Science Applications
International Corporations
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An Employee-Owned Company

TO: September 30, 2002
FCC Application Processing Branch

From: Mr. Bill Eaton
SAIC Wireless Systems Group

Subject: Submittal for FCC ID LPRLPR902M-ICU-0
731 Confirmation Number: EA803156

Sir/Mamn:

The In-Vehicle Control Unit (ICU) designed for the BellSouth Telecommunications (BST) Global Positioning System (GPS) has been deployed in approximately 14,000 vehicles across the nine state area serviced by BellSouth Telecommunications in support of their installation and maintenance fleet.

A type II permissive change is being requested for the following system design changes that will occur on future builds of the ICU and have the potential to be retrofitted into the already existing units.

1) Replacement of the existing three discrete antennas system into one integrated 3/1 antenna system. Earlier correspondence with the FCC OET confirmed that this approach was acceptable for this Part 90 device since we were installing a lower gain antenna. We were advised to supply an updated MPE and Spurious Emissions test report with the filing. This test is scheduled for October 2-4, 2002 at the FCC approved Aegis Laboratory in Irvine, California.

2) The addition of an interface capability to operate an external satellite modem that holds separate type approval under CFR Part 25.

The ICU system configuration is based on commercially available technology that is hosted in a vehicle-mounted enclosure that has been designed and tested to meet these industry standards:

1. *Code of Federal Regulations Volume 47*, Part 2, 15, 25 and 90 as appropriate.

2. *Joint SAE/TMC Recommended Environmental Practices for Electronic Equipment Design (Heavy-Duty Trucks)* Document No. SAE J1455.

3. *Surface Vehicle Electromagnetic Compatibility (EMC) Standards Manual*, SAE HS-3600, 1999 Edition.

The ICU Model Number LCM386-20531200009 manufactured by Symbol Technologies, Inc. for Science Applications International Corporation in support of this program complies with Part 15 of the FCC rules and is appropriately marked.

The ICU contains a 12-channel GPS receiver manufactured by Navmen, a BSWD Wireless Modem manufactured by Research In Motion (RIM) and a Remote Alert Receiver manufactured by Street Smart Security. Externally the ICU interfaces to the satellite modem MBS1000 supplied by Wireless Matrix.

The use of the Navmen GPS receiver (TU30-D140) in the ICU is passive, requiring no intervention or activity by the technician. Periodically, the in-vehicle system GPS/vehicle data is communicated through the BSWD (now Cingular Wireless) wireless network utilizing the RIM 902M transceiver (FCC ID: L6AR902M-2-0) or will be able to accomplish the same activities over a Geostationary satellite utilizing the MBS-1000 (FCC ID: E930367). The ICU also provides the technician with a remote emergency alert capability by hosting a Remote Alert Receiver that can be activated up to 150 feet in line of sight of the vehicle RAT antenna utilizing a FOB transmitter (FCC ID: KFR-SAIC).

The ICU normally only transmits while the vehicle ignition is in the on position and is maintained in a power down state when the vehicle is not being operated.

The antenna system(s) associated with the ICU are mounted on the exterior of the BellSouth fleet vehicles and their mounting location of the antennas associated with the ICU are controlled through mechanical design, installation procedures and installation training to ensure that the external placement of the antennas is such that a safe distance is maintained between the antennas, vehicle operator and nearby persons.

Respectfully,

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