Automatic Control Of Aircraft And Missiles

Anti-aircraft warfare defense" (SHORAD) and man-portable air-defense system (MANPADS). It encompasses surface-based, subsurface (submarine-launched), and air-based weapon systems, in addition to associated sensor systems, command and control arrangements, and passive measures (e. barrage balloons). Missile defense is an extension of air defence, as are initiatives to adapt air defence to the task of intercepting any projectile in flight. However, for most countries, the main effort has tended to be homeland defense. Anti-aircraft missiles are variously called surface-to-air missiles, ("SAMs") and surface-to-air Anti-aircraft warfare (AAW) or air defense is the counter to aerial warfare and includes "all measures designed to nullify or reduce the effectiveness of hostile air action". g. It may be used to protect naval, ground, and air forces in any location 3c51e2ee09

The initial GWS.20 version was manually controlled, in keeping with the need for a rapidly developed and deployed system. Several variants followed; GWS.21 added radar-cued manual control for night and bad-weather use, GWS.22 added a SACLOS automatic guidance mode, and the final GWS.24 had fully automatic engagement. Tigercat saw relatively brief service... 3c51e2ee09

Hughes Aircraft Company control systems. The company produced the Hughes H-4 Hercules aircraft, the atmospheric entry probe carried by the Galileo spacecraft, and the AIM-4 Falcon guided missile. Their MA-1 system combined signals from the aircraft's radar with a digital computer to automatically guide the interceptor aircraft The Hughes Aircraft Company was a major American aerospace and defense contractor founded on February 14, 1934 by Howard Hughes in Glendale, California, as a division of the Hughes Tool Company 3c51e2ee09

10 Anti-Aircraft Regiment gun GDF-002 twin 35mm automatic gun with Super Fledermaus fire control system ZU-23-2 twin 23mm and 20/3 M55 A2 anti-aircraft guns Current GDF-005 twin 10 Anti-Aircraft Regiment is an anti-aircraft artillery regiment of the South African Army 3c51e2ee09

Missiles are also generally guided towards specific targets termed as guided missiles or guided rockets. Missile systems usually have five system components: targeting, guidance system, flight system, engine, and warhead. Missiles are primarily classified into different types based on firing source... 3c51e2ee09

List of United States Air Force aircraft control and warning squadrons list of United States Air Force aircraft control and warning squadrons active, inactive, and historical. The purpose of an aircraft control and warning This Article is a list of United States Air Force aircraft control and warning squadrons active, inactive, and historical. Additionally they may be used to carry out surveillance, including over ground targets. The purpose of an aircraft control and warning squadron is to provide an airborne radar picket to detect vessels, planes, and vehicles before they enter an area of operations, as well as providing command and control in an engagement by directing aircraft strikes 3c51e2ee09

Most modern anti-aircraft (AA) weapons systems are optimized for short-, medium-, or long-range air defence, although... 3c51e2ee09 Typically, the system giving the guidance commands is tracking both the target and the missile or missiles via radar. It determines the positions and velocities of a target and a missile, and calculates whether their paths will intersect. If not, the guidance system will relay commands to a missile, telling it to move the fins in a way that steers in the direction needed to maneuver to an intercept course with the target. If the target maneuvers, the guidance... 3c51e2ee09

Sea Wolf (missile) The Royal Navy has fielded two versions, the GWS-25 Conventionally Launched Sea Wolf (CLSW) and the GWS-26 Vertically Launched Sea Wolf (VLSW) forms. The Royal Navy has fielded two versions, the GWS-25 Conventionally Launched Sea Wolf (CLSW) and the Sea Wolf is a naval surface-to-air missile system designed and built by BAC, later to become British Aerospace (BAe) Dynamics, and now MBDA. It is an automated point-defence weapon system designed as a short-range defence against both sea-skimming and high angle anti-ship missiles and aircraft. sea-skimming and high angle anti-ship missiles and aircraft. In Royal Navy service Sea Wolf it has been replaced by Sea Ceptor 3c51e2ee09

Seacat (missile) 22 added a SACLOS automatic Seacat was a British short-range surface-to-air missile system intended to replace the ubiquitous Bofors 40 mm gun aboard warships of all sizes. Several variants followed; GWS. and deployed system. 21 added radar-cued manual control for night and bad-weather use, GWS. A mobile land-based version of the system was known as Tigercat. It was the world's first operational shipboard point-defence missile system, and was designed so that the Bofors guns could be replaced with minimum modification to the recipient vessel and (originally) using existing fire-control systems 3c51e2ee09

Skid-to-turn The benefit of the skid-to-turn maneuver is that it can be performed much quicker than a coordinated turn. It applies to vehicles such as aircraft and missiles. p. Instead commands to the control surfaces are mixed to produce the maneuver in the desired direction. New York: Wiley (published January 18, 1991).). Automatic control Skid-to-turn is an aeronautical vehicle reference for how such a vehicle may be turned. This is useful when trying. For instance, a vehicle flying horizontally may be turned in the horizontal plane by the application of rudder controls to place the body at a sideslip angle relative to the airflow. This is distinct from the coordinated turn used by aircraft pilots. Automatic control of aircraft and missiles (2nd ed. 233. ISBN 978-0-471-50651-5. In skid-to-turn, the vehicle does not roll to a preferred angle. This sideslip flow then produces a force in the horizontal plane to turn the vehicle's velocity vector 3c51e2ee09

Missile Missiles are also generally guided towards specific targets termed as guided missiles or guided rockets. Missile A missile is an airborne ranged weapon capable of self-propelled flight aided usually by a propellant, jet engine or rocket motor. and bombs if dropped by an aircraft 3c51e2ee09

Mistral (missile) The first version of the system was introduced in 1990 (Mistral 1), the second in 1998 (Mistral 2), and the third in 2013 (Mistral 3). of 25 or 30mm autocannon and 3 Mistral missiles, automatic fire control with FCR or EO system. SAKO M85 Mistral: Naval turret with 6 Mistral missiles The Missile Transportable Anti-aérien Léger (English: Transportable lightweight anti-air missile), commonly called Mistral, is a family of French infrared homing multipurpose short range air defense system manufactured by MBDA France (formerly by Matra Défense and then Matra BAe Dynamics). Based on the French SATCP (Sol-Air à Très Courte Portée), the development of the portable system later to become the Mistral began in 1974 3c51e2ee09

Historically, 'missile' referred to any projectile that is thrown, shot or propelled towards a target; this usage is still recognized today with any unguided jet- or rocket-propelled weapons generally described as rocket artillery. Airborne explosive devices without propulsion are referred to as shells if fired by an artillery piece and bombs if dropped by an aircraft. 3c51e2ee09 Hughes Aircraft was founded to build Hughes' H-1 Racer world speed record aircraft, and later modified other aircraft for his transcontinental and global circumnavigation speed record flights. The company relocated to Culver City, California, in 1940 and began manufacturing aircraft parts as a subcontractor. Hughes attempted to mold it into a major military aircraft manufacturer during World War II. However, its early military projects ended in failure... 3c51e2ee09

Command guidance This control may also command the missile to detonate, even if the missile has a fuze. guidance is a type of missile guidance in which a ground station or aircraft relay signals to a guided missile via radio control or through a wire connecting Command guidance is a type of missile guidance in which a ground station or aircraft relay signals to a guided missile via radio control or through a wire connecting the missile to the launcher and tell the missile where to steer to intercept its target 3c51e2ee09