

RESUME

John (Jack) S. Williams Senior Design Engineer

RELEVANT PROJECTS

General Motors Corporation
Educational Facilities
Rome Intelligence & Reconnaissance
Laboratory

Knowledgeable senior Telecommunications and TV systems designer with many years of experience in the Physical Telecommunications Industry as a design engineer and manager. Deeply involved with data transmission via RF Frequencies and Fiber/UTP infrastructure designs since its inception providing a plethora of diverse and unique system designs that span the telecommunications spectrum from initial planning through documentation and construction. Proven ability to coordinate with others to achieve necessary goals resulting in countless projects with satisfied customers.

YEARS OF EXPERIENCE

Forty Three

Office / Research and Development Labs

PROFESSIONAL SOCIETIES

BICSI Telecommunications Association

General Project Responsibilities

Design and engineered new network physical Fiber/UTP infrastructure for administration and Lab areas. Design included but not limited to network cabinet elevations, electronics, power requirements, equipment placement cable tray layout, data, voice locations, fiber optic cable sizing and routing.

EDUCATION

ABF Design and Estimating,
- Sumitomo Electric
ABF Fiber Installation Training
- Sumitomo Electric
AT&T Systemax Certification,
- AT&T
Northern Telecom Integrated Building
Distribution Network Certification,
- Northern Telecom

General Motors Corporation. – Asset Management & Treasury Office New York, NY

Completed survey of all physical communications and facilities for Computer Room and four telecommunications closets. Designed and engineered Network Upgrade included new switches, new wireless, rearrangement of existing equipment and cabinets/racks, new overhead wire management, new UPS electrical panels for new overhead electrical service.

General Motors Corporation. – Training Center Tarrytown, NY

Designed and engineered new network for 80 users in 8 Training Classrooms

General Motors Corporation. – Training Center Tarrytown, NY

Designed and engineered new data/voice network for 73 users including new Computer Room and new underground telephone feed from street.

General Motors Corporation. – Powertrain Hybrid Electric Vehicle Design Castleton, IN

Designed and engineered data network upgrade for one building and new data/voice network expansion to two new buildings including diverse underground campus fiber and voice cabling.

General Motors Corporation. – Asset Management & Treasury Office New York, NY

Designed and engineered completely new data and VOIP network with new Computer Room and three closets for 300 users/2900 outlets on four floors of vertical high-rise building. Includes wireless, Satellite TV, Security, and new system-wide UPS.

General Project Responsibilities

Design and engineered new network physical Fiber/UTP infrastructure for administration and Lab areas where Broadcast Video design for ABF or conventional fiber/coaxial cable infrastructures integrated with existing Broadband and/or Satellite/Off-Air TV Distribution Systems were implemented.

General Motors Corporation – Warren Tech Center R&D Bldg.
Warren, MI

General Motors Corporation – Warren Tech Center VEC Podium Bldg.
Warren, MI

General Motors Corporation – Warren Tech Center VEC Tower Bldg.
Warren, MI

General Motors Corporation – Warren Tech Center Cadillac Bldg.
Warren, MI

General Motors Corporation – Warren Tech Center Design Center Bldg.
Warren, MI

General Motors Corporation – Warren Tech Center GSB1 Bldg.
Warren, MI

General Motors Corporation – Warren Tech Center GSB2 Bldg.
Warren, MI

General Motors Corporation – Warren Tech Center Manufacturing A Bldg.
Warren, MI

General Motors Corporation – Warren Tech Center Manufacturing B Bldg.
Warren, MI

General Motors Corporation – Warren Tech Center Manufacturing C Bldg.
Warren, MI

General Motors Corporation – Warren Tech Center Engineering Bldg.
Warren, MI

General Motors Corporation – North American Headquarters.
Detroit, MI

General Motors Corporation – Pontiac Engine Engineering Bldg.
Pontiac, MI

General Motors Corporation – MPG Vehicle Performance Integration Center Building 104.
Milford, MI

General Motors Corporation – TPC North Building.
Pontiac, MI

General Motors Corporation – Arizona Proving Grounds.
Mesa, AZ

Ford Motor Company – Ford R&E Center Campus.
Dearborn, MI

Ford Motor Company – Ford Facilities-Broadband System designs for.
Various Locations within the United States and Mexico

Utility Monitoring Systems

General Project Responsibilities

Design and engineered new network physical Fiber/UTP infrastructure for administration and Lab facilities where Utility Monitoring System site surveys and designs were successfully implemented or are in the process implementation.

