

|                                                                                                                    |            |
|--------------------------------------------------------------------------------------------------------------------|------------|
| INTRODUCTION/SUMMARY.....                                                                                          | XVII       |
| <i>SUMMARY TABLE ADVANCED TRANSPORTATION TECHNOLOGY REVENUES,<br/>    THROUGH 2005 (\$ MILLIONS).....</i>          | <i>XIX</i> |
| <i>SUMMARY FIGURE ADVANCED TRANSPORTATION TECHNOLOGY REVENUES,<br/>    2002, 2003 AND 2005 (\$ MILLIONS) .....</i> | <i>XIX</i> |
| AIRLINES.....                                                                                                      | 1          |
| WEATHER FORECAST DURING FLIGHT .....                                                                               | 1          |
| IRIS RECOGNITION TRIED AS PREMIUM SERVICE.....                                                                     | 1          |
| SKY CONNEXION GETS GREENLIGHT .....                                                                                | 2          |
| AIRPORT GROUND TRAFFIC CONTROLLED .....                                                                            | 3          |
| TRAINING SYSTEM RECOGNIZES SPEECH .....                                                                            | 4          |
| TRAINING SYSTEM RECOGNIZES SPEECH (CONTINUED).....                                                                 | 5          |
| TRAINING SYSTEM RECOGNIZES SPEECH (CONTINUED).....                                                                 | 6          |
| AUTO ELECTRONICS .....                                                                                             | 7          |
| X-BY-WIRE MAKES ADVANCES.....                                                                                      | 7          |
| QNX DEPLOYS IN-CAR NETWORKS .....                                                                                  | 8          |
| SMART JUNCTION BOX DEVELOPED .....                                                                                 | 9          |
| NEC LICENSES SIRF TECHNOLOGY FOR EUROPE .....                                                                      | 10         |
| INTEL DISPLAYS PROCESSORS .....                                                                                    | 11         |
| AMI-C CHOOSES CHIP PLATFORM.....                                                                                   | 11         |
| VOLVO MOVES INTO TELEMATICS.....                                                                                   | 12         |
| BRINGING WIRELESS CONNECTIVITY TO EUROPE .....                                                                     | 13         |
| PIONEER DESIGNS FOR FLEXIBILITY .....                                                                              | 13         |
| OPEN SYSTEM CONTROLLER UPDATED .....                                                                               | 14         |
| MICROCONTROLLER SERIES INTRODUCED .....                                                                            | 14         |
| SPEECH RECOGNITION SOFTWARE OFFERED.....                                                                           | 15         |
| SIRF SUPPLIES CHIPSET FOR PLATFORM.....                                                                            | 16         |
| SIRF SUPPLIES CHIPSET FOR PLATFORM (CONTINUED).....                                                                | 17         |
| AVIATION .....                                                                                                     | 18         |
| BEATING BOEING TO THE PUNCH .....                                                                                  | 18         |
| ACCURATE WEATHER DELIVERED .....                                                                                   | 18         |
| ACCURATE WEATHER DELIVERED (CONTINUED).....                                                                        | 19         |
| BIOMETRICS .....                                                                                                   | 20         |
| VERIFYING A SAFER COMMUTE .....                                                                                    | 20         |
| MILLIONTH VOICE CHIP SHIPPED .....                                                                                 | 21         |
| MILLIONTH VOICE CHIP SHIPPED (CONTINUED).....                                                                      | 22         |
| COMMUNICATION .....                                                                                                | 23         |
| MULTIPLE BANDS ADD FUNCTIONS, COVERAGE.....                                                                        | 23         |
| BLUETOOTH RADIO ANTENNA INTRODUCED .....                                                                           | 24         |
| TI CONNECTS WITH A BLUETOOTH ROM CHIP.....                                                                         | 24         |

|                                                         |    |
|---------------------------------------------------------|----|
