



North Carolina A&T State University is Well Connected . . .

By Calvin Bonaparte

North Carolina Agricultural and Technical State University is part of the world's foremost information technology services delivered through the North Carolina Research and Education Network (NCREN).

NCREN connects teachers, students and partners to collaborate, create, discover, and share knowledge. The fiber-optic infrastructure provides Internet, video, audio, data and computing networks service to all 15 of North Carolina's public institutions that grant baccalaureate degrees, as well as the North Carolina School of Science and Math, the nation's first public residential high school for gifted students. In addition, connectivity services are provided for many of the State's universities including Wake Forest and Duke University. Services are also provided for North Carolina state government network (ITS), regional networking initiatives and many of the state medical and research institutions. NCREN also provides access to national and international research networks, including Internet2 and the National LambdaRail enabling global research and collaboration.

Internet2 is a high-speed research-only network used to develop the next generation of internet applications. The next generation Internet will move data 100 to 1000 times faster than the conventional Internet.

National LambdaRail provides a nationwide

Over the past twenty years the non-profit organization, Microelectronics Center of North Carolina (MCNC), has managed and operated the NCREN network. MCNC also builds partnerships among academic, research, government and business communities. Together they are implementing a plan designed to provide network services to every K-12 school and community college in North Carolina. This initiative has created a new organization called the K-20 Education Network.

The goals of the K-20 Education Network are to provide seamless access to advanced networked Information Technology resources, to complement the institution's network-based next generation computing infrastructures and to enable the highest quality of communication services for students at all levels of education.

North Carolina A&T State University is a major player in NCREN. N.C. A&T is part of the regional hub that provides connectivity to the Triad with future plans to provide network diversity from the Research Triangle area to Charlotte. This is a critical connection link for the North Carolina information highway and future Internet2 network.

North Carolina A & T is also a key participant in the NCREN Advisory Committee. This committee reviews budgets, strategic directions, and all areas of operations. The goal is to ensure that the A&T community remains at the forefront of the

infrastructure to facilitate interconnectivity among high-performance research and education networks. This unique network is owned and controlled by the U.S. research community.

NCREN is a highly reliable and cost-efficient network. The network enables users throughout the educational arena to share resources including computing resources, software applications, scientific research and even people. For example, advanced collaboration tools such as video-based distance learning enables teachers to remotely deliver classes to students throughout the state.

Information Age.▪

