Optical flow version manual of gd-145b folding machine (Chinese)

Development background

As early as 1920s, UAVs appeared, and the world war in 1914 was going on in full swing. Two British generals, kader and pitcher, put forward a proposal to the British military aviation Society: to develop a small aircraft that can be operated by radio instead of being piloted, so that it can fly over a certain target area of the enemy, and drop the bombs installed on the small aircraft in advance. This bold vision was immediately appreciated by Sir day Henderson, then president of the British military aviation society. He appointed Professor a.m. law to lead a team of people to develop it. The drone was then used as a training target. Is a term used in many countries to describe a new generation of drones. Literally, the term can describe the development of cruise missiles from kites, radio controlled aircraft, and V-1 missiles, but in military terms it is limited to reusable heavier than air vehicles.

R & D history

In the 1940s, drones were used to train air defense Gunners in World War II.

In 1945, after the Second World War, redundant or retired aircraft were converted into special research or target aircraft, which became the first trend of modern UAV use. With the development of electronic technology, UAV begins to show its flexibility and importance in the role of investigation task.

In the process of Vietnam War, Gulf War and NATO air attack on Yugoslavia from 55 to 74 years in the 20th century, UAVs were frequently used to perform military tasks.

In 1982, the Israeli Aviation Industry Corporation (IAI) used UAVs as military missions in other roles. During the Galilee peace operation (Lebanon War), the Scout UAV system played an important role in the service of the Israeli army and the Israeli air force. IDF mainly uses UAVs for reconnaissance, intelligence collection, tracking and communication.

During the desert storm operation in 1991, the U.S. military launched a small UAV designed specifically to deceive the radar system as a decoy, which also became the target of other countries.

In March 1996, NASA developed two test aircraft: x-36 test tailless drone. The model is 5.7 meters long and weighs 88 kg. Its size is equivalent to 28% of that of ordinary fighter. The separation aileron and steering thrust system used in this model are more flexible than those used in conventional fighters. The horizontal and vertical tail not only reduces the weight and tension, but also reduces the radar reflection cross section. The ideal mission of the UAV is to suppress the enemy's air defense, interdiction, battle loss assessment, theater missile defense and super high altitude attack, especially suitable for the mission in the politically sensitive area.

Before the late 20th century, they were just smaller than full-size remote-controlled aircraft. The U.S. military's interest in such vehicles is growing because they provide low-cost, mission flexible combat machines that can be used without the risk of pilot death.

In the 1990s, after the Gulf War, UAVs began to develop rapidly and be widely used. The U.S.

military has purchased and built vanguard drones as reliable systems in the second and third Gulf wars against Iraq.

After the 1990s, western countries fully realized the role of UAV in the war and competed to apply high and new technology to the research and development of UAV: new wing and light materials greatly increased the endurance of UAV; advanced signal processing and communication technology improved the image transmission speed and digital transmission speed of UAV; advanced autopilot made UAV Instead of needing a land-based television screen, the man-machine flies to the hovering point, changes altitude and flies to the next target.