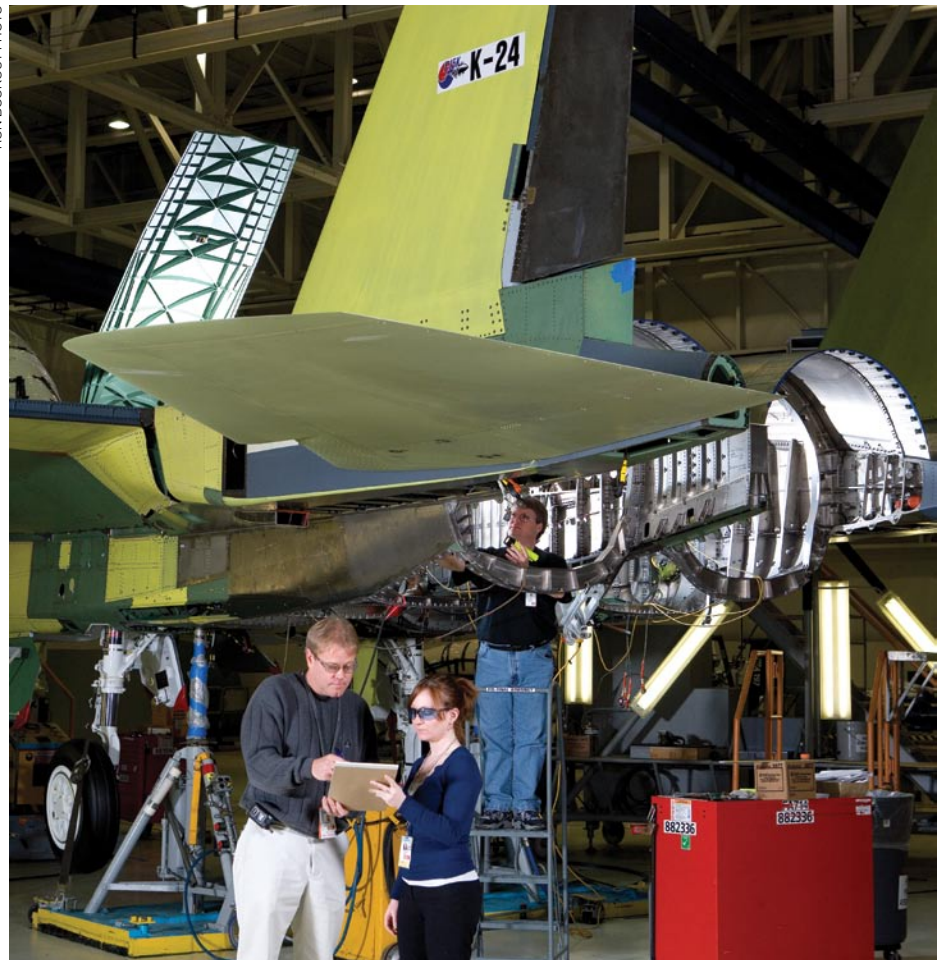
"We were shocked when we heard the news of the crash," recalled Winkler. "The pilots were like members of our family, especially Lt. Col. Kim Sung-dae, whom we knew very well from the time he spent training in St. Louis" (where the F-15 is produced).

Immediately after the crash, Winkler flew to Korea to meet with Republic of Korea Air Force (ROKAF) officials. The crash was a major media story in Korea, and Winkler became the face of Boeing, meeting with reporters at Seoul's Incheon International Airport soon after landing.

"It was my duty to represent Boeing and the F-15 program during this time of crisis and to show the ROKAF and the Korean people that we were committed to fully supporting the investigation," he said.

**Bobby Deadmond (from left), F-15 final assembly foreman, and quality engineer Lauren Bay discuss the progress on an F-15K in final assembly in St. Louis. In the background, quality inspector Kevin Klein makes a final inspection.**

RON BOOKOUT PHOTO



### A seat with a view

When Ed Wilson flies to Korea, he gets the best seat on the airplane.

It's not that he has a lot of frequent flier miles. Instead, Wilson is one of Boeing's F-15K test pilots responsible for delivering the newest Eagle from St. Louis to its final destination at Daegu Air Base in South Korea.

"It's better than first class," said Wilson of piloting the F-15K on this long-haul flight. "I've got a window seat on every flight, the view is always spectacular, the box lunch isn't bad, and I'm in total control of the airplane."

But flying the F-15K to Korea may be the easiest part of Wilson's job. Prior to every delivery flight, Wilson and the other F-15 pilots and weapon systems officers making the trip put the aircraft through multiple tests in St. Louis and do flight planning with the U.S. Air Force on the route, air-refueling plan and emergency procedures. There's also extensive paperwork to be completed to ensure the aircraft and the pilots have all the required export and quality documents on board as they make the 8,600-mile (13,800-kilometer) trip.

