

COMPANY OVERVIEW

Sentury Systems designs, fabricates and programs hardware and software that keeps working: off the grid, off the network, and long after the next upgrade cycle. We bring in-house fabrication, electrical and off-grid power systems, embedded and RF engineering, edge AI and program delivery together under one standard: build it so it lasts.

SECTORS Defense & government · Public safety & emergency management · Critical infrastructure & utilities · Automotive & powersports · Remote operations & expeditions

NAICS 541330 Engineering Services · 541715 R&D in the Physical & Engineering Sciences · 332710 Machine Shops · 541511 Custom Computer Programming Services · 334220 Wireless Communications Equipment Manufacturing

THE CENTURY STANDARD

Design for failure.

Every critical function has a backup.

Works offline.

No subscription, no cloud dependency, no remote off-switch.

Repairable by design.

Standard parts, accessible assemblies, usable documentation.

Yours to own.

Your hardware, your data, your source. No lock-in.

Built for the field.

Heat, cold, vibration and rough handling.

CORE COMPETENCIES

CAP - 01

Precision Fabrication & Rapid Prototyping

- CNC machining in steel and aluminum
- Additive manufacturing in advanced polymer composites on purpose-built printers
- Structural welding, fiberglass and epoxy composites
- Failure analysis and redesign of production components

CAP - 02

Electrical Systems & Circuit Design

- Schematic design, circuit analysis and fault isolation
- Low-voltage and multi-tier DC power architectures, inverters and charging circuits
- Conductor, fuse and breaker sizing for load, run length and safety
- Wire harness fabrication with precision crimping, soldering and weatherproof terminations
- Sensor, actuator and control-electronics integration

CAP - 03

Off-Grid Power & Life Support

- Custom engineered power systems with programmable battery and energy management
- Multi-array solar installations with redundant infrastructure
- Field water purification: multi-stage filtration and UV-C sterilization
- Insulation and thermal design for small, mobile structures

CAP - 04

Embedded Systems & Firmware Analysis

- Hardware and firmware analysis and documentation
- Vehicle networks and diagnostic protocols (CAN, UDS, OBD-II)
- Engine control calibration and logic mapping
- Microcontroller design and integration

CAP - 05

RF & Secure Communications

- Digital voice and data piggybacking on legacy infrastructure
- End-to-end encrypted communication services
- Software-defined radio monitoring, scanning and emergency-alert decoding
- Wireless signal awareness, survey, and mapping

CAP - 06

Edge AI & Offline Software

- AI systems tailored to run on limited local compute
- Custom model training for narrow, dependable task execution
- Integration of AI command software with radios, vehicles, sensors, maps & more
- Multi-device networks that share data without legacy network infrastructure

CAP - 07

Program Delivery

- Multi-million-dollar projects managed from conception to completion
- Permitting, inspections and quality closeout
- Coordination of specialized contractors across multiple concurrent projects
- Digital scheduling and reporting that keeps every stakeholder current

SELECTED WORK

● FIELDIED

Self-sustaining mobile habitat

A mobile living module with its own power, water and climate control, built from the frame up.

● DELIVERED

Field-failure redesign for electric off-road vehicles

Recurring wear failures traced; components redesigned and made in advanced polymer composites.

○ R&D

Digital radio on analog hardware

Digital voice and encrypted messaging for existing analog radios, via a companion device.

● PROTOTYPE, IN DAILY USE

Edge AI command platform

Self-contained AI on limited local compute, acting across radio, vehicle, mapping and alerting tools.