2025 Study Submission

CS-X and CVS-X Low Observable Tactical Transports

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The survivability of conventional tactical transports such as the C-130 and the CV-22 on deep penetration sorties, such as insertion and extraction of SOF or resupply of sites under siege will be questionable, should these aircraft be confronted with a modern IADS. Moreover, tankers which need to support tactical fighters on deep penetration sorties would be a lucrative target for hostile fighters and long range strategic SAM systems.

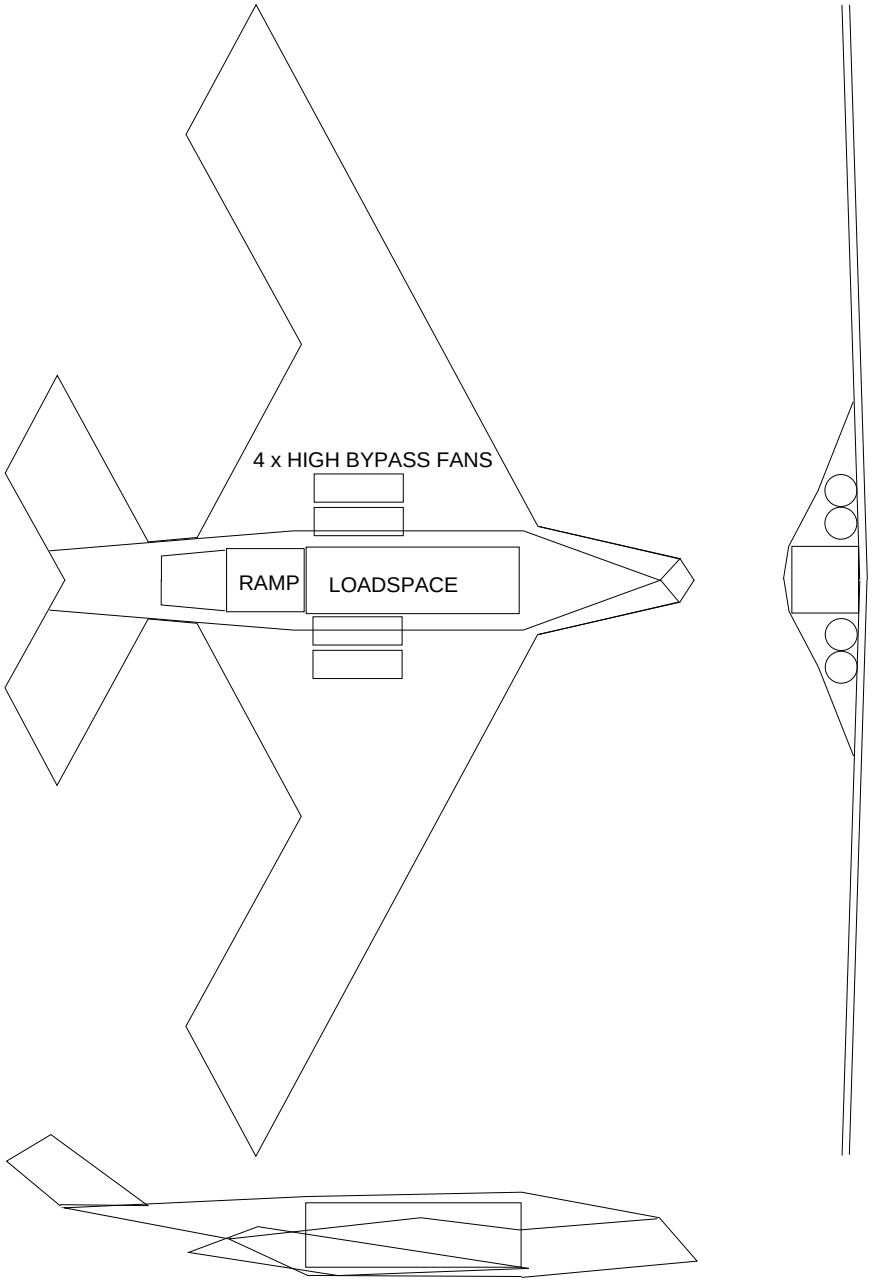
There is a good case to be made therefore for a Low Observable (Stealth) airframe capable of undertaking such missions.

This proposal covers two such airframes - the CS-X and the CVS-X. These are medium and light transports respectively.