| BLUETOOTH ENABLES HANDS-FREE PHONES .....               | 25 |
| AMI-C AND ERTICO COLLABORATE .....                      | 25 |
| FIBER LOWERS WEIGHT, INCREASES BANDWIDTH .....          | 26 |
| HIGH SPEED BUS UNVEILED .....                           | 27 |
| PRICING EFFICIENCY FAVORS WIRELESS .....                | 27 |
| PRICING EFFICIENCY FAVORS WIRELESS (CONTINUED).....     | 28 |
| PRICING EFFICIENCY FAVORS WIRELESS (CONTINUED).....     | 29 |
| LOOKING BEYOND ANYTIME, ANYWHERE .....                  | 30 |
| LOOKING BEYOND ANYTIME, ANYWHERE (CONTINUED) .....      | 31 |
| HOT SPOTS INCREASE NETWORK CAPACITY .....               | 32 |
| HOT SPOTS INCREASE NETWORK CAPACITY<br>(CONTINUED)..... | 33 |
| MERIDIAN ANNOUNCES NEW MODEM .....                      | 34 |
| PEER-TO-PEER IS AN OPTION.....                          | 34 |
| PEER-TO-PEER IS AN OPTION (CONTINUED) .....             | 35 |
| MORE CONNECTIONS FROM CONNEXION .....                   | 36 |
| UCONNECT DUE TO ARRIVE.....                             | 37 |
| SERVICE OFFERED WITH ANTENNAE.....                      | 38 |
| MORE NODES ON THE NETWORK.....                          | 38 |
| BOEING CONTINUES MAKING CONNECTIONS.....                | 39 |
| A NEW GLASS FIBER MARKET EMERGES .....                  | 40 |
| BRINGING THE OFFICE TO THE BOAT .....                   | 41 |
| PHONES FOUND WITH MULTIMODES .....                      | 42 |
| CONFERENCE REPORT .....                                 | 43 |
| DIGITAL CAR BREAKS NEW GROUND.....                      | 43 |
| WHERE IS THE VALUE IN TELEMATICS? .....                 | 43 |
| WHERE IS THE VALUE IN TELEMATICS? (CONTINUED).....      | 44 |
| WHERE IS THE VALUE IN TELEMATICS? (CONTINUED).....      | 45 |
| WIRELESS IS THE KEY .....                               | 46 |
| WILL THE CONSUMER PAY?.....                             | 47 |
| TELEMATICS GO BY THE BOOK .....                         | 48 |
| TELEMATICS GO BY THE BOOK (CONTINUED) .....             | 49 |
| ONSTAR OFFERS ITS MARKET PERSPECTIVE .....              | 50 |
| OEM MODEL REMAINS THE SAME .....                        | 51 |
| CONSUMERS WILL BE THE CLEAR WINNER.....                 | 52 |
| EMERGING WAREHOUSE MARKETS SURGE .....                  | 53 |
| CIVILIAN MARKET DOMINATES.....                          | 53 |
| GAUGING DANGER AT INTERSECTIONS.....                    | 54 |
| ELECTRONIC TOLL COLLECTION.....                         | 55 |
| EXPANDING INTO SHOPPING AND FOOD .....                  | 55 |
| FLEET MANAGEMENT.....                                   | 56 |
| CSI SUPPLIES CNH GLOBAL.....                            | 56 |

|                                                   |    |
|---------------------------------------------------|----|
| XATA PUTS DATA INTO USER'S PALMS .....            | 56 |
| DRIVECAM THWARTS INSURANCE FRAUD .....            | 57 |
| LOUISIANA POLICE GET TRACKED BY CHOICE .....      | 58 |
| @TRACK GOES WITH GE CAPITAL .....                 | 58 |
| WEBRASKA WINS PATENT PROTECTION .....             | 58 |
| WEBRASKA WINS PATENT PROTECTION (CONTINUED) ..... | 59 |
| NEW CONTRACTS EXPAND FOOTPRINT .....              | 60 |
| IRD OFFERS SIEMENS EXCLUSIVE SUPPORT .....        | 60 |
| WINGCAST ADDS ANOTHER PARTNER .....               | 61 |
| NEXTEL TAKES NETWORK GLOBAL .....                 | 62 |
| TRIMBLE TRACKS EUROPEAN TRUCKS .....              | 62 |
| FASTER REMOTE CONNECTION PROMISED .....           | 63 |
| EXTENDING TELEMATICS BEYOND THE DASHBOARD .....   | 64 |
| @TRACK COMPLETES SALE TO AETHER .....             | 64 |
| EVENT TRIGGER EASES CONCERNS .....                | 65 |
| EVENT TRIGGER EASES CONCERNS (CONTINUED) .....    | 66 |
| CARREADERS MONITOR EV PERFORMANCE .....           | 67 |
| OPERATORS MONITOR WITH HINDSIGHT .....            | 68 |
| CONEXANT SHIFTS TO NEW ZEALAND .....              | 69 |
| TRANSCORE ENHANCES TRUCKER'S OPTIONS .....        | 69 |
| TWO CIRCUIT BOARDS INTRODUCED .....               | 70 |
| @ROAD OFFERS NEW LOCATION DEVICE .....            | 71 |
| AETHER CHOSEN FOR TRACKING .....                  | 72 |
| SNOW PLOWS TRACKED EFFICIENTLY .....              | 73 |
| TRUCKERS PLAN TO AVOID TERROR .....               | 73 |
| QUALCOMM ADDS SECURITY MEASURES .....             | 74 |
| BASIC MANAGEMENT PACKAGE LAUNCHED .....           | 75 |
| NATIONAL SCIENTIFIC SEEKS PARTNERS .....          | 75 |
| BRINGING TRACKING TO THE INTERNET .....           | 76 |
| HANDHELD PROVES DELIVERY .....                    | 77 |
| QUALIFICATION GRANTED .....                       | 78 |
| TRAILER PRODUCTS MAKE DEBUT .....                 | 78 |
| TIGER ANNOUNCES MGT. CHANGES .....                | 79 |
| NETWORK COMPLEXITY WITH STABILITY .....           | 80 |
| SUITE TARGETS SMALL ENTERPRISES .....             | 81 |
| TRACKED IF BY LAND OR SEA .....                   | 82 |
| VIRTUAL LOOK LAUNCHED .....                       | 83 |
| PHONES PROVIDE YOUR LOCATION .....                | 83 |
| CHANNELS SHRINK IN SIZE AND POWER .....           | 84 |
| TRAINING OFFERED FOR EMERGENCY OPERATORS .....    | 84 |
| SHRINKING HARDWARE EXPANDS TRACKING .....         | 85 |
| A SMALL ENTRY LAUNCHES GPS .....                  | 85 |
| INTERFACE MODULE WILL SEND CODES .....            | 86 |
| INCREASING SECURITY OF TRUCKS .....               | 87 |

|                                                                                              |     |
