



JOHN PALAHNUK

Technology Executive
johnpalahnuk.com

3650 Lone Oak Court Prescott, Arizona USA 86305
jpalahnuk@gmail.com
661-219-5590

The following is a partial list of programs and achievements spanning over the last 30 years. Direct experience includes all phases of business growth and program development. This summary encompasses executive, middle and project level management, as well as personal execution of engineering designs, team development and driving growth for the global organization.

PROGRAMS, ACHIEVEMENTS

MIL/Aero

AIM9X: Sidewinder Missile

The AIM-9X Block II is the most advanced short-range air-air missile in the U.S. military inventory.

Negotiated several multi-year and on-going contracts for all AIM9X mid-body hanger assembly Block versions.

Executed the design and collaboration of the advanced modular mid-body hanger assembly for the AIM9X Block I, Block II and Block II+ missiles. Developed the manufacturing processes for the production cells, electronics, molding, final assembly, inspection, test, and packaging. Assured the successful transition from prototypes, low quantity LQ, PAR, PWAR, FAI, and final production approval for high quantity follow-on contracts.



Space

Semi-con

Robotics

MIL/Aero

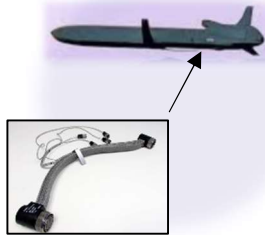
LRSO: AGM-181 Long Range Stand Off Weapon

The LRSO is a nuclear-armed air-launched cruise missile.

Successfully negotiated the development, LQ and multi-year on-going contracts for the LRSO programs.

Executed the design and collaboration of twelve interconnect solutions for the LRSO. Developed the manufacturing processes for the production cells, molding, final assembly, inspection, and test.

Assured the successful transition from prototypes, low quantity LQ, PAR, PWAR, FAI, and final production approval.



Space

Semi-con

Robotics

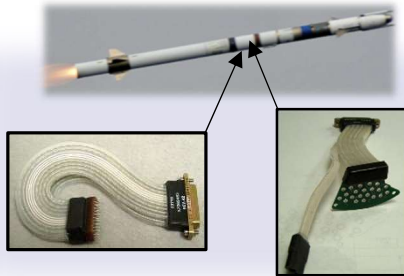
MIL/Aero

RAM: Rolling Airframe Missile

The RAM is a small, lightweight, infrared homing surface-to-air missile and defense system.

Successfully negotiated multi-year firm-fixed contracts and designed two high-flex, high-performance, EMI/signal hardened cable assemblies.

Executed the needed activities for the engineering, manufacture and testing for the RAM product lines.



Space

Semi-con

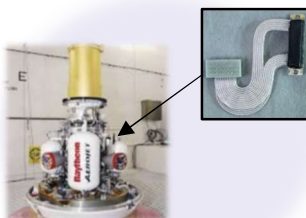
Robotics

MIL/Aero

EKV: Exo-atmospheric Kill Vehicle

The EKV is a U.S. Ground-Based Midcourse defense interceptor, part of the larger National Missile Space Defense system.

Led the design team for the signal interconnects and 1×10^{-6} hermetically sealed electromechanical interfaces for fourteen guidance interconnect assemblies. Created and executed the multi-year program for the engineering, manufacture, and testing of the EKV product line.



Space

Semi-con

Robotics



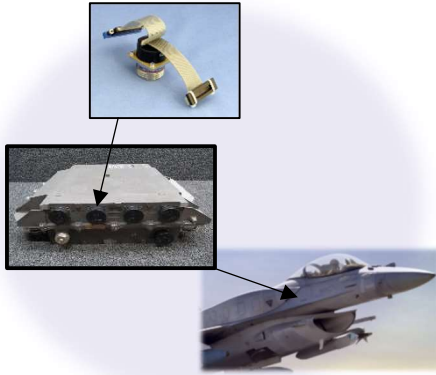
MIL/Aero

EEC: Electronic Engine and Fuel Controllers

Space

Semi-con

Robotics



The EEC's are portable fuel management systems that control engine operation, provide propulsion and detect, announce, and mitigate failures.

Negotiated LTA's with the customer. Streamlined engineering, manufacture and testing processes for the EEC product lines.

Established the UTAS SDQR and on-site e-silk approval program. Served as the certified UTAS on-site DQR, establishing the QA program for full production qualification and maturity.

