

COMPANY INFORMATION:

VDV MEDIA CORP.

VDV MEDIA CORP. is a Digital Wireless Telecommunications engineering company with a focus on design and provides RF communication system, custom system integration of video, data, and voice network. More details information regarding VDV and its key personnel is in following Section.

MISSION STATEMENT

VDV Media Corporation's mission is to be a market driven Technology Company. It is committed to manage its business with high quality and first class customer service for long term growth. It will invest in new technologies, and maintain leadership in their markets. VDV provides our employees with a professional working environment that foster creativity, pride, personal growth and reward.

VDV MEDIA CORP. PROFILE

VDV MEDIA CORP. is a Digital Wireless Telecommunications engineering company with a focus on design and manufactured RF communication system, custom system integration of video, data, and voice network. VDV is a Texas Corporation; started in 1999 and incorporated in 2000 VDV currently has 24 engineers and personnel on their staff. VDV Media Corp has 3 office locations:

VDV Media Corp.

Headquarter: Worldwide headquarters for Administration, Sales, Service and Engineering.

17736 Preston Rd Suite 250
Dallas, TX 75252
USA

Further information about VDV can be obtained through its web site at www.vdvmedia.com or directly at 1-972-248-4142.

Contact Person: Stephen Hansen, VP Sales and Marketing

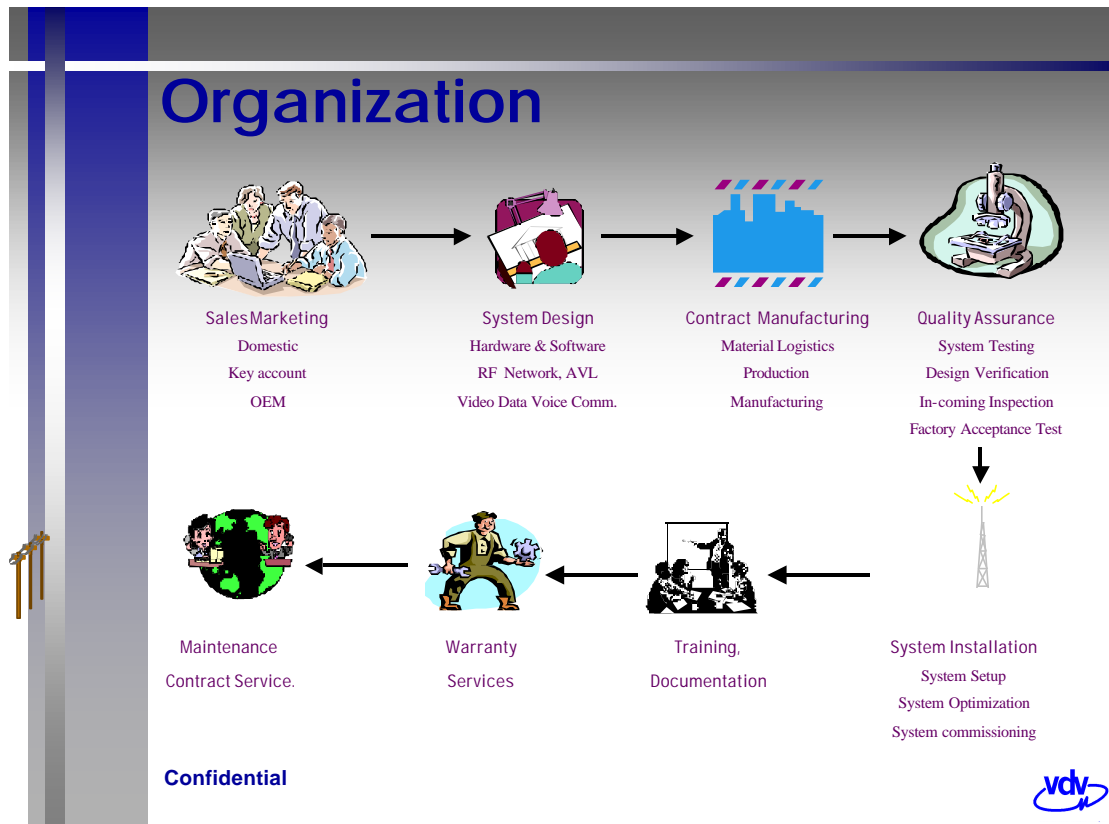
International Offices:

South America Office: Latin American Sales and Technical Support office.

