



This aircraft is from the first production block of F-15Cs, but has been updated several times during its lifetime. The 173rd FW generally flies aircraft in the latest operational configuration, although it will probably not acquire AESA radar-equipped machines.

Offensive Basic Fighter Maneuvers (OBFM), Defensive Basic Fighter Maneuvers (DBFM), High Aspect Basic Fighter Maneuvers (HABFM) as well as advanced BFM. During the four OBFM training missions the student will employ the aircraft's power and weapon capabilities starting up from behind the enemy aircraft flown by an instructor. The latter will try to get the 'enemy aircraft' off his tail, while the student will do the same to stay behind. This is performed at short, medium and long range. During the four DBFM missions, the position versus the enemy aircraft is swapped. The student must then try to get the 'enemy aircraft' off his tail. Students then move on to the High Aspect Basic Fighter Maneuvers phase, four rides in which they start from a neutral merge to determine through a positional fight who is the more capable pilot.

After this, the Air Combat Maneuvering (ACM) training module starts, which encompasses a total of six missions, with the complexity stepping up with every flight. ACM is very much like BFM, but here the student pilots learn to work in a team (element) to fight one or two bandits. As one of the instructor pilots comments, "ACM is about having one of the aircraft being the nose-holder while the other is the butt-kicker."

As a team, one aircraft keeps the enemy aircraft occupied, while the other pilot stays out of the immediate fight to position for weapons firing. These ACM missions are performed to combine air combat manoeuvres and element support, and typically require three F-15s.

Between ACM missions 3 and 4, students will fly their two Night Intercept (NINT) missions, during which they need to practise and demonstrate their proficiency in basic intercepts (1 versus 1) in the night environment, employing the F-15

with Night Vision Goggles as an additional sensor. These two consecutive night missions are ideally scheduled to coincide with a Night Air-to-Air Refueling (NAAR) mission. Later in the course, two additional Night Intercept missions are scheduled in which 2v2 tactical intercepts in the night environment are introduced.

After the ACM training part has been completed, the course takes a whole new direction, and the students learn to use the radar during the Tactical Intercepts (TI) module, beginning with simple 1v1 intercepts. The last mission of this module (TI-5) is flown two days before the end of the course (day 123), involving some eight F-15s in a 4v4 engagement.

Two days after ACM-4, a single Live Gun mission is flown with three F-15s, in which the target is a towed banner with an acoustic scoring system being towed over the water by another Eagle at an altitude of 5,000 ft AGL. Students get the chance to fire their 20-mm M61A1 Vulcan rotary cannon against it. This is an option in the training syllabus only Kingsley Field has to offer.

Low-altitude training

This is followed by the first Low Altitude Step Down Training (LASDT) mission, in which the student pilot gets an introduction in low-altitude tactics. The first mission is flown single-ship. In only three missions, this LASDT module ends in 2v2 tactical intercepts in the low-altitude environment, in which the student has to demonstrate proficiency in low-level operations at 500 ft AGL.

By now the students have been taught all the basic skills: they can take off and land, they can dogfight, fight as a team and use their radars. This is their toolbox, and to put things to the test the students are placed in mission-oriented scenarios during the Air Combat Tactics (ACT) module. Corresponding to the scenarios as they unfold, they now need to employ out of their toolbox the knowledge and skills gained over the last four and a half months, and apply them in a very dynamic air-to-air situation.

They will execute an offensive counter-air and defensive counter-air mission as a two-ship, and they need to execute a defensive counter-air mission as a four-ship. This is the last module and is finished by completing the last of three missions on day 124 of the course.

The syllabus is continuously upgraded to keep up with the advanced avionics and weapon capability improvements to which the F-15 has been subject, and also to react as aerial threats in the world have change.

As Lieutenant Colonel Rick Wedan explains: "In the early 1990s, Air Defense Command was still built around Russian bombers coming over the North Pole, firing missiles towards the United States. The tactic employed then by American pilots was to prevent that from happening. Following the events that took place on 11 September 2001, air defence units now had to develop new tactics to identify, shadow and perhaps to provide some non-lethal coercive methods to land airplanes, helicopters or airliners, for that matter. Technological developments and the change of threats resulted in a significant change of tactics, both from a homeland defence perspective but also from a global military perspective.

"Current tactics are taught using the 'Tactics Bible' containing tactics, techniques and procedures (TTP) for an array of scenarios, and this manual is modified annually during a conference called the 3-Dash-1 Rewrite Conference, where top instructor pilots and weapon officers from the USAF are gathered, representing the Combat Air Forces from all over the world. The Air Force keeps track of what is going on in the world and alters the TTPs on an annual basis. It is not only front-line units that make use of this manual, the different FTUs actualise their syllabus accordingly almost in real time, thus altering the way training is done at Kingsley Field".

Lieutenant Colonel Wedan continues: "Being such a viable tool, the Air Force continues to push the retirement date to a later date by continuing to