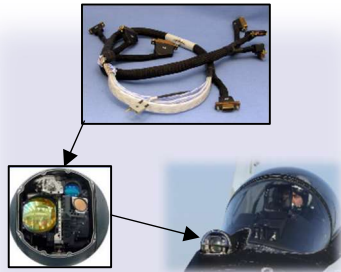
MIL/Aero

IRST: Advanced Targeting & Imaging Pod

Space

Semi-con

Robotics



The IRST is an infrared laser targeting pod, using rangefinders to provide full fire-control solutions for cannon fire or launching missiles.

Negotiated R&D and production contracts. Led program and interconnect design teams for the IRST and other infrared/optical pods and gimbals.

MIL/Aero

Other Programs: TOW, HAWC, Hellfire, Patriot, Targeting Pods, Gimbals, Guidance & Telemetry Systems, and more.

Space

Semi-con

Robotics



Hypersonic air-launched cruise missile, HAWC

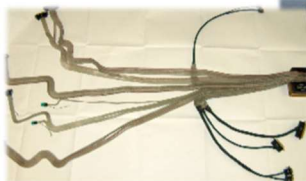


Tube-Launched, Optical tracked, Wireless guided missiles, TOW



Anti-armor, air-to-ground precision missile, Hellfire

Advanced Targeting & imaging Pod, LITENING



Surface-to-air missile (SAM) missile system, Patriot



JOHN PALAHNUK

PROGRAMS, ACHIEVEMENTS

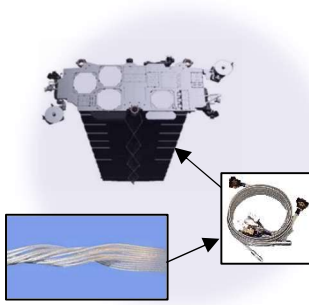
MIL/Aero

Space

Semi-con

Robotics

Starlink Satellites



Starlink satellites are space-based phased-array broadband transceivers using argon-fueled thrusters for on-orbit maneuvering.

Designed the cable interconnect solutions for the deployable solar array. Led the engineering, manufacture, tooling, and QA teams.

There are over 6,000 Starlink satellites currently in orbit.

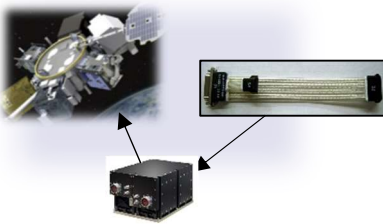
MIL/Aero

Space

Semi-con

Robotics

HGR: Resonator Gyro



Spacecraft orbital and interplanetary sensor pointing/stabilization and attitude control IMU.

Negotiated R&D, upgrade, and production contracts for the high-flex interconnect space assemblies. Led the engineering, manufacturing, and QA teams for these LEO, GEO, and deep space programs.

Collaborated and establish technical criteria and procedures for radiographic/x-ray of electronic terminations and requirements for space Gyros and other related space applications.

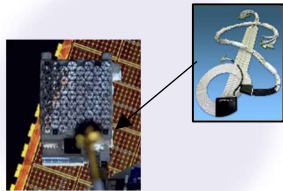
MIL/Aero

Space

Semi-con

Robotics

NICER: Neutron Star Interior Composition Explorer



A directional NASA telescope on the International Space Station.

Designed the cable interconnect solutions for the dynamic star deployment, tracking, scanning and gimbaling.

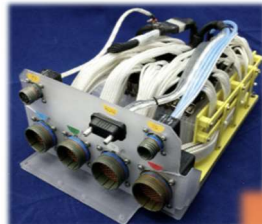
MIL/Aero

Space

Semi-con

Robotics

Other Programs: Space, LEO, GEO, Exo-Atmospheric, Hypersonic, etc.



Hardened EMI/EMF Enclosures



Electronic and power enclosures systems and interconnects for spacecraft



Hermetically sealed custom electrical connectors.





JOHN PALAHNUK

PROGRAMS, ACHIEVEMENTS

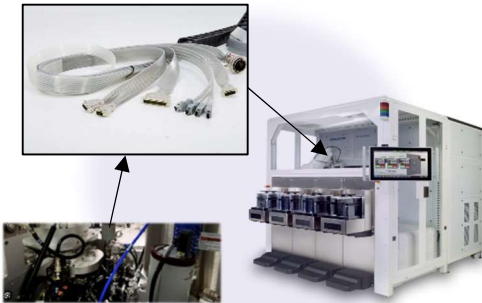
MIL/Aero

Space

Semi-con

Robotics

Automated Wafer Processing Tools



Automated wafer processing systems manage various manufacturing processes for silicon wafers.

Designed automated wafer etchers, handlers, wafer reclaim stations and other capital equipment for the semi-conductor industry. Design work included robotic, electrical, electronics, mechanical, chemical and safety systems as well as robotics, sensing, and dynamic cable carriers.