R Moroni 1299/806
99010-031 Passo Fundo –RS
Brasil
Contact: Lajos Sebescen, Managing Director

Asia Office: Sales office for the Asia Region and Engineering.

87 Nguyen Duc Can Rd
Hanoi, Vietnam
Contact: Dr. Trung Q Nguyen, Managing Director



MISSION STATEMENT

VDV Media Corporation's mission is to be a market driven Technology Company with focus on high quality and first class customer service. It is committed to building and managing its business by developing products around our core technology expertise: Digital Communication, Connectivity and Interoperability. It will continue to invest in new technologies, and maintain leadership in their markets. VDV plans to continue is development in new technologies by developing new products and through continuing to seek Consulting Engineering products that are synergetic with our exiting technologies. VDV provides our employees with a professional working environment that foster creativity, pride, personal growth and reward.

ENGINEERING AND CONSULTANT SERVICE:

Beside development of its product line, VDV Media Corp. offers engineering services. Our main focus is on products and solutions that are consistent with our core expertise and direction. VDV believes that by managing its engineering staff in a 2/3 VDV products and 1/3 consulting engineering projects, it will provide two benefits 1) It will provide a smooth work flow for the engineering teams and 2) VDV's engineering team will become trained and experienced in the latest technologies by choosing projects that are consistent with its primary focus, connectivity and interoperability. VDV Media provides wireless industry with custom applications to meet the needs for cost effective communication solutions. From small to large projects, VDV Media is dedicated to working with

VDV Media Corp.

companies that can benefit from end-to-end engineering services (hardware, software), professional wireless communication systems and networking products.

Please [email](#) us to see how we can provide a customized solution to meet your needs.

Custom Product Development Services

VDV Media offers a variety of unique technologies available to customers including:

- Multi-Protocol Digital Voice/Data Communications
 - Man Machine Interface
 - Call and Signal Processing Engine
 - Protocol Stack
- RF Design: (VHF to 2.4GHz)
 - Mobile, Portable Radios
 - Base Station, Repeater system
- Networking, Digital switching system.
- Telecommunications
- GPS
- Antenna Systems
- Feasibility Studies

M/A-COM Ericson EDACS System:

VDV Media is a M/A COM Tyco Authorized Dealer representative for Asia region: **EDACS (Enhanced Digital Access Communications System)** is a high-performance, feature rich, group-oriented critical radio communications system available in VHF, UHF, 800 and 900 MHz frequency bands. With its unique architecture that ensures continued uninterrupted operation, EDACS is recognized as a reliable, fault tolerant, trunked two-way radio communications system. To provide flexible and efficient wide-area network operations, EDACS is offered in multi-site, simulcast, and combined configurations, and is also capable of carrying voice and data on a single system. ProVoice™, digital technology, combines the proven functionality and reliability of EDACS with state-of-the-art voice coding techniques to provide the best possible audio quality and security in two-way radio systems.

OFFICERS:

Cap Van Nguyen, CEO, President.






BSEE University of Tenn. 1980, MSEE University of Houston 1984. More than 20 years experience in communication and wireless system engineering. Cap manages VDV Media's resources and positioning, including strategic direction and product development. Areas of responsibility include software, hardware, firmware and the development of custom solutions for our large corporate and service provider customers. Under Cap's leadership, a series of successful releases of VDV's voice data communication network system brought to a good position in its markets. Cap led the development of a voice data network trunking product line including switching site controller, repeater, and subscribers handsets.

Successfully commercialized LTR/ESAS network product line that resulted in multi-million revenues and deployed more than 2000 Trunking channels worldwide.

Implemented several network tracking projects in Texas and South America.

Currently, he leads the research and development group focus in multi-protocol Digital Communication System.

Cap is the holder of several US patents in Signal Processing and Communication Systems:

PAT. NO.		Title
1	<u>6,621,426</u> 	Method and apparatus for modulating a signal
2	<u>6,593,867</u> 	High performance bus interface
3	<u>6,462,679</u> 	Method and apparatus for modulating a signal
4	<u>5,557,606</u> 	Routing of voice communication at a cell site in a land mobile radio system
5	<u>4,914,289</u> 	Article inspection system for analyzing end and adjacent sides

Stephen Hansen: VP Sales and Marketing

At VDV Media, as VP Sales and Marketing, Steve will build the sales and marketing team and develop and implement National and International marketing launches for products developed by VDV Media. In addition, he will be responsible for development marketing and distribution agreements for products for the Land Mobile Radio industry.

