

6.3.6 Climb and Accelerate

Raymer suggests using Eq. (6.9) and (6.10) for estimating the fuel fraction for acceleration to climb altitude, but these equations use data from an earlier edition of Ref. 6.3.6.1, which has now been updated. An alternative procedure is to use a graph from the current edition of Ref. 6.3.6.1 (Fig. 6.3.6.1), and may be more relevant.

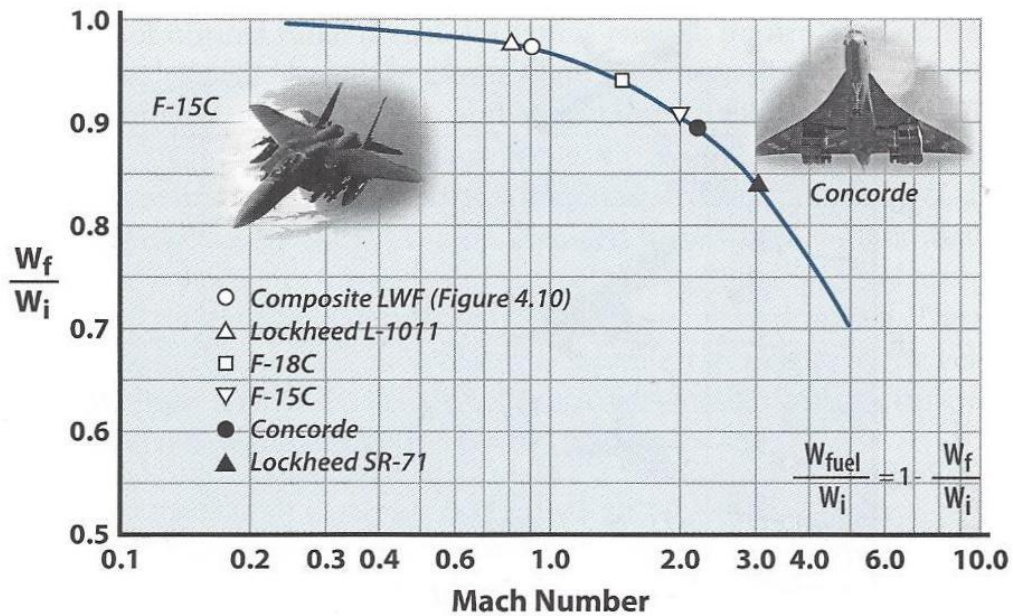


Fig. 6.3.6.1 Fuel Fraction for Climb and Acceleration

When calculating the fuel fraction from a high-subsonic speed to a supersonic speed, use the procedure outlined in the text of Raymer Section 6.3.6

References

- 6.3.6.1 Nicolai, L.M., and Carichner, G.E., “Fundamentals of Aircraft and Airship Design, Vol I”, AIAA 2012.