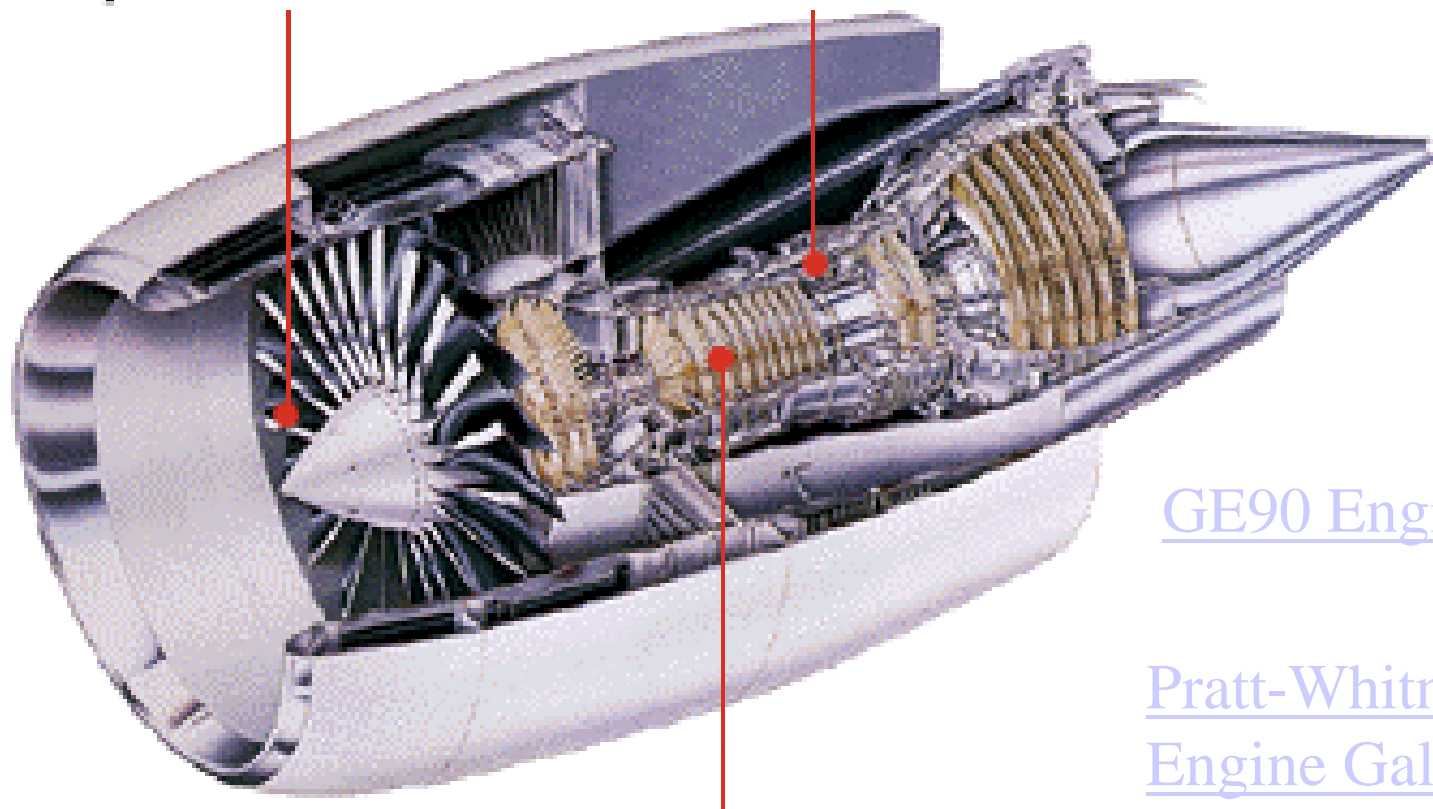


GE90's Advanced Technology Yields Leading Performance

Composite-Bladed Fan

Dual Annular Combustor



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High Pressure Ratio Compressor

