



What is ATN?

The Air Technology Network is a distance learning satellite service provided by the Air Force Institute for Advanced Distributed Learning, located at Maxwell AFB—Gunter Annex, Ala.

How does it work?

It uses an interactive television network which consists of one-way video satellite uplinks reaching receive-only downlinks but with two-way audio interaction. ATN uses compressed digital video, which greatly reduces the cost of transmission, yet provides high-quality, live, full-motion video.

Who uses it?

ATN now reaches classrooms across 140 Air Force sites within the United States (including Alaska and Hawaii) and 13 locations in Europe and the Western Pacific. Education and training courses are transmitted terrestrially from a variety of locations (Sheppard, Keesler, Maxwell, Lackland, Dobbins, and Robins AFBs) to ATN's central uplink hub at Wright-Patterson AFB, Ohio, for broadcasting.

The connection to Europe is being made through the Global Broadcast Service with a gateway uplink at Norfolk, Va. ATN's service to the Western Pacific region is provided by a commercial service provider, but is currently temporarily suspended while contracts for service are being renegotiated. The new contract will extend ATN's reach across the entire Eurasian continent, allowing ATN to meet the deployed warriors in all theaters of operation.

Since its development in 1991, ATN has been used to provide continuing education and training to more than 32,000 students—and the number is increasing year by

year. Last year alone, an estimated 11,000 AF, AFRC, and ANG personnel received instruction through ATN.

What topics are taught?

Courses broadcast over ATN include a variety of topics from technical and medical training to civil engineering. ATN is fully compatible with the Air National Guard's Warrior Network and the Army's Satellite Education Network. Those DoD networks are part of the larger federal government network, the Government Education and Training Network, pioneered in 1993. GETN is a network of networks operated by a consortium of 17 federal agencies. It has more than 10,000 scheduled hours of broadcasting each year (3,500 from ATN alone) from 12 uplinks reaching more than 1,300 receive sites.

What's the future of ATN?

ATN has been around for a while, but it's meeting the challenge of the future. The Air Force is exploring the capability of using ATN for datacasting.

Datacasting is used in industry to allow for broadcasting computer based instruction, text materials for local printing, interactive TV, and streaming media, among other applications. Satellite is ideal for applications that require rapid deployment of course content to a large number of sites—real-time or otherwise. Satellite can provide a bypass to our heavily burdened communications infrastructure, and to DoD firewalls. Courses can be received by local servers for real time (live) or delayed delivery to the classroom, desktop, or laptop—anytime, anywhere. Datacasting would also be integrated with existing learning management systems in support of computer-based courses developed in conformance with DoD's Advanced Distributed Learning Initiative.

WEB SITE: <http://atn.afit.edu>

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