|----------------------------------------------------------------------------------------------|-----|
| OPTIONS ENHANCED FOR SMALLER PLAYERS .....                                                   | 87  |
| OPTIONS ENHANCED FOR SMALLER PLAYERS<br>(CONTINUED).....                                     | 88  |
| OFFERING HARDWARE AND SERVICE.....                                                           | 89  |
| TRIMBLE EXPANDS DOWN UNDER .....                                                             | 90  |
| PARTNERSHIP BRINGS TELEMETRY TO DEALERSHIPS.....                                             | 90  |
| PRUNING THE ANTENNA FARM.....                                                                | 91  |
| FLEETBOSS ADDS ENTERPRISE FUNCTION .....                                                     | 92  |
| PAPERLESS WAREHOUSE IN THE OFFING? .....                                                     | 92  |
| DELIVERED DATA CUTS COSTS .....                                                              | 93  |
| DELIVERED DATA CUTS COSTS (CONTINUED) .....                                                  | 94  |
| VIRTUAL TRAINING PROVES CHEAPER .....                                                        | 95  |
| VIRTUAL TRAINING PROVES CHEAPER (CONTINUED).....                                             | 96  |
| TWO-WAY SATELLITE OPTION ADDED .....                                                         | 97  |
| TRIMBLE PARTNERS WITH MICROCELL.....                                                         | 97  |
| GLOBAL CONNECTION ESTABLISHED .....                                                          | 98  |
| TRACKING TRAINS WITH MODELS.....                                                             | 99  |
| BRIEFLY NOTED .....                                                                          | 99  |
| OMNITRACS SATELLITE-BASED MOBILE<br>COMMUNICATIONS AND TRACKING SYSTEM<br>DEMONSTRATED ..... | 99  |
| RADIO SATELLITE INTEGRATORS COMPLETE AVL<br>SYSTEM FOR THE TRIANGLE TRANSIT AUTHORITY.....   | 100 |
| RLM SOFTWARE'S FLIGHTVIEW ADDED TO HERTZ'S<br>ONLINE CAR RENTAL SYSTEM.....                  | 100 |
| INDUSTRY NEWS .....                                                                          | 101 |
| CELLPOINT COMES TO AMERICA .....                                                             | 101 |
| @ROAD ADDS HOMELAND INITIATIVE .....                                                         | 101 |
| TRACKING DEFAULTED PROPERTY .....                                                            | 101 |
| FONIX BUYS DECTALK.....                                                                      | 102 |
| CONFERENCE TO BE JOINTLY SPONSORED .....                                                     | 103 |
| SMARTIRE GETS FUNDS, DISTRIBUTION .....                                                      | 103 |
| EARNINGS ANNOUNCED AND AMENDED.....                                                          | 103 |
| ANOTHER LICENSEE CHOOSES QNX.....                                                            | 104 |
| @ROAD JOINS STANDARDS EFFORT.....                                                            | 105 |
| COMPANIES ANNOUNCE QUARTERLY RESULTS.....                                                    | 105 |
| VIDEO TRANSMITTED OVER COPPER.....                                                           | 106 |
| NESTOR REFOCUSSES ON ENFORCEMENT.....                                                        | 106 |
| BILLING GETS MORE DETAILED.....                                                              | 107 |
| FATALITIES CONTINUE TO DECLINE .....                                                         | 107 |
| ROBOTIC PARKING OPENS FACILITY .....                                                         | 108 |
| TRACKING THIEVES FROM ABOVE .....                                                            | 108 |
| CELLPORT CHANGES FOCUS TO WIRELESS .....                                                     | 109 |
| GLOBAL POSITIONING SUPORTED.....                                                             | 109 |

|                                                                                                            |            |
|------------------------------------------------------------------------------------------------------------|------------|
| STANDARD FOR TIRE MONITORING SET .....                                                                     | 110        |
| MOTOROLA OPENS NEW HQ .....                                                                                | 110        |
| PATENT FOR DIFFERENTIAL GPS.....                                                                           | 111        |
| WINDOWS WARMLY CLEANED BY HOTSHOT .....                                                                    | 112        |
| TIRE MONITORS ARE PART OF THE CONCEPT .....                                                                | 112        |
| INSURERS BACK MONITORING .....                                                                             | 113        |
| PUBLIC INPUT REQUESTED.....                                                                                | 114        |
| COMPANIES REPORT QUARTERLY EARNINGS.....                                                                   | 114        |