Steve comes to VDV Media Corporation with over 25 years experience in the radio communications, telecom and computer industries. His most recent experience was as the co-founder of Broadband Gateways Incorporated (BGI), a Dallas Texas based company that developed unique VoDSL products for the major Telephone companies. During his tenure at Broadband BGI he had the duties of VP Sales & Marketing and VP Business Development. Prior to BGI he worked for Uniden America Corporation and AmeriCom Corporation where he head up sales and customer support for their work wide operations for the Land Mobile Radio Industry. Steve will also be responsible for the development of distribution contracts for products that are consistent with our core technology products. The contract negotiated was a contract for the distribution of M/A Com's LMR and EDACs products for the Asian Market.

Nick Avdonin: CTO; UC Berkley, 1978 BSEE.

Nick has 25 years of experience in software and hardware development for communications and computer equipment. Has successfully developed more than 12 products including handset, base stations and switching system.. Main interest and expertise are in communications software, hardware architecture and TDMA Tetra protocol.

Nick is responsible for the management, maintenance and development of VDV's core real-time wireless voice and data network and management software. In addition to his management responsibilities, Nick is involved in the actual design and implementation of many key features and subsystems of the software including real-time desktop clients and supervisory programs. Nick is also in charge of the product's system usability and user interface designs.

Nick has 25 years experience in professional software development with knowledge in the following software technologies: C/C++, Visual C++, Visual Basic, JAVA, PASCAL, FORTRAN, MFC, OWL, COM/DCOM, XML, SQL, Access, embedded real-time and Database system.

Nick has developed and responsible for software development of embedded-controller based navigational and sonar products for maritime application. These units used both LORAN radio and GPS satellite digital signal processors to provide navigators with position, bearing and course destination information.

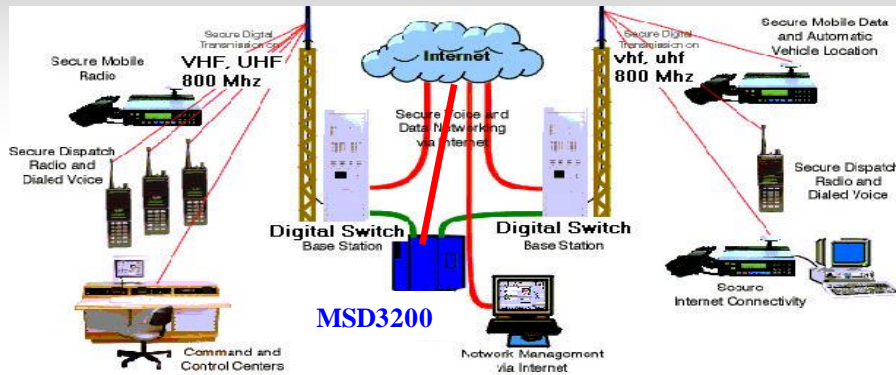
Nick is holder of several US patents in communications system:

1. 5,901,341 **T** Land mobile radio system having a cell in which mobile radios transmit and receive both data and audio
2. 5,613,201 **T** Automatic call destination/system selection in a radio communication system

ACCOMPLISHED PROJECT:

VDV MEDIA CORP. has successfully developed and is manufacturing key components for data and voice network using VHF/UHF/800MHz/2.4Ghz trunking network system that includes site controllers, repeaters, and subscriber handsets. VDV principals and staff have many years of combined experience in the two-way radio and system engineering fields. With a strong technical team a history of success in the RF communication industry, VDV has extensive experience with all facets of real-time data RF network, specializing in systems requiring custom design, system integration and complex control system. All software hardware development is done in-house. The company maintains a strong design department, designing all of our DSP, ASIC, FPGA, RF system, and custom software such as MMI, protocol stack. Following is a sample of some of our accomplished projects for both in-house and contract development:

VDV Digital Trunking Network System



Confidential



Multi-site Dispatch Network Hub and Digital Trunking Switch (DTRK):