Led the engineering, manufacture, tooling and QA/test teams.

MIL/Aero

Space

Semi-con

Robotics

FOUP: Front Loaders



Automated front loaders are an automated wafer loading system utilized to automatically load and unload wafers from FOUPS to on-board process chambers and back again.

Designed and integrated the electrical, mechanical and software subsystems and the high-flex cable solutions for various front loaders.

Set up the engineering, integration teams and the manufacturing and QA processes with department heads.

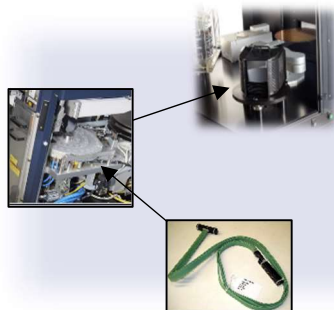
MIL/Aero

Space

Semi-con

Robotics

WHR: Wafer Handler Robots



A robotic wafer handler is an automated system that manipulates silicon wafers during the semiconductor manufacturing.

Designed and integrated the electrical, mechanical and software subsystems and the high-flex cable solutions for the wafer handlers.

Incorporated WHR's into the automated wafer processing systems and other silicon wafer equipment requiring automated loading and unloading.

Other Automated Semi-Conductor Wafer and Chemical Processing Tools and Equipment.

MIL/Aero

Space

Semi-con

Robotics



Automated Wafer Reclaim Stations

Automated chemical delivery systems and IPA dispensing.



Automated Vertical Furnace Quartzware Cleaning Systems





JOHN PALAHNUK

PROGRAMS, ACHIEVEMENTS

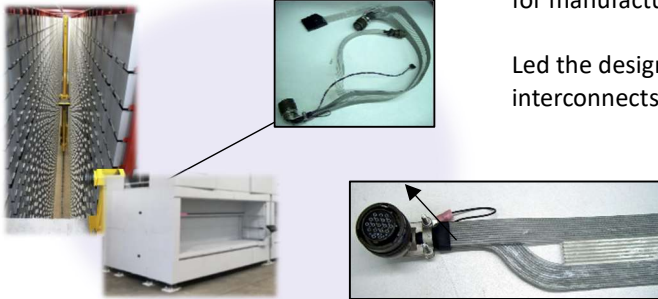
MIL/Aero

Space

Semi-con

Robotics

VLM: Vertical Lift Modules



VLM's are automated storage and part retrieval systems for manufacturing, retail distribution and warehouses.

Led the design team for the cable assemblies and interconnects for the lift modules.

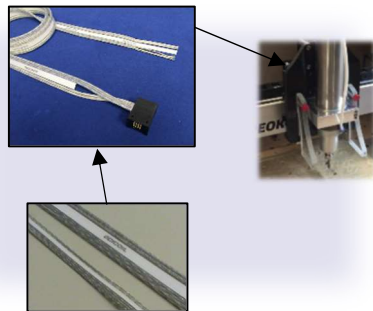
MIL/Aero

Space

Semi-con

Robotics

ATC: Automated Tool Changers



ATC's are used in CNC and other automated equipment to improve versatility in production and the tool carrying capacity of the system.

Designed automated tool changers and the high-flex flat cable interconnects with StripMount for the electrical, pneumatic, and sensing systems.

Applied for and received a US patent for the StripMount support system, and set up the engineering, manufacturing, and QA processes with department heads.

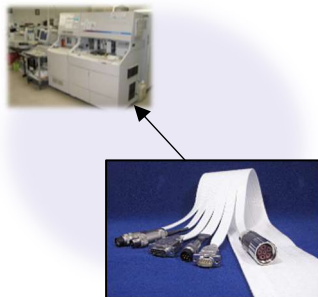
MIL/Aero

Space

Semi-con

Robotics

Medical: Automated Sample Testing



Automated sample testing tools analyze the sampling of cells contained on a monolayer of well-stained, well-preserved cells.

Negotiated R&D, upgrade, and production contracts for the high-flex interconnect space assemblies.

Led the engineering, manufacturing, test and QA teams for these medical programs.

MIL/Aero

Space

Semi-con

Robotics

Other Automated Tools, Robots and Equipment.

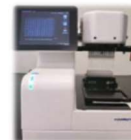


Automated Blood and Virus Sample Testing Stations

Automated Covid Sample Testing



Automated Benchtop Analyzers





JOHN PALAHNUK

PROGRAMS, ACHIEVEMENTS

US PATENTS: Multiple patents are for specialized extrusion processes, fastener features and integrated self-supporting systems.

Search www.uspto.gov for: CICOIL or John Palahnuik.

LANGUAGES: Proficient in English and Spanish.