| OMNITRACS SAYS SHIPMENTS GROWING.....                                                                      | 115        |
| NESTOR NEGOTIATES AND REFINANCES .....                                                                     | 116        |
| GLEANNING MARKET INTEREST ONLINE.....                                                                      | 117        |
| AMI-C SEEKS CONTRIBUTORS.....                                                                              | 118        |
| CAMERAS OFFER LANE GUIDANCE .....                                                                          | 119        |
| TOP TIER WILL COME TO CONGRESS .....                                                                       | 119        |
| DON'T RUN THESE RED STOPLIGHTS.....                                                                        | 120        |
| SENSOR NEED INSPIRES PARTNERSHIP .....                                                                     | 120        |
| EUROPEANS WORK TO ESTABLISH STANDARDS.....                                                                 | 121        |
| SPECIFICATION READY TO BE PUBLISHED .....                                                                  | 122        |
| PLATFORM REFERENCES NEW SPECS .....                                                                        | 123        |
| GM ANNOUNCES FUNDING RECIPIENTS.....                                                                       | 124        |
| READERS SHRINK IN SIZE.....                                                                                | 124        |
| BUSES UPGRADE FARE AUTOMATION .....                                                                        | 125        |
| TIGHT MARKET YIELDS CAPITAL.....                                                                           | 125        |
| ARGONNE OPENS NEW TEST FACILITY .....                                                                      | 126        |
| MARKET FOR AUTO EXTERIOR PLASTICS TO REACH NEARLY<br>1.4 BILLION POUNDS BY 2006 .....                      | 126        |
| <i>TABLE 1 AUTOMOTIVE EXTERIOR PLASTICS MARKET, THROUGH 2006<br/>(MILLION POUNDS).....</i>                 | <i>127</i> |
| <i>FIGURE 1 AUTOMOTIVE EXTERIOR PLASTICS MARKET BY RESIN TYPE, 2001<br/>AND 2006 (MILLION POUNDS).....</i> | <i>128</i> |
| HAS EVERYTHING CHANGED FOR ITS?.....                                                                       | 128        |
| HAS EVERYTHING CHANGED FOR ITS? (CONTINUED) .....                                                          | 129        |
| HAS EVERYTHING CHANGED FOR ITS? (CONTINUED) .....                                                          | 130        |
| HAS EVERYTHING CHANGED FOR ITS? (CONTINUED) .....                                                          | 131        |
| BRIEFLY NOTED .....                                                                                        | 132        |
| FORD MOTOR CO. PLACES BLANKET PURCHASE ORDER<br>WITH I.D. SYSTEMS .....                                    | 132        |
| SMARTIRE SYSTEMS ANNOUNCE RESULTS FOR FIRST<br>QUARTER OF FISCAL 2002 .....                                | 133        |
| MOBILEARIA ENTERS AGREEMENT WITH REUTERS.....                                                              | 133        |
| ALLIED BUSINESS INTELLIGENCE PREDICTS THAT X-BY-<br>WIRE SYSTEMS WILL GROW .....                           | 133        |
| AUTOMOTIVE TELEMATICS WILL RAPIDLY EXPAND BY<br>2005 .....                                                 | 134        |
| SIEMENS LAUNCHES SIEMENS VDO AUTOMOTIVE CORP.....                                                          | 134        |

|                                                                                                           |     |
|-----------------------------------------------------------------------------------------------------------|-----|
| PRESIDENT OF THE ITI BOARD OF DIRECTORS IS NAMED ....                                                     | 134 |
| WEATHER.COM TO PROVIDE ONSTAR WEATHER<br>REPORTS.....                                                     | 134 |
| MOBILEARIA COMPLETES IN-VEHICLE PRODUCTIVITY<br>SERVICE PLATFORM.....                                     | 135 |
| NESTOR NAMES CHIEF OPERATING OFFICER .....                                                                | 135 |
| SLATER JOINS INTERNATIONAL ADVISORY BOARD OF<br>PARSONS BRINCKERHOFF .....                                | 135 |
| NEW POCKET ADAPTERS TO FIT POPULAR HANDSETS .....                                                         | 135 |
| BOS ACQUIRES LICENSE FROM RESEARCH FRONTIERS .....                                                        | 136 |
| IMAGE SENSING SYSTEMS APPOINT TWO TO ITS BOARD<br>OF DIRECTORS .....                                      | 136 |
| SBC COMMUNICATIONS AND @TRACK SIGN AGREEMENT ...                                                          | 136 |
| MICROBURST SERVICE NOW IN NAFTA CORRIDOR<br>MARKETS.....                                                  | 136 |
| ANDREA ELECTRONICS' LATEST DSP-BASED AUDIO<br>INPUT TECHNOLOGIES NOW RUN ON ANALOG<br>DEVICES' SHARC..... | 137 |
| SMARTIRE SYSTEMS SEES LOSS IN SECOND QUARTER .....                                                        | 137 |
| MOTOROLA REPORT DECREASE IN SALES .....                                                                   | 137 |
