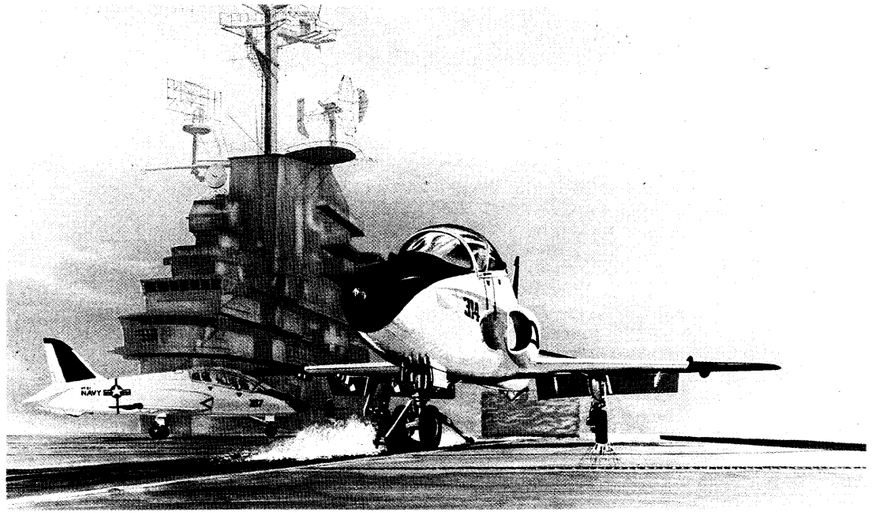
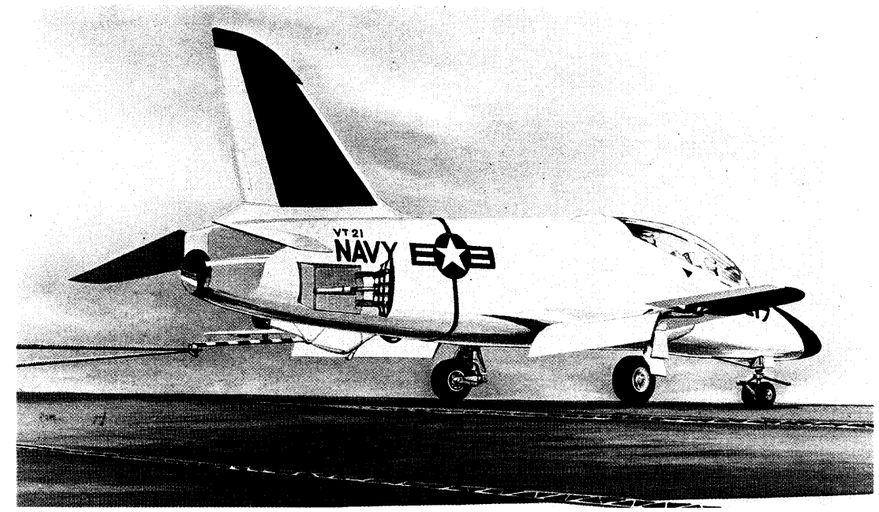
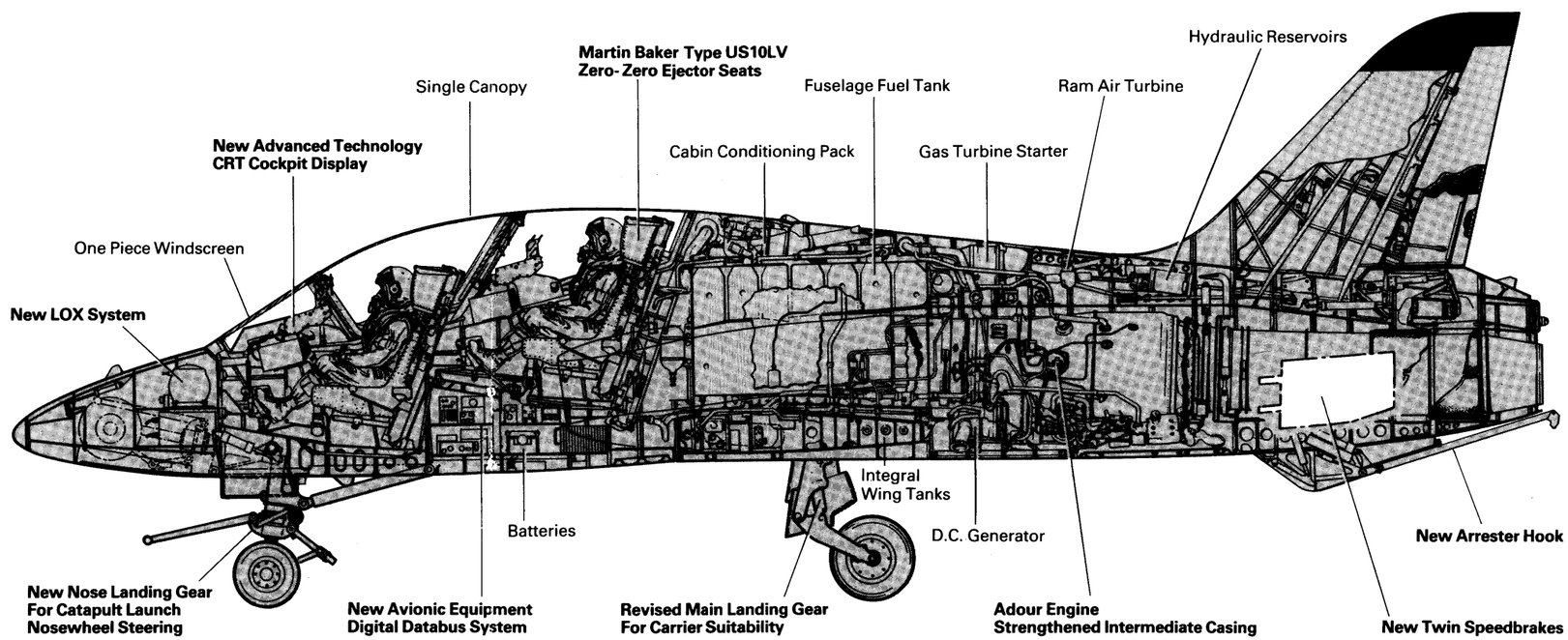
Systems

The Hawk VTX's systems are simple and entirely conventional, with the emphasis on reliability.
The Adour engine is started by a self-contained Gas Turbine Starter (GTS) which uses the aircraft batteries and operates on aircraft fuel.
Fuel is fed to the engine from the internal tanks (and drop tanks if fitted) by a combination of air pressure and an electrical booster pump. System reliability is excellent.
The ailerons and tailplane are powered by fully duplicated hydraulic systems, with a Ram Air Turbine (RAT) to provide emergency power to the flying controls. The rudder is not powered.
The flaps, speedbrakes, landing gear and wheelbrakes are hydraulically operated.
Electrical services are powered by a 9kW brushless dc generator; two batteries are provided. Static inverters provide 115Vac power. The crew's oxygen is supplied from a self-contained liquid oxygen unit.



The cabin conditioning system functions when the engine is running.
The zero-zero escape system is based on the Martin Baker Type US10LV seat, similar to that fitted in the F-18 Hornet.

Minor improvements to the Hawk's systems are required to satisfy the requirements of VTXTS. Carrier suitability dictates changes to the landing gear. An arrester hook is installed under the rear fuselage and the single speedbrake of current Hawk variants is replaced by two fuselage side-mounted speedbrakes.