Wilson led the first delivery flight to Korea in October 2005 and has made five of the six F-15K delivery flights since then. He described every minute in the cockpit as an "event." Weather is always a challenge, as is fatigue. On a typical ferry flight, Wilson and his team depart St. Louis for an 8.5-hour, nonstop flight to Hickam Air Force Base, Hawaii. After a day of rest for the crew, the aircraft take off on a 7.5-hour flight to Andersen Air Force Base, Guam—where the only view out of the cockpit is a two-mile stretch of land called Wake Island, and a lot of water. The following day the F-15 crew makes the final leg, a four-hour flight to Daegu.

After landing safely at Daegu, Wilson is often required to spend another one to two weeks in Korea assisting the Republic of Korea Air Force with the final acceptance of the airplanes. This involves meeting with senior ROKAF members in addition to putting the airplane through a final round of ground and flight tests to ensure the customer is totally satisfied with the airplane.

"The camaraderie we've developed with the ROKAF and the time we spend with the squadrons understanding their needs and talking about their requirements is one of the best parts of the job," said Wilson. "It makes the long flight worthwhile."

—Mary Ann Brett



**Top:** Major Joo-II Kim (left) of the Republic of Korea Air Force and Boeing F-15 test pilot Ed Wilson stand at attention as the first F-15K is presented to the Republic of Korea at Daegu Air Base.

**Above:** In Seoul, members of the Republic of Korea Air Force celebrate the arrival of the first F-15Ks in October 2005. So far, 18 F-15Ks have been delivered. The remaining 22 will be delivered through 2008.



Michael Barber (from left), Ron Jones and Lesa Dirden work on the center fuselage of F-15K25 in the F-15 production facility in St. Louis. K25 is one of 12 F-15Ks scheduled for delivery to the Republic of Korea Air Force in 2007.

Even though the aircraft that arrived in June stayed in Korea, deliveries and the work toward final acceptance activities ceased during the subsequent investigation. The ROKAF searched the crash site in the East Sea more than 40 times but was unable to locate the enhanced crash-survivable memory unit, more commonly known as the “black box.” However, enough evidence was gathered by early August for the ROKAF to determine the cause of the crash to be gravity-induced loss of consciousness, or g-loc.

Meanwhile, F-15K production and flight testing continued in St. Louis. When deliveries resumed, the F-15K delivery schedule included two three-aircraft ferries to Korea, instead of the usual two-aircraft ferries.

Boeing contracts with the U.S. Air Force to provide tanker support for the ferry flights. Once the aircraft arrive in country, the ROKAF puts the aircraft through their paces with a series of ground inspections and two acceptance test flights before final acceptance. The F-15K is the first Boeing combat aircraft to go through final acceptance in another country. Usually, all customer acceptance testing is completed

in the United States and then the aircraft are delivered to the customer.

“It’s definitely more challenging to conduct final acceptance operations in Korea, said John Heilmann, F-15K program manager. “But aircraft acceptance in Korea was a key customer requirement during contract negotiations, and we are meeting this requirement. One of the more challenging aspects is supporting the aircraft with spare parts or other maintenance operations during the ferry to Korea. We pre-position some key spares in Korea and express ship or hand carry other parts when necessary.”

So far, 18 F-15Ks have been delivered to Korea. The ROKAF is under contract for 40 F-15Ks; the remaining 22 will be delivered through 2008.

On Jan. 17, the Korean Defense Acquisition Program Administration said it would conduct an open competition for 20 high-end multirole fighters to be delivered in the 2010-2012 timeframe. Winkler said he believes that together with Boeing’s many Korean industry partners, Boeing will make a strong bid with the F-15K to fulfill the ROKAF’s needs. ■

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## Strong F-15K support—everywhere

John Heilmann loves watching F-15s take off from St. Louis, especially when they are F-15Ks making the 8,600-mile (13,800-kilometer) journey to Daegu Air Base, Korea. But Heilmann, the F-15K program manager, knows getting the F-15 in the air is only half the job. The other half takes place after they reach Korea.

Before the F-15Ks depart for Korea, Boeing maintenance teams are en route to support the aircraft during crew rest stops in Hawaii and Guam and upon arrival in Korea. These rotating teams, headed by Don Rogers, Jeff Bonomo and Dan Bement, stay in Korea and lead maintenance support of the final acceptance process. From the F-15K program office in St. Louis, Tim Williams, Brad Jones and Kim Dabner have rotated to lead the final acceptance process and sign the final acceptance paperwork.

Once the aircraft are accepted, Jerry VanDeursen and his team in Korea take over. VanDeursen is the Boeing site manager in Daegu and heads the Contract Engineering Technical Services team. The six-person team is responsible for supporting the Republic of Korea Air Force in the maintenance of the aircraft and the training of the ROKAF pilots and crew.

“I’ve been around F-15s for all my 23 years with McDonnell Douglas and Boeing, and it still makes me proud to be part of one of the best fighter programs in the world,” VanDeursen said. ■