Jet Engine Combuster

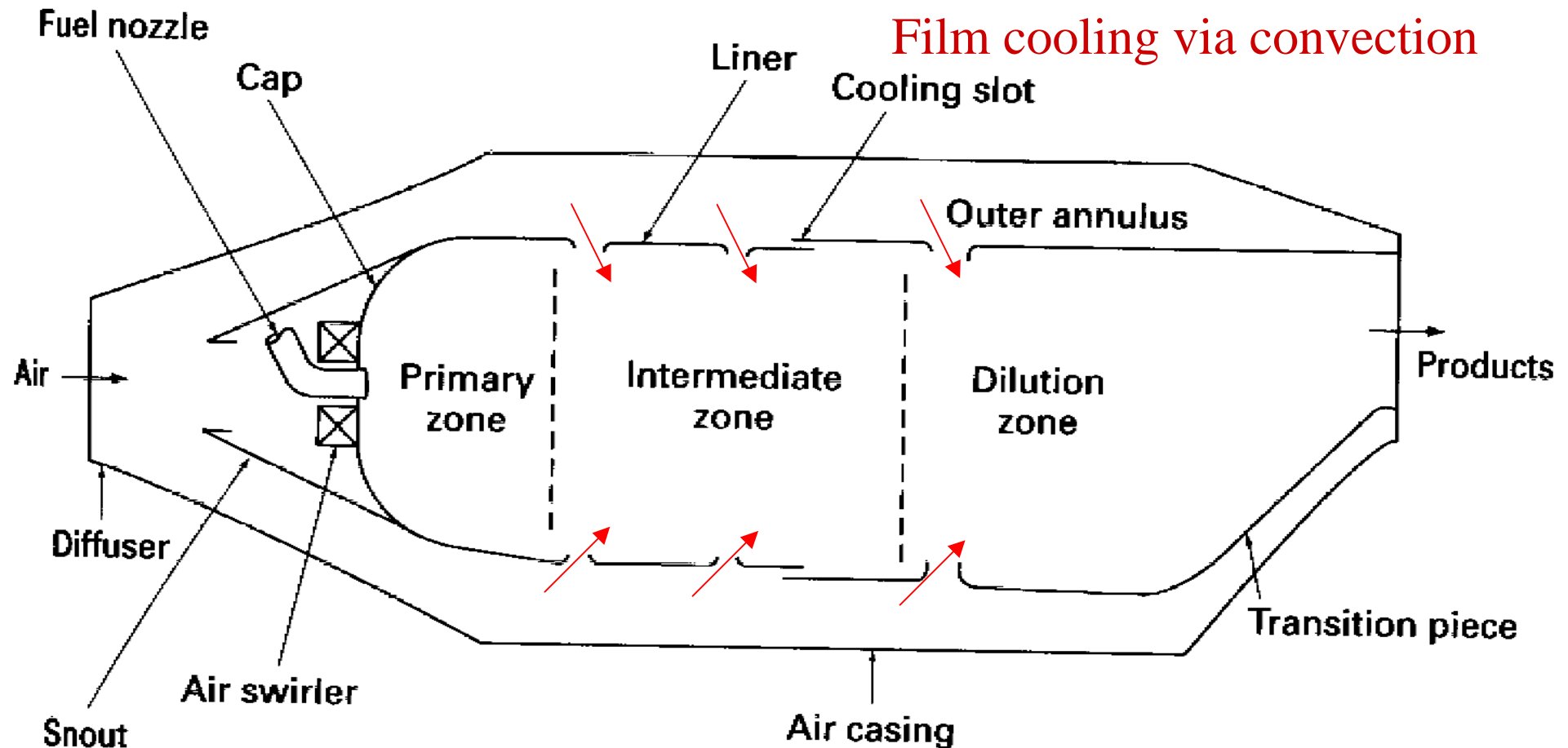


FIGURE 11.3

Main components of a gas turbine combustor [Lefebvre (1983), from *Gas Turbine Combustion*, p. 13, reproduced with permission of Taylor and Francis, Inc., Washington, D.C. All rights reserved.].