| DONNELLY CORP. SEE FIRST QUARTER LOSS.....                                                                | 138 |
| IMAGE SENSING SYSTEMS ELECT BOARD CHAIRMAN AS<br>INTERIM PRESIDENT AND CEO .....                          | 138 |
| NEXIQ TECHNOLOGIES ANNOUNCE FY2002 EARNINGS .....                                                         | 138 |
| MICROVISION TO CONTINUE DEVELOPING NEXT-<br>GENERATION AUTOMOTIVE DISPLAY PRODUCTS.....                   | 139 |
| TPN TO PROVIDE TRAFFIC INFO ABC RADIO IN TEXAS .....                                                      | 139 |
| FONIX CORP. SEE RISE IN REVENUE.....                                                                      | 139 |
| ANDREA ELECTRONICS SEES SHARP DECLINE IN<br>REVENUES .....                                                | 139 |
| @TRACK COMMUNICATIONS' REVENUES IN LINE WITH<br>EXPECTATIONS.....                                         | 140 |
| TELETRAC ADD WIRELESS MESSAGING AND ALERT<br>FEATURE TO ITS FLEETDIRECTOR PRODUCT.....                    | 140 |
| TIGER TELEMATICS CLOSES ITS ACQUISITION .....                                                             | 140 |
| AETHER SYSTEMS TO DEPLOY 165 MOBILEMAX2 UNITS .....                                                       | 140 |
| FOUR NEW MEMBERS JOIN UNIVERSITY OF DENVER ITI<br>BOARD OF DIRECTORS.....                                 | 141 |
| MOTOROLA COMPLETES LICENSING AGREEMENT WITH<br>CELLPORT SYSTEMS.....                                      | 141 |
| INTERNATIONAL ROAD DYNAMICS GETS CONTRACT<br>FROM PROVINCE OF NEW BRUNSWICK.....                          | 141 |
| DONNELLY TO BECOME WHOLLY OWNED SUBSIDIARY<br>OF MAGNA.....                                               | 141 |

|                                                                                                               |     |
|---------------------------------------------------------------------------------------------------------------|-----|
| DENSO INTERNATIONAL AMERICA CUT JOBS AT TWO CALIFORNIA FACILITIES .....                                       | 142 |
| HITACHI AMERICA NAMES PRESIDENT AND CEO OF ITS AUTOMOTIVE PRODUCTS GROUP .....                                | 142 |
| COMMUTERS IN MINNESOTA CAN GET ROAD INFO BY DIALING 511 .....                                                 | 142 |
| TELEVOKE ANNOUNCES SERVICE IN MEXICO .....                                                                    | 143 |
| DOT'S FEDERAL AVIATION ADMINISTRATION NOW PROVIDE PILOTS WITH ACCESS TO RUNWAY VISUAL RANGE INFORMATION ..... | 143 |
| SMARTIRE SYSTEMS DEVELOP AND IMPLEMENT NEW FINANCIAL PLAN .....                                               | 143 |
| ROBERT BOSCH CORPORATION TO FORM AN ENERGY SOLUTIONS DIALOGUE GROUP.....                                      | 143 |
| WAITING PERIOD UNDER HART-SCOTT-RODINO ANTITRUST IMPROVEMENTS ACT OF 1976 EXPIRED.....                        | 144 |
| SOCIETY OF AUTOMOTIVE ENGINEERS RELEASE REPORT .....                                                          | 144 |
| NUMEREX ANNOUNCED NEW MOBILE MESSAGING OFFERING .....                                                         | 144 |
| MAGNA'S ACQUISITION OF DONNELLY CORP. MEET E.U. MERGER REGULATIONS .....                                      | 145 |
| PEOPLET COMMUNICATIONS COMPLETE INTEGRATION OF G2X WIRELESS FLEET PRODUCT.....                                | 145 |
| @ROAD ACQUIRES CONNECTBUSINESS.....                                                                           | 145 |
| NEXIQ TECHNOLOGIES' CHIEF EXECUTIVE OFFICER RESIGNS .....                                                     | 146 |
| TOYOTA TO USE ACCOUNT-AGGREGATION SERVICE FROM ACCOUNTONE .....                                               | 146 |
| NEXIQ TECHNOLOGIES TO REDUCE ITS WORKFORCE .....                                                              | 146 |
| CLARITY TO SUPPLY TECHNOLOGY AND HARDWARE TO RIVERPARK .....                                                  | 147 |
| PB FARRADYNE NAME SENIOR ADVISOR FOR TRANSIT ITS SERVICES .....                                               | 147 |
| EXPERIAN ANNOUNCE THE LAUNCH OF AUTO MARKET STATISTICS .....                                                  | 147 |
| ONSTAR WIRELESS BUSINESS CHOOSE ITS VICE PRESIDENT .....                                                      | 147 |
| ATX TECHNOLOGIES NAME VICE PRESIDENT OF ATX PERFORMANCE EXCELLENCE .....                                      | 148 |
| PHATNOISE DESIGNS XILINX COOLRUNNER SERIES CPLDs.....                                                         | 148 |
| MOBILITY TECHNOLOGIES NAME CEO, COO, AND CFO.....                                                             | 148 |

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| ANDREA ELECTRONICS CORP. ANNOUNCED DROP IN REVENUES .....          | 148 |
| 2003 LINCOLN LS LUXURY SEDAN TO FEATURE CLIMATE CONTROL SEAT ..... | 149 |
| DENSO CORP. ANNOUNCE GLOBAL FINANCIAL RESULTS .....                | 149 |
| “WINDOWS CE FOR AUTOMOTIVE” TO BECOME “WINDOWS AUTOMOTIVE” .....   | 150 |
| LAW ENFORCEMENT .....                                              | 151 |
| GPS ASSISTS ACCIDENT INVESTIGATIONS .....                          | 151 |
| PROJECT 54 MAKES PROGRESS .....                                    | 151 |
| PROJECT 54 MAKES PROGRESS (CONTINUED) .....                        | 152 |
