TALON's flexible design provides analysts with:

Consistent Interface

A familiar design with one interface means less training, faster adoption, and fewer mistakes

Scheduling Capabilities

Scheduling processes enable "lights-out" operations, improve operations by:

- *Automation* – Tasks run overnight without staff
- *Error Reduction* – Reduced manual inputs for fewer mistakes
- *Readiness* – Off shift execution of tasks means products are immediately ready for review and action
- *Efficiency* – Optimizes resources by running tasks during off hours
- *Scalability* – Handles increasing workloads without extra staffing
- *Reliability* – Ensures critical operations are completed on schedule

Status & Notification Capabilities

Operational status and notifications ensure situational awareness:

- *Operational Status* – Provides spacecraft, fleet and constellation statuses for quick diagnostics
- *System Status* – Notifies of system issues
- *Notifications* – Distributes errors and status

Mission Standardization and Configuration Management

Enables consistency, accuracy, and adaptability in managing a spacecraft, fleet, or constellation. Some benefits include:

- *Error Prevention and Reliability* – Ensures only approved, validated versions of software, models, and procedures are used
- *Faster Troubleshooting* – Makes diagnosing and resolving issues more focused due to comparisons against a known baseline
- *Adaptability and Future Proofing* – Enables controlled upgrades without disturbing ongoing operations
- *Compliance and Documentation* – Provides structured documentation of processes

Parallel Processing

Provides an environment which allows for faster processing and increases decision making speed

Quality Assurance

Input data, SOH, product generation, and user defined checks

User Management

TALON's flexible security allows for personnel roles, white/black-lists, and missions

Python Procedure Engine & API

All the power of Python with access to TALON's support libraries provide:

- *Flexible prototyping and development* – Customization of processes, a rapid development, and a rich ecosystem of both internal and external pre-built libraries
- *API Seamless Connectivity* – Provides integration capabilities with any python capable API which can include GOTS, COTS, and custom systems for added functionality and customization

TALON's Operational Heritage: TALON has been proven in real-life situations using current GOTS, and COTS astrodynamics tools:

- **Orbit Regimes –** Low Earth Orbit (LEO), Medium Erath Orbit (MEO), Geosynchronous Earth Orbit, Highly Elliptical Orbits but without limitations in processing all orbits
- **Tools** – NASA's General Mission Analysis Tool (GMAT), Ansys' System Tool Kit (STK) and Orbit Determination Tool Kit (ODTK)

TALON is a Cloud based Flight Dynamics tool designed to simplify operations for a single spacecraft, fleets, or constellations.

TALON provides operators, analysts, and management with a constantly increasing set of capabilities:

- **Orbit Determination** – Both batch and filter processing with/without covariance using a wide variety of tracking data.
- **Maneuver Planning and Coordination** – Maneuver version control for single and coupled maneuvers for both internally and externally generated plans.
- **Maneuver Calibration** – User tool to simplify the setup and execution of maneuver calibration.
- **Maneuver Reconstruction** – Telemetry processed into a maneuver for propagation, orbit determination, and/or calibration.
- **Product Generation** – Native COTS/GOTS tool formats, industry standards formats, and ability to create mission specific products using python.
- **Propagation** – Mission based requirement propagation accuracies with and without covariance.

For More TALON Information, Demonstrations, or Purchasing Details Please Contact:

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For Information about Omitron or Other Omitron Products visit our Website:

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Introducing

TALON

TACTICAL AUTOMATION FOR LARGE-SCALE ORBIT NAVIGATION

Streamline – Optimize – Automate

Reduce workforce costs, enhance repeatability and unlock unparalleled flexibility with intelligent automation.