SAM CAMO Modules Overview:

SAM CMMS offers a comprehensive suite of CAMO (Continuing Airworthiness Management Organization) modules designed to streamline aircraft management, maintenance planning, and regulatory compliance. Below is an expanded and detailed description of each CAMO module:

1. Aircraft Management

The **Aircraft Management** module serves as the core of SAM CMMS, providing a complete overview of each aircraft in your fleet. It offers seamless access to detailed information across related modules, including:

- **Aircraft Ownership and Usage:** Details of aircraft owners, operators, and user rights.
- **Component Tracking:** Overview of installed components and their statuses.
- **Service Information Compliance:** Real-time tracking of Airworthiness Directives (AD) and Service Bulletins (SB).
- **Defect Management:** Monitoring of open maintenance defects and deferred items (Hold Items).
- **Scheduled Maintenance:** Upcoming maintenance tasks linked to operational parameters.
- **Work Order Management:** Access and management of open work orders for maintenance execution.

This module ensures that CAMO staff always have a holistic view of each aircraft's airworthiness status, supporting efficient decision-making and operational readiness.

2. Component Management

The **Component Management** module provides full control over all routable components, whether:

- **Installed:** Onboard specific aircraft.
- **Available:** Ready for installation.
- **In Process:** Out for overhaul, repair, or inspection.
- Key features include:
- **Component Group Handling:** Manage and track component groups (assemblies consisting of two or more components functioning as a unit).
- **Lifecycle Tracking:** Monitor component history, including installation/removal records, repairs, and overhauls.
- **Compliance Assurance:** Ensure components meet applicable airworthiness standards before installation.

This module is essential for optimizing component utilization, managing stock levels, and reducing turnaround times.

3. Fleet Planning

The **Fleet Planning** module offers comprehensive insights into fleet-wide maintenance requirements by:

- **Predictive Maintenance Forecasting:** Analyzing future utilization based on flight hours, cycles, or calendar intervals.
- **Customizable Maintenance Windows:** Plan maintenance activities for customizable future periods (e.g., 30, 60, or 90 days).
- **Fleet-Wide Overview:** Visual dashboards displaying upcoming maintenance activities across the entire fleet.

This proactive planning approach helps reduce aircraft downtime and improve overall fleet availability.

4. Log & Production Recording

The **Log & Production Recording** module captures real-time operational data, including:

- **Flight Activity Updates:** Automated logging of flight hours, landings, and various cycle counts.
- **Decimal Hour Recording:** Supports recording aircraft production in decimal hours or hour-minute formats.
- **Maintenance Findings:** Report maintenance snags or discrepancies identified during operations.
- **Advanced Tracking:** Monitor specific operational parameters, such as sling operations and engine cycles.

Accurate operational data ensures maintenance schedules remain aligned with regulatory requirements and aircraft usage.

5. Maintenance Planning

The **Maintenance Planning** module facilitates efficient scheduling and follow-up of all required maintenance tasks, including:

- **Task Applicability Management:** Apply manufacturer-issued maintenance tasks to specific aircraft or components.
- **Automated Task Generation:** Automatically generate due tasks, deferred items, service information, and component maintenance requirements based on defined operational thresholds (hours, cycles, days).
- **Optimized Maintenance Execution:** Create detailed work orders that consolidate all necessary maintenance activities for streamlined execution.

This module ensures continuous compliance with OEM maintenance programs and regulatory standards.

6. Service Information Management

The **Service Information Management** module centralizes all regulatory and OEM-issued service information by:

- **AD and SB Search Capabilities:** Quickly search and identify applicable Airworthiness Directives (ADs) and Service Bulletins (SBs).
- **Digital Documentation:** Maintain a digital library of compliance documents, automatically linked to job cards during work order creation.
- **Regulatory Alignment:** Ensure real-time compliance with changing airworthiness requirements.

This module significantly reduces administrative workloads and minimizes the risk of missed compliance deadlines.

7. AMP (Aircraft Maintenance Program) Management

The **AMP Management** module simplifies the creation and revision of Aircraft Maintenance Programs by:

- **AMP Customization:** Select and tailor maintenance tasks specific to each aircraft.
- **Revision Control:** Utilize a built-in revision control system to track changes between OEM-issued Maintenance Planning Document (MPD) revisions.
- **Regulatory Approval Management:** Efficiently manage and switch between AMP revisions once approved by the relevant Civil Aviation Authority (CAA).

This module ensures that aircraft maintenance programs remain current and fully compliant with OEM and regulatory standards.

8. Model Tree Management

The **Model Tree Management** module allows for precise configuration control of aircraft models by:

- **Model Configuration:** Define aircraft models with permitted component configurations.
- **Position Control:** Ensure that only authorized components are fitted in designated positions.
- **Conformity Checks:** Automatically verify compliance during aircraft imports or regular operations, preventing configuration discrepancies.

This module ensures adherence to fleet configuration standards and supports accurate component traceability.

9. MEL (Minimum Equipment List) Management

The **MEL Management** module provides integrated control over deferred maintenance items and MEL-related airworthiness issues:

- **Seamless MEL Integration:** Import and manage the fleet's MEL list for quick reference and action.
- **Automated Compliance Tracking:** Automatic assignment of due dates based on MEL category requirements.
- **Airworthiness Control:** Ensures that deferred maintenance remains within permissible operational limits.