| WIRELESS CHECKS DEVELOPED .....                                    | 153 |
| NAVIGATION SYSTEMS .....                                           | 154 |
| COMPAQ LAUNCHES IN EUROPE .....                                    | 154 |
| LET MAGELLAN SHOW YOU AROUND .....                                 | 154 |
| ATX OFFERS A NEW TETHER .....                                      | 155 |
| MAPPING SERVICE GETS SWITCHED .....                                | 156 |
| ONSTAR WITHOUT THE HUMAN COST? .....                               | 157 |
| MAP DATABASE UPGRADED FOR VOICE .....                              | 158 |
| SOFTWARE SECURES MOBILE TRANSACTIONS .....                         | 159 |
| CROSSING THE CHASM IN THE AFTERMARKET .....                        | 159 |
| WHO ARE THE USERS? .....                                           | 160 |
| READING PALMS TO FIND DIRECTION .....                              | 161 |
| DEVICES SHRINKAGE CONTINUES .....                                  | 162 |
| POINT OF INTEREST EXPANDED .....                                   | 163 |
| MORE DATA OFFERS INCREASED OPTIONS .....                           | 164 |
| SATELLITE ROUTING IS AT HAND .....                                 | 164 |
| SOFTWARE TOOL SPEEDS DEVELOPMENT .....                             | 165 |
| SAUDI ARABIA IS MAPPED .....                                       | 166 |
| WINDOWS CLOSING ON THE FUTURE .....                                | 166 |
| FORD PROTOTYPE SHOWN IN EUROPE .....                               | 167 |
| TELE ATLAS EXPANDS IN EUROPE .....                                 | 167 |
| MAPS ARE VOICED AND DIGITIZED .....                                | 168 |
| PORTABLE OFFERS SIMPLICITY .....                                   | 169 |
| PORTABLE OFFERS SIMPLICITY (CONTINUED) .....                       | 170 |
| SAFETY AND SECURITY SYSTEMS .....                                  | 171 |
| BETTER VISION AT NIGHT .....                                       | 171 |
| BENDIX USES INFRARED VISION .....                                  | 171 |
| VOLVO AWARDED FOR CONCEPTUAL VIEW .....                            | 172 |
| AUTOVUE INCLUDED IN CONCEPT CAR .....                              | 172 |
| TRADING PRIVACY FOR CONVENIENCE .....                              | 173 |
| “SIRF”ING TO MEET FCC MANDATE .....                                | 174 |



|                                               |     |
|-----------------------------------------------|-----|
| FINGERPRINTS REPLACE ID PASSWORDS .....       | 175 |
| SIMULATIONS TRAIN SAFER DRIVERS.....          | 175 |
| BAGS CHECKED FOR EXPLOSIVES .....             | 176 |
| MICHELIN MONITORS TIRES REMOTELY.....         | 177 |
| ADDING STABILITY TO FOUR-WHEEL DRIVE .....    | 178 |
| FINGERPRINTS CAN BE KEYS .....                | 178 |
| FINGERPRINTS CAN BE KEYS (CONTINUED).....     | 179 |
| <br>                                          |     |
| TELEMATICS.....                               | 180 |
| HIDDEN CONSOLE ENTERTAINS .....               | 180 |
| PLATFORM MEETS LOW-END NEEDS .....            | 180 |
| NEW DEAL, NO DETAILS .....                    | 181 |
| FINDING FAULT RELIABLY .....                  | 181 |
| PHONE VISION GAINS ADHERENTS.....             | 182 |
| HIGH-SPEED I MOBILE INTERNET .....            | 182 |
| HIGH-SPEED I MOBILE INTERNET (CONTINUED)..... | 183 |
| <br>                                          |     |
| TRAFFIC MANAGEMENT.....                       | 184 |
| PB FARRADYNE PLANS FOR PALM BEACH COUNTY..... | 184 |
| URS TO UPGRADE HIGHWAY INTERCHANGE.....       | 184 |
| NESTOR PERFORMS IN IRVINE .....               | 185 |
| TOLERATING FAULTS IMPROVES CONTROL .....      | 185 |
| TOLERATING FAULTS IMPROVES CONTROL            |     |
| (CONTINUED).....                              | 186 |
| TOLERATING FAULTS IMPROVES CONTROL            |     |
| (CONTINUED).....                              | 187 |
| TRAFFIC CLASSIFIED WITH FIBER .....           | 188 |
| LA LOOKS AT ITS CONGESTION .....              | 189 |
| MOVING TO ONE TRUCK, ONE TRANSPONDER.....     | 189 |
| CROSSING THE TOLL CHASM .....                 | 190 |
| SIGNS WARN OVER HEIGHT TRUCKS .....           | 190 |
| AUSTIN, TX ORDERS DETECTION SYSTEM.....       | 191 |
| EARLY MERGES DECREASE AGGRESSION .....        | 191 |
| MORE CAMERAS COME ONLINE .....                | 192 |
| IRD VIRTUALLY WEIGHS TRUCKS.....              | 192 |
| PREPASS COMES ONLINE IN VIRGINIA.....         | 193 |
| PILOT PROGRAM MEASURES POTENTIAL.....         | 194 |
| ORIBITAL WINS NEW CONTRACTS .....             | 195 |
| ITERIS WINS CA CONTRACT.....                  | 195 |
| PB FARRADYNE MANAGES CONTRACT .....           | 196 |
| CONNECTICUT PROJECT TAKES FORM .....          | 196 |
| GEORGIA SEES ITERIS' ADVANTAGE .....          | 197 |
| TRAFFIC WORSENS IN U.K. ....                  | 197 |
| BRIEFLY NOTED .....                           | 198 |

|                                                                                         |     |
|-----------------------------------------------------------------------------------------|-----|
| INTERNATIONAL ROAD DYNAMICS GETS CONTRACT<br>FROM MASTEC ITS .....                      | 198 |
| CORNET TECHNOLOGIES TO PROVIDE VIDEO CODEC<br>EQUIPMENT TO TRAFFIC CONTROL SYSTEMS..... | 198 |
| ITERIS ADDS SENIOR CONSULTANT .....                                                     | 198 |
