AEM 617 midterm

Emergency Descent:

Conditions:

$20^{k\,lbf}$ aircraft at ~~40~~ ^{kft} and Mach 0.8. AR ≈ 6

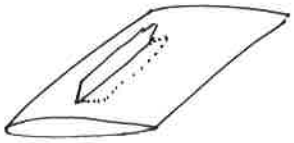
- Size a fuselage mounted speed brake to descend to 15^{kft} in 10 min

  You must not exceed Mach 0.85 or 450 ^{KCAS}.

  Design the structure and hydraulic system (3000 psi) to acomplish this.

  - Aero from Fluid Dynamic {Lift, Drag} Hoerner (I'll scan some useful pages)
  - Structure
  - Hydraulics: cylinder type
  - Systems? Weight?

- Compare ~~w~~ wing mounted speedbrake fence.



- Make a recommendation to your boss regarding the above conceptual designs.

  "Which one should we pick?"