

Aerospace & Defence Taxonomy Example

Deliver strategic insight through your own technology lens. Here's a sample of the technologies from an Aerospace and Defence taxonomy that could be part of your custom taxonomy with Cipher.

Technologies	Scopes
Air Turbine Starters	Focus only on aerospace applications and gas-turbine engines. Excluding: Accessory Gearbox,ECS Heat Exchangers, EEC, FADEC (NOT Flight Controls), Fuel Architecture, Fuel Nozzles and General Heat Exchangers.
Fibre Optic Heat Detection	Heavy usage of temperature and pressure sensors using fibre optic technologies. These sensors can also withstand high temperature environments and conditions in particular Aerospace & Defence applications. Scope is broad however automotive, rail, marine and industrial applications are excluded if an industrial application is mentioned.
Flight management systems for drones	Includes any software for air traffic management of drones. Keywords: UTM (unmanned traffic management), Flight control system, traffic management, aerospace deconfliction and UAV identification.
Head Mounted Displays	Head and helmet worn displays for aeronautical use. Applications include night vision visibility, eye tracking, display tracking systems, low visibility landing solutions and head up displays brought to the pilot's eye level. Automotive, locomotive, marine and medical applications have been removed. Cockpit displays have been excluded.
Hypersonics	Technologies supporting the ability of air or near-space platforms to operate at hypersonic speeds (Mach 5+). Key technology areas include propulsion systems (scramjet, boost-glide), control surfaces and systems, aerodynamics, thermal management, advanced materials and survivability. Technologies relating to both hypersonic vehicles and missile systems are included. Wind tunnel designs and structures have been excluded at present.

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Custom Taxonomies



Aerospace & Defence Taxonomy Example (cont.)

Technologies	Scopes
Virtual Cockpit	Virtual, mixed and augmented reality cockpits for aerospace, military and maritime applications. Cockpits, flight decks and militarised vehicles are environments where technologies are more focused within. Technologies include haptic feedback and sensory controls, gesture recognition, head mounted displays, head up displays, head tracking, eye tracking and simulation technologies. Negatives include touch screens and general head worn displays. Automotive, industrial and locomotive applications have been excluded.
Terrain Awareness Warning Systems	Terrain awareness warning systems for A&D applications only. Scope to be broadened in the future if deemed necessary. Key terms included are: low visibility landing, brownout, whiteout, terrain mapping, integrity monitoring, obstacle detection, terrain awareness, ground collision, terrain avoidance, escape path, path planning and navigation guidance. Synthetic vision systems are outside of the scope. Aperture radar and enhanced vision systems have been excluded from the scope.
Electromagnetics	This Classifier broadly covers Electromagnetic effects that include; but are not limited to lightning strikes, EM pulses and radio frequency interference. This classifies them to affect systems and electronics both consumer and A&D use cases. Mission critical equipment and US MIL-STD are also included, European military standards were not mentioned in any records. Infrastructure protection was excluded from the scope, as were RFID and medical technologies.
3D Printing: Gas Turbine Engines	Components/materials for extreme conditions. Any 3DP method for A&D applications. 3DP modelling software applications are included where they are applicable to A&D. Excluded: Power & renewable generation, locomotive, automotive & rail. General manufacturing techniques.