| ODETICS REPORTS NET LOSS.....                                                           | 199 |
| URS CORP. GETS CONTRACT FROM THE GEORGIA'S DOT .....                                    | 199 |
| IMAGE SENSING SYSTEMS DISCLOSES FINANCIAL<br>RESULTS FOR ITS FIRST QUARTER.....         | 199 |
| TRAVELER INFORMATION SERVICES .....                                                     | 200 |
| MEDICAL RECORDS DELIVERED .....                                                         | 200 |
| ONSTAR CONTINUES TO ADD OFFERINGS.....                                                  | 200 |
| ONSTAR CONTINUES TO ADD OFFERINGS (CONTINUED) .....                                     | 201 |
| TELCONTAR DRILLS INTO ORACLE DATABASES.....                                             | 202 |
| WINGCAST CONTINUES TO ASSEMBLE CAST.....                                                | 202 |
| BUILDING WHAT THE CONSUMER WANTS .....                                                  | 203 |
| BUILDING WHAT THE CONSUMER WANTS (CONTINUED).....                                       | 204 |
| BUILDING WHAT THE CONSUMER WANTS (CONTINUED).....                                       | 205 |
| YAHOO! CHANGES ITS COURSE .....                                                         | 206 |
| ACURA ADDS MORE ONSTAR.....                                                             | 206 |
| PARTNERS CHOSEN FOR FUTURE.....                                                         | 207 |
| PUTTING MAPS INTO USER'S PALMS.....                                                     | 207 |
| VW HITCHES TO ONSTAR .....                                                              | 208 |
| WINGCAST DIRECTS DELPHI.....                                                            | 208 |
| WEATHER AND TRAFFIC LINKED ON THE WEB .....                                             | 209 |
| WINGCAST GROUNDED BEFORE LAUNCH .....                                                   | 209 |
| EXTENDING AWARENESS WITH USED CARS .....                                                | 210 |
| CUEING UP FOR THE FUTURE .....                                                          | 210 |
| TELCONTAR GAINS SUPPORT.....                                                            | 211 |
| TEXT TO SPEECH FOR MOBILE DEVICES .....                                                 | 212 |
| WAL-MART TO SELL ROADSIDE HELP .....                                                    | 212 |
| ADDRESSING DRIVERS' PRIVACY CONCERNS .....                                              | 212 |
| ADDRESSING DRIVERS' PRIVACY CONCERNS<br>(CONTINUED).....                                | 213 |
| BRINGING VOICE TO MOBILE DEVICES .....                                                  | 214 |
| TELEMATICS TEAM ASSEMBLED.....                                                          | 215 |
| 511 SYSTEMS COMING ONLINE .....                                                         | 215 |
| TOYOTA OFFERS FULL SERVICE TELEMATICS.....                                              | 216 |
| HONDA UPGRADES TO TWO WAY .....                                                         | 217 |
| REAL-TIME TRAFFIC INFORMATION ADDED .....                                               | 218 |
| ERICSSON TO RESELL LOCATIONET PLATFORM .....                                            | 219 |
| BROAD PATENT CLAIMS GRANTED.....                                                        | 219 |
| BROAD PATENT CLAIMS GRANTED (CONTINUED) .....                                           | 220 |
| DISPLAYS GET COLORED CODED .....                                                        | 221 |

|                                                    |     |
|----------------------------------------------------|-----|
| COMPRESSION PUTS MAPS IN POCKET .....              | 221 |
| EARTHLINK CHOOSES GEOGRAPHIC DATA .....            | 222 |
| PARTNERS PREPARE PLATFORM FOR FUTURE .....         | 223 |
| CAN VOLVO BUCK THE TREND?.....                     | 224 |
| DRIVERS ASSISTED HANDS-FREE .....                  | 225 |
| REAL-TIMETRAFFIC STILL PROPOSED.....               | 226 |
| GRAPHICS FOR MAPS IMPROVED .....                   | 227 |
| BRIEFLY NOTED .....                                | 228 |
| COPILOT AND POCKET COPILOT GPS NAVIGATION TO       |     |
| USE ALK'S TTS.....                                 | 228 |
| NAVTECH MAP TO BE USED BY MOTOROLA IN EUROPE ..... | 228 |
| VEHICLE CONTROL SYSTEMS .....                      | 229 |
| THREE RTOS BENCHMARKED .....                       | 229 |
| FUTURE DATA FLOW IS DECENTRALIZED .....            | 229 |
| FUTURE DATA FLOW IS DECENTRALIZED (CONTINUED)..... | 230 |
| FUTURE DATA FLOW IS DECENTRALIZED (CONTINUED)..... | 231 |
| DISTRIBUTED DATA REPLICATED.....                   | 232 |
| NEW DATABASE COMES ONLINE.....                     | 233 |
| NEW DATABASE COMES ONLINE (CONTINUED) .....        | 234 |
| VEHICLE DESIGN .....                               | 235 |
| TRW OUTLINES X-BY-WIRE FUTURE .....                | 235 |
| DESIGNS VISUALIZED WITH DIMENSIONS .....           | 236 |
| PARTNERS DEMONSTRATE BLUETOOTH .....               | 236 |
| MOTOROLA OFFERS BLUETOOTH KIT .....                | 237 |
| VEHICLE POWER SYSTEMS AND VEHICLE SYSTEMS.....     | 238 |
| APPLIED SENSORS ADD CONTROL.....                   | 238 |
| PROTOTYPE CAMERA MONITORS CABIN.....               | 238 |