The Multi-Site Dispatch (MSD) Hub provides the capability to send half-duplex group calls to groups of radios, which are distributed, across several sites within the network. MSD calls originating at a digital switch will be directed to the hub and on to the appropriate switches. MSD operation requires audio and data connections between the hub and all switches that are part of the MSD network. The MSD will support up to 32 sites. The DT-2000 Digital Trunk Switch can support 40 repeaters or radio interfaces at 900, 800Mhz, UHF, VHF high band land low band. The system is designed with the advanced DSP, TDM digital technology and it provides non-blocking switching, COR, PTT, RSSI capability. Each Radio Interface port can handle multiple radio groups to simplify system design and reduce cost. Automatic call setup and routing capability will allow easy to use and efficient communication network. Using its cross-banding technology, the DTRK Digital Trunk Switch can provide connectivity between different protocols and different frequencies making them part of the overall network.

The system was first introduced at D&G Communication in Houston TX with 1 MSD hub and 7 digital switch cell sites.

The system since then has now deployed worldwide with several large networks.

- The Coprel Authority service truck tracking system using GPS and our RF network infrastructure contract to design, awarded VDV Corporation a multi-year, phased in service for the Coprel three metropolitan and surrounding under serve areas. The system comprised 12 cell sites with microwave network link. Besides providing phone (voice) and data (fax) to home, the system also integrates a complete GPS tracking system. It provides vehicle tracking and asset management of a fleet of utility service trucks through real-time tracking using land mobile and portable

radios. This allows operator to see exactly where their service trucks and their equipment are located at any given time. With each push to talk or on timer the radio in vehicle will transmit latitude and longitude coordinate are sent back to base stations at Coprel main Dispatch Center. (Coprel is an urban/suburban Co-op provide utilities service such as power, wireless voice and data). These projects were accomplished on time, and within budget.

- A&B Communication in Corpus Christi has deployed an MSD network with 5 Digital switch cell sites.
- Texas Wide Area Voice Data Network: VDV Media Corp. has just completed a wireless voice and data network project in South Texas with Bosshard Communications. VDV has designed, manufactured, installed, setup and optimized a three-node radio network system that interconnects two-way radios.

UHF Repeater

The VDV Media 450 Series broadens the scope of trunking communications to give you innovative tools for staying in touch through wireless communication.

- 450-494Mhz, Wideband (44 MHz) operation without re-tuning
- Switch selectable RF preselector
- Switch selectable narrow/wideband capability.
- Built-in conventional/trunking capability

UHF Mobile/Portable Radio

Developed an UHF mobile and portable using an Enhanced Sub-Audible Signaling. VDV Media Corp in 2002 has released two new radios for the 400 MHz UHF subscriber base. These radios support the ESAS and LTR protocols for communications with Networked ESAS switches and standard LTR UHF repeater sites. There is the SMU250KTSE vehicle-installed, mobile radio; and the SPU554KTSE hand-held portable radio.

Digital 800Mhz Bases-station Transceiver System

The DBTS-800 Repeater is designed for high performance digital data and voice applications. The D-TRK™ Series offers cost savings by combining voice and data into one efficient and flexible solution.

Features:

- TDMA Digital Technology
- 4 voice/data channels per 25Khz bandwidth
- Frequency: 806-870 MHz
- Network up to 128 sites
- Frequency Control: 25Khz 12.5Khz step
- Frequency stability: <1.5ppm

TDMA Digital Mobile:

The MD1000 RF Data Radio Modem is a digital data radio using advanced TDMA technology couple with Digital Signal Processing containing all of the base-band signal processing and Medium Access Control (MAC) protocol functions required for a high performance Wireless Voice and Packet Data Modem. It interfaces with the host computer

such as a PDA or a Mobile Data Computer and the RF radio modulation, demodulation circuits to deliver reliable two-way transfer of the application data over a wireless link. The MD1000 assembles application data received from the host computer, adds forward error correction (FEC) and error detection (CRC) information, and interleaves the results for burst-error protection. After automatically adding symbol and frame sync code-words, the data packet is converted into filtered signals for modulating the radio transmitter.

