## 10 Landing Gear (ATA 32)

## **Definition**

Those unites and components which furnish a means of supporting and steering the aircraft on the ground or water, and make it possible to retract and store the landing gear in flight. Includes tail skid assembly, brakes, wheels, floats, skids, skis, doors, shock struts, tires, linkages, position indicating and warning systems. Also includes the functioning and maintenance aspects of the landing gear doors but does not include the structure [of the doors]... (ATA 100)

Following **ATA 100**, the landing gear system may be subdivided into:

- main gear and doors
- nose gear and doors
- extension and retraction system
- wheels and brakes
- steering system
- position indicating and warning
- supplementary gear (devices used to stabilize the aircraft while on the ground and prevent damage by ground contact).

Landing gear design has always been an integral part of aircraft design. The aircraft configuration cannot be laid out without due considerations given to the landing gear. Details of the steering system, the extension and retraction system, as well as the wheels and brakes may be the subject of separate studies.

The Bibliography (Section 17) includes literature on landing gear design.