1074.3.d. con't.

2. Integrated propulsion and flight control systems;
3. Fly-by-wire or fly-by-light control systems;
4. Fault-tolerant or self-reconfiguring "active flight control systems";
5. Airborne automatic direction finding equipment;
6. Air data systems based on surface static data; **or**
7. Raster-type head-up displays or three dimensional displays;

e. Computer-aided-design (CAD) "software" specially designed for the "development" of "active flight control systems", helicopter multi-axis fly-by-wire or fly-by-light controllers or helicopter "circulation controlled anti-torque or circulation-controlled direction control systems" whose "technology" is controlled in 1075.4.b., 1075.4.c.1. or 1075.4.c.2.

1075. Technology

1. "Technology" according to the General Technology Note for the "development" of equipment or "software" controlled by 1071., 1072. or 1074.
2. "Technology" according to the General Technology Note for the "production" of equipment controlled by 1071. or 1072.
3. "Technology" according to the General Technology Note for the repair, refurbishing or overhaul of equipment controlled by 1071.1. to 1071.4.

Note:
1075.3. does not control maintenance "technology" directly associated with calibration, removal or replacement of damaged or unserviceable LRUs and SRAs of a "civil aircraft" as described in Maintenance Level I or Maintenance Level II.
N.B.:
See Technical Notes to 1072.1.

4. Other technology, as follows:
   a. Technology for the "development" or "production" of:
      1. Airborne automatic direction finding equipment operating at frequencies exceeding 5 MHz;
      2. Air data systems based on surface static data only, i.e., which dispense with conventional air data probes;
      3. Raster-type head-up displays or three dimensional displays for "aircraft";
      4. Inertial navigation systems or gyro-astro compasses containing accelerometers or gyros controlled by 1071.1. or 1071.2.;
      5. Electric actuators (i.e., electromechanical, electro-hydrostatic and integrated actuator package) specially designed for "primary flight control";
      6. "Flight control optical sensor array" specially designed for implementating "active flight control systems";
   b. "Development" "technology", as follows, for "active flight control systems" (including fly-by-wire or fly-by-light):
      1. Configuration design for interconnecting multiple microelectronic processing elements (on-board computers) to achieve "real time processing" for control law implementation;
      2. Control law compensation for sensor location or dynamic airframe loads, i.e., compensation for sensor vibration environment or for variation of sensor location from the centre of gravity;
      3. Electronic management of data redundancy or systems redundancy for fault detection, fault tolerance, fault isolation or reconfiguration;

      Note:
      1075.4.b.3. does not control technology for the design of physical redundancy.

      4. Flight controls which permit inflight reconfiguration of force and moment controls for real time autonomous air vehicle control;
      5. Integration of digital flight control, navigation and propulsion control data into a digital flight management system for "total control of flight";

      Note:
      1075.4.b.5. does not control:
      a. "Development" "technology" for integration of digital flight control, navigation and propulsion control data into a digital flight management system for "flight path optimization";
      b. "Development" "technology" for "aircraft" flight instrument systems integrated solely for VOR, DME, ILS or MLS navigation or approaches.

      6. Full authority digital flight control or multisensor mission management systems employing "expert systems";

      N.B.:
      For "technology" for Full Authority Digital Engine Control ("FADEC"), see 1095.3.a.9.

   c. "Technology" for the "development" of helicopter systems, as follows:
      1. Multi-axis fly-by-wire or fly-by-light controllers which combine the functions of at least two of the following into one controlling element:
         a. Collective controls;
         b. Cyclic controls;
         c) Yaw controls;
      2. "Circulation-controlled anti-torque or circulation - controlled directional control systems";
      3. Rotor blades incorporating "variable geometry airfoils" for use in systems using individual blade control.

Category 1080: Marine

1081. Systems, Equipment and Components

1. Submersible vehicles and surface vessels, as follows:
   N.B.:
   For the control status of equipment for submersible vehicles, see: Category 1150 Information Security for encrypted communication equipment; Category 1060 for sensors; Categories 1070 and 1080 for navigation equipment; Category 1081. for underwater equipment.

   a. Manned, tethered submersible vehicles designed to operate at depths exceeding 1,000 m;
   b. Manned, untethered submersible vehicles having any of the following:
      1. Designed to operate autonomously and having a lifting capacity of all the following:
         a. 10% or more of their weight in air; **and**
         b. 15 kN or more;
      2. Designed to operate at depths exceeding 1,000 m; **or**
      3. Having all of the following:
         a. Designed to carry a crew of 4 or more;
         b. Designed to operate autonomously for 10 hours or more;