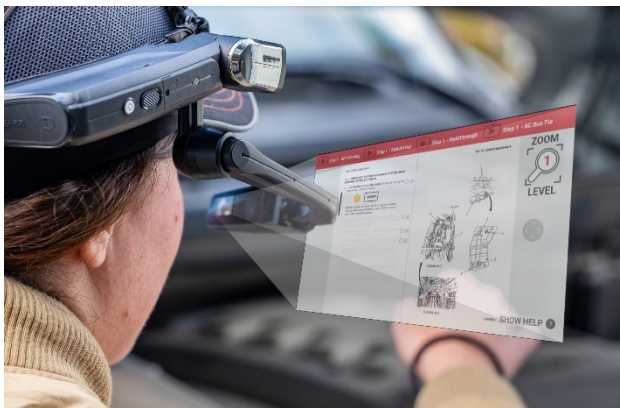


**Overview:**

Mission Capable Ratings inform Commanders how many of each type of aircraft in the Air Force's overall fleet are mission ready. According to a May 2020 report by Brian Everstine, the service's mission capable rates for all fifth-generation fighters and the bomber fleets in 2019 were inadequate when measured in the context of operational/war planning needs; the B-1 had a 46% MC rate, the B-52 was 66%, and the B-2 was 60%. In other words, over half of the B-1 fleet and roughly 40% of the remaining bombers were unavailable at any point in time. Maintenance problem-solving is largely concerned with four areas: maintaining critical systems, fixing the problem quickly and faster than the last time, determining what is causing the breakdown to happen so frequently, and identifying the 20 percent of breakdowns that are consuming 80 percent of resources.

Klatt Works has developed a commercial solution based on a head-mounted, high-resolution Head Mounted Tablet. The device is intrinsically safe and is suitable for operations in the oil and gas industry and the mining industry where there is a risk of a fuel-rich atmosphere, like a natural gas leak. The device is designed to be fully operated with voice commands and head gestures in a loud, noisy environment. It is currently being sold to and used by commercial and government entities. Specifications and Features include: Android 8 Operating System Applications: Document Navigator, Camera, Bluetooth, Wi-Fi, GPS and Location, IMU Rechargeable battery – 8 hours + typical Ruggedized - Survives 6ft drop to concrete Operates in the rain and dust Microphones (4) and speakers Camera 16 MP with image stabilization LED Flashlight and Voice recognition. The advantage of using this COTS device that is manipulable with developments to meet the DAF's requirements is that it is already certified intrinsically safe and operates in bright day and exceptionally low light conditions without obscuring the operator's vision. See-through transmissivity is a tangible obstacle with other see-through AR systems. The lightweight, low profile offered by Klatt Works allows for hours of operation with the most comfortable device for maintainers.



Above figures of the MX Accelerator Head Mounted Tablet displaying a maintenance instruction & C-130 maintenance environment

The advantage of using this COTS device is that MX Accelerator can create a fully integrated maintenance system tailored to user-specific needs providing hands free display of documents and support information directly to the maintainers.