2.4GHz High Gain Antenna and RF Transceiver:

Design and manufacture a 2.4GHz 21dB gain antenna using micro-strip technology. RF circuit design issues for the 2.4GHz frequency hopping spread-spectrum transceiver included filter design, impedance matching, receiver sensitivity and methodologies for avoiding LNA saturation when near another transceiver.

KEY PERSONNEL:

Mehul Patel: RF Lead Engineer

Experience:

DC/MA® (Digital Channel Multi-Carrier Architecture) is a proprietary 16 QAM air interface that enables eight voice channels to occupy a 20 kHz modulation bandwidth.

Design an RF Cartesian feedback loop to linearize the transmitter for a mobile unit.

Achieving 30 dB reduction in inter-modulation at 16 watts peak envelope.

Group lead in RF/analog development of 800MHz and 900MHz repeaters including transceiver requirements, frequency plan, receiver and transmitter level plans. Responsible for directing a team of RF engineers in the development of receivers, LNA, transmitters, synthesizers, reference oscillators, power supplies and all interface electronics associated with the DCMA digital mobile radio.

1996-1998: RF development Engineer for Seimen's Wireless

Development of CDMA subscribers in 800Mhz and 1900Mhz

RF Design Tools

- HP/EEsof, ADS, Eagle, Pspice, OrCad, LabVIEW
- Familiar with a large variety of RF and base-band test equipment

Ken Brown: Product Manager

Ken has more than 30 years experience in manufacturing experiences with GTE, MCI prior join VDV Media. Ken coordinates all tasks related to manufacturing, delivery and support of products. This includes responsibility for project management, system installation and technical support; the manufacturing group, including purchasing, materials management, production and quality assurance; and technical information management.

Lam Nguyen: Quality Assurance Engineer.

BS Computer Engineering. University of Texas at Arlington

MSCS: University of Texas at Dallas.

Lam manages all quality assurance processes for the software, hardware components that comprise VDV's Wireless Voice Data Network Systems. Lam has the responsibility of overseeing the development of test plans based on software hardware design documents, the designing of test cases to satisfactorily fulfill the test plan and the performance of the test plans. Additionally, Lam monitors the health trends of the project through the defect tracking system and creates weekly reports of project status. Hugh has more than 3 years of quality assurance experience with Alcatel Wireless Group prior joining VDV.

Ira Wiesenfeld, P. E., Sr. Technical Staff.

Southern Methodist University - (BSEE) 1972.

Motorola Executive Development Program MBA, 1978-1981; Registered Professional Engineer - Texas

FCC First Class Radiotelephone Operators License, 1966-1985. FCC General Radiotelephone, 1985-Present. BellCore Certified Radio Technician - Issued 1991.

Ira provides engineering consultant, Site survey, Regulation approval, RF design and analysis, installation, maintenance, and training, mobile telephone, paging, data, satellite, GPS system, Fiber Optic, and computer systems to a variety of customers throughout North America, South America, and the Caribbean. Customers include: wire line telephone companies, radio common carriers, cellular operators, local governments, police agencies, industrial plants, recording and motion picture studios and laboratories, schools and colleges, and equipment manufacturing companies

Responsible for IMTS, Common Carrier Paging, Trunking, and Microwave system installation, maintenance, repair, field engineering and design, evaluation and recommendation of engineering requirements.

Dr. William A. Van Dyke, Jr.

Education:

Doctor of Science, D.Sc., in Engineering, George Washington University, 1990.

Master of Engineering Administration, MEA, George Washington University, 1984.

Bachelor of Science, BS, Texas A&M Commerce (formerly East Texas State University), 1958.

Graduate Studies in Physics, Mechanical Engineering, Software Development, and Electronics (East Texas State University, Southern Methodist University, and Trinity College)(Also, Several Technical Training Courses)

Areas of Expertise:

Research and Development Software Modeling & Simulation, Computing Information Networking and Telecommunications, Technology Transfer, Systems Engineering, Engineering Management, Electronics and Mechanical Systems, National Security Technical Assessment of Classification/Declassification subject-matter expert, and Engineering Graduate School Advisor & Professorial Lecturer.

Description of Expertise:

Research and Development of energy systems and their components, computer software modeling and simulation systems. Manage university R&D fuel assistance program and engineering research grant program. Manage small business grant research projects for energy systems, software modeling, and space power systems.