General Motors Corporation – Warren Tech Center.

Mesa, AZ

General Motors Corporation – Arizona Proving Grounds.

Mesa, AZ

General Motors Corporation – Milford Proving Grounds.

Milford, MI

General Motors Corporation – SPO World Headquarters.

Grand Blanc, MI

Educational facilities

General Project Responsibilities

Design and engineered educational facilities where TV Distribution System, Access Control System or system extension designs have been developed for coaxial cable infrastructures with stand-alone, Satellite, Off-Air TV, Cable TV Headends were successfully completed.

University of Michigan – Perry & LSA Buildings

Ann Arbor, MI

University of Michigan – CCRB, Public Health I, Public Health II, Weill Hall Buildings

Ann Arbor, MI

John Hopkins University – Campus Video Conferencing

Baltimore, MD

Ellsworth School District – Hancock County Tech Center

Ellsworth, ME

Robeson Community College – Campus Video Conferencing

Lumberton, NC

University of Vermont – Campus Video Conferencing

Burlington, VT

Orland Consolidated Schools – Bucksport High School

Bucksport, ME

Wayne State University – Undergrad Housing North

Detroit, MI

Penquis Consolidated Schools – Penquis High School

Milo, ME

Schoolcraft College – old Waterman Building

Livonia, MI

Schoolcraft College – New Waterman Building

Livonia, MI

Wayne State University – Undergrad Housing South

Detroit, MI

Oakland County Schools – Oakland County Schools Conference Center

Farmington Hills, MI

Irving Consolidated Schools – Irving Schools 10 Buildings

Irving, TX

University of Michigan – Hospital

Ann Arbor, MI

University of Maryland – Board Room, LaPlata, Leonardtown and Prince Frederick Conference Rooms

College Park, MD

Anne Arundel Community College – Conference room

Arnold, MD

New York City – ARC Board Room

New York, NY

Beaumont Hospital – Troy East Ambulatory Care Center

Troy, MI

Walled Lake Consolidated Schools – Walled Lake Northern High School

Commerce Township, MI

Manufacturing

General Project Responsibilities

Design and engineered new network physical Fiber/UTP infrastructure for administration and Lab areas where Fiber/UTP Infrastructure survey were conducted and/or Fiber/UTP infrastructure upgrade design and drawings were developed.

General Motors Corporation – SPO Bulk Center

Saint Louis, MO

General Motors Corporation – SGMW Engine

Liu Zhou, China

General Motors Corporation – Martinsburg Plant 51

Martinsburg, WV

General Motors Corporation – St. Catharine’s Engine Plant

Saint Catharines, ON

General Motors Corporation – Tonawanda Warehouse HVV6

Tonawanda, NY

General Motors Corporation – St. Catharine’s Component Plant

Saint Catharines, ON

General Motors Corporation – Lansing Regional Stamping
Lansing, MI

General Motors Corporation – Lansing Regional Stamping
Lansing, MI

Manufacturing – Broadcast Video

General Project Responsibilities

Design and engineered facilities where Broadcast Video design for ABF or conventional fiber/coaxial cable infrastructures integrated with existing Broadband and/or Satellite/Off-Air TV Distribution Systems were successfully completed or are in process.

General Motors Corporation – Flint Engine South
Flint, MI

General Motors Corporation – Fairfax Assembly Plant
Fairfax, KS

General Motors Corporation – Lords Town New Paint Plant/CUC Building
Lords Town, OH

General Motors Corporation – Shreveport Assembly Plant
Shreveport, LA

General Motors Corporation – Tonawanda Plant 1
Tonawanda, NY

General Motors Corporation – Oshawa New Paint Plant
Oshawa, ON

General Motors Corporation – Lansing Regional Stamping
Lansing, MI

General Motors Corporation – Lansing Grand River Assembly
Lansing, MI

General Motors Corporation – Tonawanda I4/I5 Engine Plant
Tonawanda, NY

General Motors Corporation – Oklahoma City Truck Assembly
Oklahoma City, OK

General Motors Corporation – Shreveport General Assembly/Body Shop
Shreveport, LA

Chrysler LLC - Windsor Assembly
Windsor, ON

Sandoz Pharmaceuticals – New Jersey Campus
Princeton, NJ

ChicagoLand Speedway – ChicagoLand Raceway
Joliet, IL

Manufacturing – Utility Monitoring Systems

General Project Responsibilities

Design and engineered GM manufacturing facilities where Utility Monitoring System site surveys and designs were successfully completed