CS-X Stealthy Medium Transport/Tanker

The CS-X is a notional C-130 replacement, designed for similar unrefuelled radius and payload. The aircraft is powered by four high bypass ratio fans, and uses stealthy inlets and exhaust diffusers. Fuel is carried in the wings and centresection fuel tanks, in the blended fuselage/wing interface.

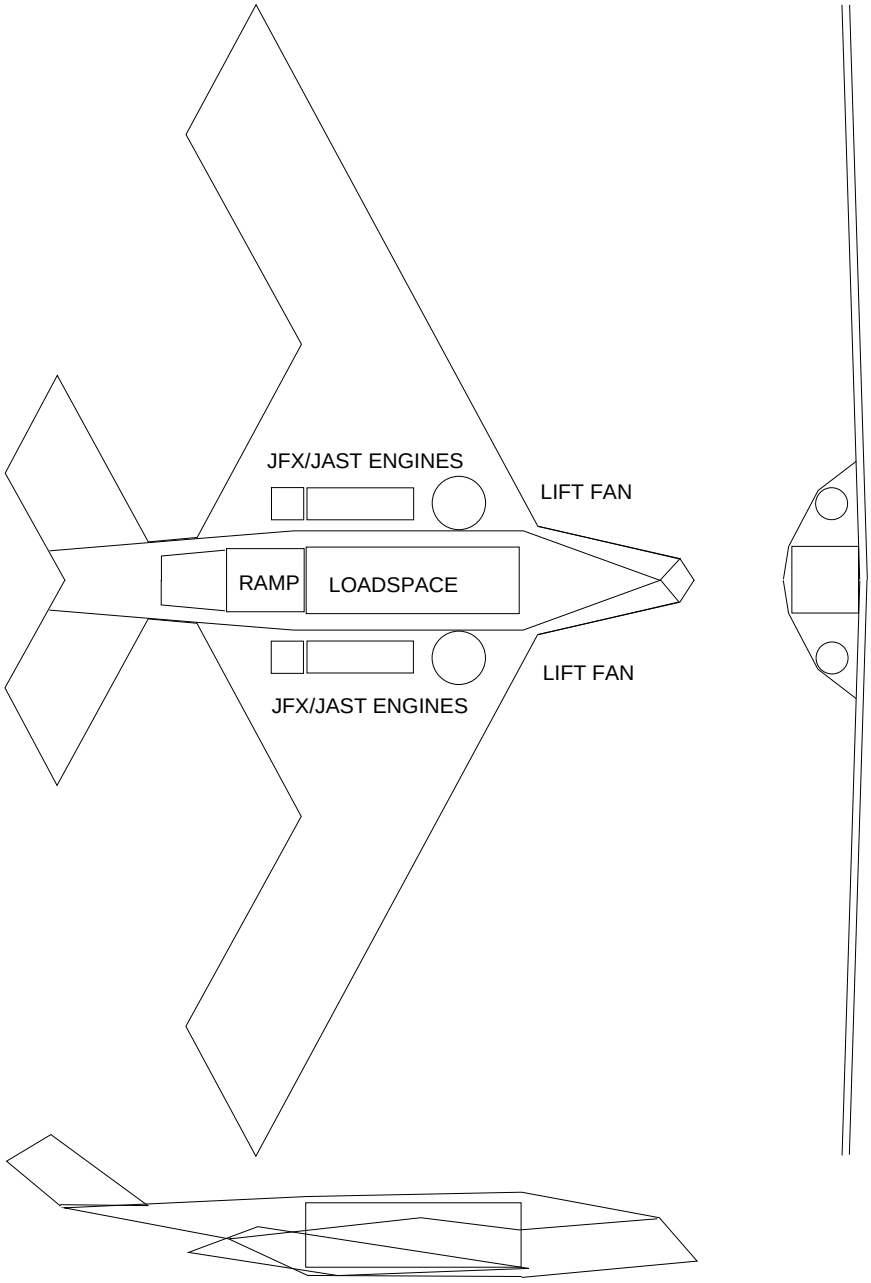
The aircraft uses a low wing monoplane configuration to minimise contour discontinuties on the lower surfaces, this is to minimise all aspect RCS when illuminated by surface IADS elements.



VSTOL LOW OBSERVABLE TRANSPORT (c) 1995 C. Kopp

CVS-X Stealthy V/STOL Light Transport/Tanker

The CS-X is a notional CV-22 replacement. It uses a pair of engines derived from the JAST/JFX powerplant, and uses lift fans and 2D exhaust nozzles to generate vertical lift. The aircraft is designed for VTOL at lower gross weights, and STOL at MTOW.



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