Information Systems and Technology developed new architectures and software applications for advanced high-speed computing, networks and telecommunication systems. Managed design and development of information systems and networks for aircraft, naval ships, business, regional, and metropolitan area enterprise systems. Specified computing hardware and software systems, and interconnecting devices.

REFERENCES:

Second Generation Products:

Customer Name	Country	Contact name	Telephone Number	Network Sites
Bosshards Radio Services	USA	Steve Bosshards	1-254-773-1102 cell: 254-624-4230	3
Coprel Power Utility Authority	Brasil	Lajos Sebescen	55-54-9999-8379 55-54-312-6644	12
National Police Department	Viet Nam	Phung V. Ha	84-9-0346-3363 84-4-662-3166	2
D&G Communications	USA	Gary Gaudin		
PT. MAESA NUSATAMA. CGK Indonesia International Airport	Indonesia	Jeffrey Suryadinata	(62-21) 576-0857	3
A&B Communications	USA	Lionel Chatel	1-800-551-1320 cell: 361-220-0719	4

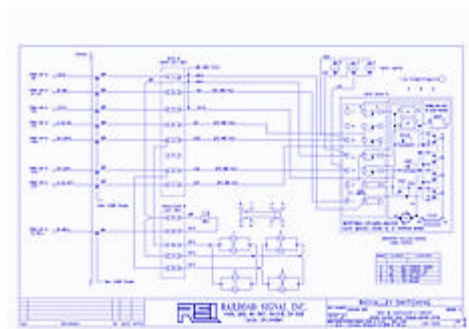
First Generation Products:

Customer Name	Country	Contact name	Network Sites
Lig Mobil	Brasil	Antonio	4
Range Communication	USA	Dave S.	6
Yellow River Authority	China		16
Angle Communications	USA	Randy A	5
Daqing Oil Field	China	Mr Qi	3
Jinlin Railway	China	Wang T.	4
MeyCom	Mexico	Patricio Ruiz	6
Cellwave	Guatemala	Eric P.	4
AirLink	Brasil	Enrique B.	6

Airlink	Argentina	Alex T.	24
AL Technologies	Morocco		1
China PTT	China	Jinchu	4
RedCom	Honduras	Julio S.	5
APW	USA	Allen P.	1

Engineering Design

System design is crucial to the safety, reliability, and longevity requirements of a communication system. VDV's staff has many years experience in the design of detailed circuit plans, technical specifications, and materials. Every system is custom designed for each customer's specific needs to ensure trouble-free operation. Technical support is provided from manufacturer through installation and is available to customers as a field service for maintenance and repair.



Manufacturing

Quality manufactured products are vital to the safety and operation of all communications systems. That is why VDV uses contract manufacturer with the most up-to-date manufacturing facilities available to produce it's high quality products.

Installation

Qualified installation is the primary concern of advanced technology process when installing a system. Once installed, every piece of equipment is field tested to ensure it is completely operational and safe (meetings or exceeding equipment requirements, and local code requirements).

Maintenance and Repair

Equipment's maintenance and repair capabilities for damages or defective components is unsurpassed in the industry. Every technician is trained and fully qualified to test, maintain, or repair any and all components and equipment.

CUSTOMER SUPPORT AND TRAINING:

VDV offers introductory and advanced training on most products. Introductory courses consist of distinct units pertaining either to machine operation and preventive maintenance or machine operation and programming. An introductory programming course teaches students how to create, edit, and setup programs; an introductory maintenance course teaches students how to perform preventive maintenance tasks as defined in The equipment's maintenance manual.

Advanced Product Course: Advanced programming courses address advanced topics for the seasoned programmer, while advanced maintenance training courses cover advanced topics relating to mechanical, electrical maintenance, program setup and troubleshooting. These advanced courses integrate the ability to read and interpret diagnostic readouts, electrical or mechanical schematics, or prints with advanced maintenance skills.

Through our Advanced Workshop Training Series, VDV offers advanced training courses on our products at your locations or at VDV Media Training Center in Dallas, USA for technicians or engineers, the training provides critical information needed to implement new technologies into real environment. These workshops leverage the knowledge and experience of our experts from a variety of disciplines, as well as the efforts of VDV-led research and studying emerging technologies



Following an advanced training workshop, students will be prepared to support new equipment introduction and improve the performance.