General Motors Corporation – Indianapolis MFD

Indianapolis, IN

General Motors Corporation – Fredericksburg

Fredericksburg, VA

General Motors Corporation – Baltimore

Baltimore, MD

General Motors Corporation – Saginaw

Saginaw, MI

General Motors Corporation – Mansfield Metal Fabrication

Mansfield, OH

General Motors Corporation – Shreveport Assembly Plant

Shreveport, LA

General Motors Corporation – Bedford Casting Plant

Bedford, IN

General Motors Corporation – Arlington Truck Assembly Plant

Arlington, TX

General Motors Corporation – Defiance Assembly Plant

Defiance, OH

General Motors Corporation – Grand Blanc MFD

Grand Blanc, MI

General Motors Corporation – Flint RFE

Flint, MI

General Motors Corporation – Toledo

Toledo, OH

General Motors Corporation – Marion Metal Fabrication Plant

Marion, IN

General Motors Corporation – Tonawanda Engine Plant

Tonawanda, NY

General Motors Corporation – Oklahoma City Assembly Plant

Oklahoma City, Ok

General Motors Corporation – Wentzville Truck Plant

Wentzville, MO

General Motors Corporation – Spring Hill Assembly Plant

Spring Hill, TN

Federal Government

Military-Rome Intelligence & Reconnaissance Laboratory

Provided status reports for voice/data physical infrastructure implementation. Developed dual-cable Campus Broadband System distribution extension design and testing documentation to new building. Provided as-built drawings and test documentation for Broadband System extension.

Airport Facilities: The following is a list of the Airports where COAX Infrastructure surveys were conducted and COAX infrastructure upgrade design and drawings were developed:

Detroit Metro Airport-Campus backbone coax design and building coax designs for Security Card Access System in Smith, Northwest, & International Terminals plus Power House and Central Service Buildings with Status Monitoring

Chicago O'Hare International Terminal-Building coax design for a 5-trunk system (2 Broadband, 2 TV Distribution, & 1 Security Camera Collection) with Status Monitoring.

Professional Experience

Diversified Design Services (Engineering Group-3 years)

Senior Information Systems Engineer

Provided estimating, quoting, design, and as-built documentation for ABF/UTP or conventional fiber/UTP cable infrastructures. Provided estimating, quoting, design, testing requirements, and as-built documentation for Broadband Systems, TV Headends, and TV Distribution Systems. Broadband and TV Systems were often integrated with existing Broadband, CATV feeds, Satellite feeds, and Off-Air TV reception.

Motor City Electric Technologies (Engineering Group-2 years)

Senior Information Systems Engineer-Provided estimating, quoting, design, and as-built documentation for ABF/UTP or conventional fiber/UTP cable infrastructures. Provided estimating, quoting, design, testing requirements, and as-built documentation for Broadband Systems, TV Headends, and TV Distribution Systems. Broadband and TV Systems were often integrated with existing Broadband, CATV feeds, Satellite feeds, and Off-Air TV reception.

Clover Technologies, Inc. (Engineering Group-18 years)

Lead Engineer

Developed a complex Headend and TV Distribution System. Directed the design activities of a 3-man design team to successfully develop fiber/UTP infrastructure for voice/data designs and TV Control System at Ford Field Stadium.

Broadcast Video Engineer

Design for ABF or conventional fiber/coaxial cable infrastructures integrated with existing Broadband and/or Satellite/Off-Air TV Distribution Systems were successfully completed.

Senior Information Systems Engineer-Provided estimating, quoting, design, and as-built documentation for ABF/UTP or conventional fiber/UTP cable infrastructures. Provided estimating, quoting, design, testing requirements, and as-built documentation for Broadband Systems, TV Headends, and TV Distribution Systems. Broadband and TV Systems were often integrated with existing Broadband, CATV feeds, Satellite feeds, and Off-Air TV reception.

Senior Broadband Systems Engineer

Provided estimating, quoting, designs, testing requirements, as-built documentation, and technical support to Broadband technicians for Broadband Systems. Also administered the project number assignment system for all company projects. Supervised a three man Broadband design team.

General Instrument Corporation (Engineering Group-20 years)

Broadband Systems Engineer-Provided estimating, quoting, designs, testing requirements, and technical support to Sales Representatives, Broadband technicians, and Distributors for Broadband Systems.

Professional Registrations

BICSI Telecommunications Association

Served in the GM Broadband MAP/TOP committee as a member of the Design Group in developing the MAP/TOP Specification in the mid-'80's