Microsoft’s $21.9 billion military AR headset contract could pave the way for new consumer features down the road
Microsoft won a 10-year, $21.9 billion contract to supply the US Army with 120,000 AR headsets. The HoloLens-based devices, based on Integrated Visual Augmentation System, will use AR to show soldiers maps, compasses, and other heads-up displays. The headsets expand on the HoloLens with a more rugged design and myriad features like real-time mapping and extra sensors for night and thermal vision. For simulations, the headsets use machine learning and AR to create life-like training environments, which the US Army claims “allows the Soldier to Fight, Rehearse, and Train using a single platform.”

Microsoft’s Army contract marks its third major military partnership in recent years. The company signed a $480 million contract with the Army in 2018 to secure prototypes that would become the AR eventual headset. Less than a year later, Microsoft’s Azure beat out AWS in a highly contentious battle over which cloud provider would help build out the Pentagon's cloud computing infrastructure called the Joint Enterprise Defense Infrastructure (JEDI). That deal, reportedly worth around $10 billion, is currently being challenged by Amazon.

Meanwhile, workers at Microsoft have voiced opposition to military partnerships.

- In 2019, a group of Microsoft workers wrote a letter opposing the Army AR headset contract saying they “did not sign up to develop weapons,” while another group published an open letter on Medium urging Microsoft to pass on the JEDI program.

- Microsoft President Brad Smith tried to preempt some of these concerns in a 2018 blog post where he said employees with moral misgiving towards working with the military could move to other projects.

Microsoft’s military deal dwarfs most other AR contracts in terms of scale and may have trickle-down effects for consumers down the line. The US Army’s AR contract stands out for the sheer size of investment. For comparison, mobile AR revenues worldwide from both consumer and enterprise applications combined are expected to total $21.02 billion by 2024, per an ARtillery Intelligence report. While that forecast is limited to mobile and does not include military use cases, it does highlight just how significant the Microsoft deal is. And even though the features included in the Army’s AR headset aren’t currently available to consumers, that could change. Military tech tends to eventually trickle down to consumers after years on the battlefield. Microwave ovens, Global Positioning Systems (GPS) virtual reality, and the internet itself, for instance, all started off as military projects before eventually making their way to consumers.
Mobile AR Revenues Worldwide, 2019-2024

billions

Note: consumer and enterprise applications; includes productivity, advertising, in-app purchases, premium apps, media/content creation, and retail/ecommerce enablement
Source: ARillery Intelligence, "Mobile AR Revenue Forecast, 2019-2024" as cited in company blog, Sep 17, 2020