AIM 4/20/23

Flight Level Orientation Scheme

FL 430

FL 410

FL 400

FL 390

FL 380

FL 370

FL 360

FL 350

FL 340

FL 330

FL 320

FL 310

FL 300

FL 300

FL 300

FL 290

FIG 4-6-1
Flight Level Orientation Scheme

NOTE-

Odd Flight Levels: Magnetic Course 000–179 Degrees Even Flight Levels: Magnetic Course 180–359 Degrees.

4–6–3. Aircraft and Operator Approval Policy/Procedures, RVSM Monitoring and Databases for Aircraft and Operator Approval

- **a. RVSM Authority**. 14 CFR Section 91.180 applies to RVSM operations within the U.S. 14 CFR Section 91.706 applies to RVSM operations outside the U.S. Both sections require that the operator be authorized prior to operating in RVSM airspace. For Domestic RVSM operations, an operator may choose to operate under the provisions of Part 91, Appendix G, Section 9; or if intending to operate outside U.S. airspace, hold a specific approval (OpSpec/MSpec/LOA) under the provisions of Section 3 of Part 91, Appendix G.
- **b. Sources of Information.** Advisory Circular (AC) 91–85, Authorization of Aircraft and Operators for Flight in Reduced Vertical Separation Minimum (RVSM) Airspace, and the FAA RVSM website.
- **c.** TCAS Equipage. TCAS equipage requirements are contained in 14 CFR Sections 121.356, 125.224, 129.18 and 135.189. Part 91, Appendix G, does not contain TCAS equipage requirements specific to RVSM, however, Appendix G does require that aircraft equipped with TCAS II and flown in RVSM airspace be modified to incorporate TCAS II Version 7.0 or a later version.
- **d.** Aircraft Monitoring. Operators are required to participate in the RVSM altitude–keeping performance monitoring program that is appropriate for the type of operation being conducted. The monitoring programs are described in AC 91–85. Monitoring is a quality control program that enables the FAA and other civil aviation authorities to assess the in–service altitude–keeping performance of aircraft and operators.
- **e. Purpose of RVSM Approvals Databases.** All RVSM designated airspace is monitored airspace. ATC does not use RVSM approvals databases to determine whether or not a clearance can be issued into RVSM airspace. RVSM program managers do regularly review the operators and aircraft that operate in RVSM airspace to identify and investigate those aircraft and operators flying in RVSM airspace, but not listed on the RVSM approvals databases.
- **f. Registration of U.S. Operators.** When U.S. operators and aircraft are granted specific RVSM authority, the Separation Standards Group at the FAA Technical Center obtains PTRS operator and aircraft information to update the FAA maintained U.S. Operator/Aircraft RVSM Approvals database. Basic database operator and aircraft information can be viewed on the RVSM Documentation web page in the "RVSM Approvals" section.