Group company, is marketing protective helmets made with ultra-strong Dyneema HB26 unidirectional (UD) composite in the United States. The Denver Police Department in Colorado is the first U.S. organization to adopt the new Protech Delta LT helmets. This model meets National Institute of Justice (NIJ) IIIA specifications and is 15 percent lighter in weight than comparable 100 percent aramid helmets.

Additional capacity in both yarn and UD material used in personal and vehicle protection has been brought on stream at its Greenville, N.C., facility. DSM Dyneema is on target to double global capacity for UD in 2009, as part of a $450 million investment announced earlier.

Dyneema HB26 composite is based on Dyneema, made from ultra high molecular weight polyethylene fiber. HB26 provides protection against handgun fragments and rifle threats at extremely low weights in both personal and vehicle hard ballistic armor applications, and this is the first commercial use of Dyneema HB26 composite in a ballistic helmet in the United States.

Biometric Prototype

intuVision and partner West Virginia University (WVU) Biometric Research Group are developing a prototype video soft biometry system that can automatically extract gender and ethnicity information without any intrusion of privacy. Soft biometry features are those that provide categorical information about people, such as gender, ethnicity and size, but are not enough to uniquely identify a person. This system will enable the extraction of soft biometry features and categorical classification of people from surveillance and Web-quality video.

When human observers see a person, they quickly extract categorical information, such as gender and ethnicity, even from poor quality images without having to recognize and identify them first. These types of characteristics that categorize but do not identify a person uniquely are called “soft biometric features,” and they provide high level information about the individuals. Extracting these features automatically from surveillance video will provide significant help to security personnel while protecting the privacy of individuals.

At present, intelligent video surveillance systems extract only limited knowledge about objects,

at best, by classifying them into person, vehicle, group, etc., with no further detail on the people. Other vision based biometrics such as face and iris recognition systems attempt to uniquely identify a person but require high resolution imagery.

intuVision and WVU are exploring soft biometry features that can be robustly extracted from different types and quality of video sources and reliably used for categorical classification of people.

“This exciting new technology leverages our experience in video object tracking and classification,” said intuVision’s founder and CEO Dr. Sadiye Guler. “We believe by studying significant features of face, and human measurements from video, it is possible to obtain categorical information on people without having to identify them, and our early results are very promising.”

Portable Tactical Repeater Systems

McDowell Research, an Ultralife company specializing in the design and manufacture of power solutions and accessories to support government and defense communications systems, introduced the MRC-200A and MRC-200H Tactical Repeater Systems, designed for portability and first-responder use with multiband handheld radios. The “A” model uses the Thales MBITR AN/PRC-148 radio; the “H” model uses the Harris Falcon III AN/PRC-152 radio.

In addition to greatly extending the range of a handheld radio—effectively providing performance comparable to a manpack radio—both models provide greater bandwidth coverage than all other commercial repeaters (30-512 MHz). This multiband capability allows the repeaters the ability to be used with virtually any handheld radio as the outstation, while a field-interchangeable duplexer enables full duplex operation by combining both transmit and receive signals into a single antenna, providing added filtering for greater receive selectivity.

Both models can be powered via universal AC (85-265V, 47-63Hz) or DC (11-36V) with rechargeable battery backup. Both 12V and 24V DC systems have adjustable threshold settings to enable the internal battery chargers when the vehicle’s engine is running and disable them