| HEADLIGHTS THAT LOOK AHEAD.....                    | 239 |
| AMPLIFIER IMPROVES RECEPTION .....                 | 240 |
| SEATBELTS RETRACT ACTIVELY.....                    | 240 |
| NEW DEFINITION OF BRAKE-BY-WIRE .....              | 241 |
| LIGHT-EMITTING DISPLAYS LICENSED .....             | 242 |
| ACUNIA'S MATILDA IS COMPLIANT .....                | 243 |
| VISTEON DEMOS NEW OFFERINGS.....                   | 243 |
| DELPHI EXTENDS OFFICE INTO CAR .....               | 244 |
| ALPINE INTRODUCES NEW COMPONENTS .....             | 245 |
| MICROSOFT EXHIBIT WINS BEST IN SHOW .....          | 246 |
| DELPHI IMPLEMENTS TRUEPRINT .....                  | 247 |
| GATEWAY GETS DEVICES TALKING .....                 | 248 |
| THE LAWS THAT POWER VOICE RECOGNITION .....        | 249 |
| THE LAWS THAT POWER VOICE RECOGNITION              |     |
| (CONTINUED).....                                   | 250 |

|                                                                 |     |
|-----------------------------------------------------------------|-----|
| RADAR CRUISES INTO EUROPEAN MARKET.....                         | 251 |
| RADAR CRUISES INTO EUROPEAN MARKET<br>(CONTINUED).....          | 252 |
| LASER RADAR SENSES ADAPTIVELY.....                              | 253 |
| ANTENNA KEEPS LOW PROFILE.....                                  | 253 |
| PLATFORMS STABILIZED IN EUROPE AND U.S. ....                    | 254 |
| DISTRACTED DRIVERS DRIVE DEVELOPMENT.....                       | 255 |
| CLEAR VOICE IS COMPLIANT.....                                   | 256 |
| CHANGING THE SOUND OF RADIO.....                                | 256 |
| SEARCH FOR CRASH STANDARDS BEGINS.....                          | 257 |
| NEW SYSTEM FROM XM SATELLITE RADIO.....                         | 258 |
| DEVELOPMENT FUNDING FOR BRAKE-BY-WIRE.....                      | 258 |
| SOFTWARE WARNS ABOUT TIRES.....                                 | 258 |
| SAVING THE LIVES OF RESCUERS.....                               | 259 |
| DISPLAY HAS SMALLER BORDERS.....                                | 260 |
| VISTEON AND SMARTIRE AGREE.....                                 | 260 |
| DAIMLER IS STILL SIRIUS.....                                    | 261 |
| SPEECH STILL THE ANSWER.....                                    | 261 |
| JOINT EFFORT CREATES TELEMATICS PLATFORM.....                   | 262 |
| MODULAR LIGHTING OFFERS FLEXIBILITY.....                        | 263 |
| HANDS-FREE TECHNOLOGY LICENSED.....                             | 263 |
| MULTIPLE PLAYBACK DELIVERED.....                                | 264 |
| ENTERTAINMENT OPTIONS ARE MULTIPLYING.....                      | 264 |
| MORE DATA INCREASES ACCURACY.....                               | 265 |
| BATTERY POWER IS INCREASING.....                                | 265 |
| SMALL SHIFTS YIELD MAJOR IMPROVEMENT.....                       | 266 |
| HONDA VOICE CONTROL IMPROVED VIA IBM.....                       | 267 |
| COMBINING FORCES TO IMPROVE VOICE.....                          | 268 |
| AMI-C ADDS OSGI SPECS.....                                      | 268 |
| DISTRIBUTOR GETS SIRIUS RADIO.....                              | 269 |
| XM REPORTS SUBSCRIBER GROWTH.....                               | 269 |
| HARDWARE HEARS BOTH SIGNALS.....                                | 270 |
| SEEING SEAT OCCUPANT SIZE IN STEREO.....                        | 271 |
| DRAWING A SAFETY CURTAIN ON THE SIDE.....                       | 272 |
| TRW, MICHELIN OFFER TIRE PRESSURE SENSOR.....                   | 272 |
| SONG SELECTION GETS VOICED.....                                 | 273 |
| PASSENGERS BATHED IN WARMTH.....                                | 274 |
| BRAKE BY WIRE COMES CLOSER.....                                 | 274 |
| ENTRY UNVEILS DIGITAL SOUND.....                                | 275 |
| BACKING INTO THE MARKET.....                                    | 276 |
| ELECTRONIC REGISTRATION SYSTEM SPEEDS CUSTOMS<br>CLEARANCE..... | 276 |
| ELECTRONIC REGISTRATION ... CLEARANCE<br>(CONTINUED).....       | 277 |

|                                               |     |
|-----------------------------------------------|-----|
| SMART PLATES DETER THEFT .....                | 278 |
| WINDSHIELD TAGS SUPPORT COMMERCE .....        | 279 |
| SINGLE SOURCE OPTION OFFERED.....             | 280 |
| COMPONENTS FOR DRIVE-BY-WIRE DEBUT .....      | 281 |
| SMART WINDOWS SENSE OBSTACLES .....           | 282 |
| FONIX PLATFORM GAINS SPEECH .....             | 283 |
| PROGRAMMABLE TELEMATIC CHIPS INTRODUCED ..... | 284 |
| RUGGED DISPLAY WIDENS VIEW .....              | 285 |
| DISPLAYS PROJECTED TO REAR SEATS.....         | 285 |
| BACKSEAT VIEW GETS HIGH DEFINITION.....       | 286 |
| DELPHI ADDS DIGITAL PROGRAMMING .....         | 286 |
| ADDING POWER FOR PERIPHERALS.....             | 287 |
| VEHICLE ANTICIPATES IMMINENT IMPACT.....      | 287 |
| THEFT NOTIFICATION OCCURS EARLIER .....       | 288 |
| BRIEFLY NOTED .....                           | 289 |
| SMARTSPEAK XG NOW COMPATIBLE WITH MOTOROLA'S  |     |
| MOTOROLA CENTER .....                         | 289 |
| CLARITY FORMS PARTNERSHIP WITH INNOVISION     |     |
| DESIGN.....                                   | 289 |
| VISION SYSTEMS .....                          | 290 |
| DONNELLY INTRODUCES TOWCHEK .....             | 290 |
| CHRYSLER CHRISTENS AFTERMARKET OFFERING ..... | 290 |