Turbulent flame (fuel self-ignited)

Flame stabilization

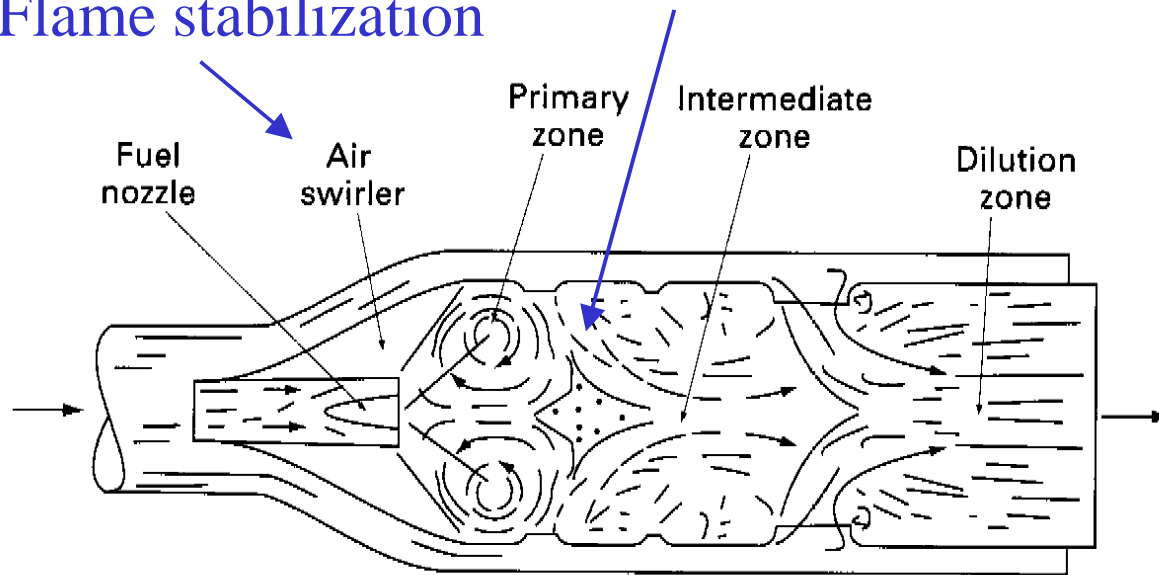
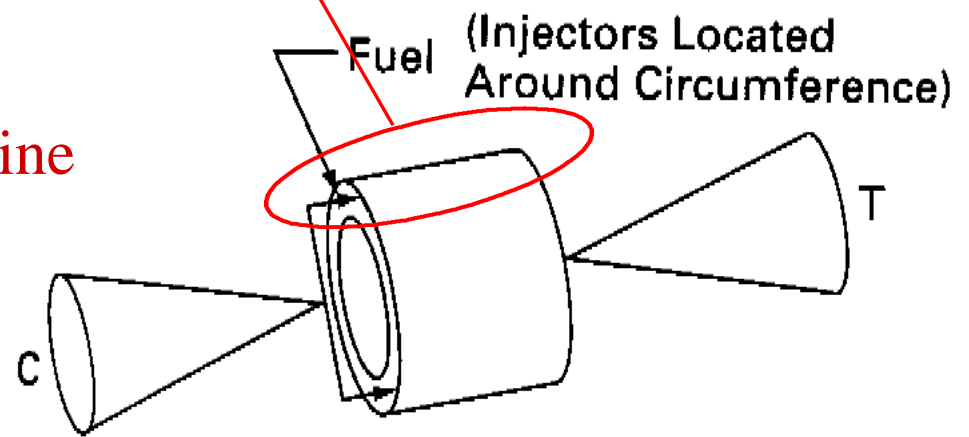


FIGURE 11.4

Flow pattern in combustor created by swirl vanes and radial jets (20% of air added in primary zone, 30% in intermediate zone and 50% in dilution zone).

- Use spark plug to start the engine and re-light after flameout

One annular section



(a) Annular