AlphaStar America (AA) is proposing to provide immediate Middle Mile broadband access to the proposed unserved areas of the United States using a low cost IP hybrid model that connects Broadband ISPs or other service providers with an Internet backbone via AA’s affiliate’s teleport and data center (see the affiliate’s address at: www.alphastar.com). In a report on rural broadband issued by FCC, the agency stated:

In many cases, the rural broadband provider will need to obtain backhaul transport from more than one provider, often over facilities that were designed for voice telephone or cable television services…Some of these middle-mile' facilities may have insufficient capacity, causing the transmission speed on otherwise adequate last-mile broadband facilities to come to a crawl or stall before the data reach the Internet backbone. Overcoming this may require the construction of a dedicated facility, which drives up costs and can deter last-mile broadband investments. Moreover, even when the last-mile provider acquires access to adequate middle-mile facilities, that access may be prohibitively expensive.

AA uses a hybrid network that integrates the terrestrial last mile, wired or wireless with a satellite middle mile. AA will offer the much needed middle mile or “a big pipe” for local ISPs and other last mile Internet providers in the unserved areas. Using AA’s middle mile network, these last mile providers will be enabled to offer retail broadband services to households, businesses and public safety institutions. Further, AA will be a socially responsible network and provide direct broadband access at a discount to schools, libraries and local governments.

The operative word for AA’s hybrid model is IMMEDIATE. It is a shovel ready project without the use of physical shovel like traditional fiber networks. It will be immediate in both employment and deployment. AA meets the sprit and the law of the stimulus program by hiring staff and personnel within weeks of funding and building the network after few weeks of employee training. Satellite travels where fiber does not or cannot due to the costs of building the infrastructure, particularly in low density areas. Unlike AA, these legacy networks’ capital expenditures are high. Following its initial deployment, AA will build hubs where there is a demand or after last mile providers are incentivized to connect by AA’s lower prices.

AA will serve unserved rural communities in Arizona, Connecticut, Colorado, Delaware, Florida, Idaho, Illinois, Indiana, Iowa, Mississippi, Nebraska, New Hampshire, North Dakota, New Mexico, Nevada, Ohio, Pennsylvania, Tennessee, Texas, and Washington. AA has contacted and is in the process of coordinating with ISPs, wired or wireless, cable, rural phone companies and all potential local Internet broadband distributors. Beyond the unserved areas AA proposes to provide broadband service to, AA identified other rural areas throughout all 50 states it was not able to include in its application due to time restraints but which will consider as the company grows.
Again because satellite middle mile multicast to all, including anchor institutions, public safety entities and critical community organizations beyond the areas that will be passed, there is an estimated 15 thousand such institutions passed. AA is also contacting schools and municipalities to offer them the service on an immediate basis and with a discount. AA is making its intent known to these entities to get their support and encourage early adoption within months.

The users include: Internet broadband access to Internet Service Providers (ISPs), Wireless ISPs, rural cable and telephone companies, multipoint multichannel distribution systems (MMDS), WiFi, WiMax, WiMesh, service providers, and the makers of third generation wireless service products. AA will provide broadband access at a discount to school libraries and local municipalities. AA will provide to its clients disaster recovery and business continuity protection using its Affiliate’s teleport and satellite access. In addition, AA will provide data backup storage and retrieval to its client list in its affiliate’s modern data center that is connected to a system of orbiting satellites. Due to the inadequacy of fiber, disaster recovery back up and data storage can best be performed by satellites. It is almost the only option that is secured immediate and reliable. The AA network will also be available to offer disaster recovery services, backup redundancy, data storage and emergency response applications for public safety and business continuity.

AA will offer access to its network, where technically-feasible, at reasonable rates and terms to be negotiated with all requesting parties. This access will include both the ability to connect to the public Internet and physical interconnection for the exchange of traffic. Moreover, AA will not favor any lawful Internet applications or content over others. AA will transmit on a neutral basis all Internet traffic along its transmission facilities. Further, AA will not give preferential treatment to affiliated services, or charge some application and content providers for “fast lanes” that would put others at a competitive disadvantage. AA will seek to maximize the usage of the facilities by as many carriers, service providers and network facilities operators as possible. The hybrid network is neither a traditional satellite broadband nor is it purely a terrestrial broadband access solution. Rather, it is a combination of the two. AA’s network differs from the current satellite broadband in the market today as follows:

1. AA uses a satellite teleport and data center owned by one of its affiliates, AlphaStar, which is one of the largest facilities of its kind in the world. The teleport is connected to the Internet backbone by fiber and satellite. From the teleport IP packets are unlinked to one or several satellites middle mile, that in turn will downlink to a network of local hubs in the rural unserved areas. (2) AA’s network of hubs will be mounted on high grounds or towers that can serve hundreds or thousands of residential end users simultaneously. A local hub includes a two way broadband satellite dish, a cache and wireless or hard wired outlets to connect the last mile. (3) Beyond the initial deployment, AA will continually deploy hubs in response to demand. The hubs could be sized to serve one customer in the remotest of locations or thousands of customers in dense areas. AA can deploy as many hubs as needed in areas with high demand and has the ability to switch a hub from one area to another in a matter of days. (4) AA’s network is independent of any other fiber or satellite networks other than leasing space segments. It is a true alternative to legacy network based on neutrality and non-discrimination. (6) Because AA will not depend on peering and because satellites can multicast, AA’s network will break the shock points and occasional congestion of the current legacy networks. (7) AA will offer franchising opportunities for a new crop of employers, therefore creating a new group of small businesses. (8) Also AA will not compete with its last mile customers & offer last mile...
services as well. (9) The caching technology makes it possible to store large portions of the internet in the local cache. Only content that changes has to be shipped over the satellite.

AA is qualified. It uses a satellite teleport and data center owned by one of its affiliate AlphaStar. It is one of the largest facilities of its kind in the world. AA has the infrastructure already in place as its affiliate AlphaStar was, in the early 1990s, built as part of the United State’s Department of Defense’s Star Wars program. Further, AA has a team of experts with in broadband fiber connectivity satellites and network management. The team has a combined 20 years of experience in the telecommunications and information technology industry. AA will require lower investment costs. AA projects needing to hire between 400-500 network operators, technical, management, and sales staff.