This module supports operational flexibility while ensuring regulatory compliance for MEL items.

10. Helicopter Penalty Management

Specifically designed for helicopter operators, this module automates the calculation of operational penalties associated with:

- **Sling Operations**
- **High-Wind Starts** (e.g., AW139)
- **External Cargo Pods** (e.g., H225)

All penalties are calculated automatically based on flight log data, ensuring accurate component tracking and operational cost management.

11. Reliability Reporting

The **Reliability Reporting** module empowers users to assess and enhance the reliability of aircraft and components by:

- **Customizable Analysis Methods:** Set up tailored analysis frameworks to evaluate component and fleet reliability.
- **Trend Analysis and Reporting:** Generate reports that highlight recurring issues, enabling proactive maintenance decisions.
- **Regulatory Compliance:** Ensure compliance with reliability programs required by aviation authorities.

This data-driven approach supports informed decision-making and continuous improvement in maintenance practices.

These CAMO modules collectively provide a robust, integrated solution for managing the continuing airworthiness of aircraft fleets, ensuring compliance, operational efficiency, and reduced downtime.

SAM MRO Modules Overview:

SAM CMMS offers a robust set of Maintenance, Repair, and Overhaul (MRO) modules designed to streamline workshop operations, enhance inventory control, and optimize resource utilization. The following expanded descriptions detail the key features and functionalities of each MRO module:

1. Work Order Management

The **Work Order** module is the core of SAM's MRO suite, providing comprehensive functionality for managing all maintenance activities both in-house and at external maintenance stations. Key features include:

- **Full System Integration:** Seamless updates between Work Orders, Aircraft, Components, Inventory, and Scheduled Maintenance modules.
- **Dynamic Task Management:** Work assigned but not completed within a work order is automatically transferred to the deferred items list for the relevant aircraft.
- **Real-Time Status Updates:** Monitor progress, add findings, and close tasks with immediate updates to aircraft and component records.
- **Multi-Job Support:** Manage complex maintenance events with multiple jobs and resource assignments within a single work order.

This module ensures streamlined maintenance operations, reducing aircraft downtime and enhancing operational efficiency.

2. Work Order Planning

The **Work Order Planning** module provides advanced scheduling capabilities through:

- **Gantt Chart Visualization:** A graphical timeline of all work orders and associated jobs, displaying progress through color-coded completion percentages.
- **Flexible Scheduling:** Easily adjust planned start dates and job durations to accommodate resource availability and shifting priorities.
- **Resource Optimization:** Assign and balance workloads across available personnel and equipment for maximum efficiency.

This visual and dynamic planning tool ensures optimal allocation of resources, helping maintenance organizations meet deadlines and operational commitments.

3. Inventory Management

The **Inventory Management** module delivers full control over parts and materials at a batch level. Key features include:

- **Comprehensive Parts Tracking:** Maintain complete history for each part, including invoice number, batch number, invoice date, and certification documents.
- **Batch-Level Management:** Ensure traceability of critical components, including expiration dates, warranty details, and compliance documentation.

- **Multi-Location Support:** Manage inventory across multiple warehouses and maintenance stations, with real-time availability updates.

This module supports efficient inventory utilization, reduces carrying costs, and ensures parts availability for scheduled and unscheduled maintenance.

4. Inquiry and Purchase Management

The **Inquiry and Purchase** module streamlines procurement processes by offering:

- **Full Procurement Lifecycle:** Handle inquiries, supplier quotations, purchase orders, and goods receipt documentation.
- **Re-Order Management:** Set minimum stock levels for automatic reorder suggestions.
- **Brokerage Functionality:** Act as a parts broker for external customers, ensuring the best pricing and delivery terms.
- **Supplier Performance Tracking:** Monitor supplier reliability and lead times for continuous procurement process improvement.

This module ensures timely parts procurement, supporting uninterrupted maintenance operations and optimized cost control.

5. Inventory Counting

The **Inventory Counting** module ensures inventory accuracy through controlled counting processes:

- **Flexible Counting Options:** Perform daily, weekly, or full stock counts as needed.
- **Transaction Locking:** All transactions involving counted parts are automatically blocked during the counting process to ensure data accuracy.
- **Accuracy Analysis:** Post-count accuracy calculations help identify discrepancies and improve future stock management processes.
- **Audit Compliance:** Maintain detailed records of stock count activities for internal and external audits.

This module supports precise inventory management, ensuring that parts availability data remains reliable and accurate.

6. Shipment Tracking

The **Shipment Tracking** module provides full visibility into the parts ordering and delivery process:

- **Order Status Monitoring:** Quickly answer questions like, “Has this part been ordered?” or “Has it arrived yet?”
- **Direct Part Allocation:** Assign received parts directly to specific work orders at the job level.
- **End-to-End Tracking:** Track shipments using carrier tracking numbers, with estimated delivery times based on historical data.

- **Inventory Integration:** Automatically update inventory levels upon receipt of goods.

This module reduces procurement-related downtime by ensuring full transparency throughout the parts supply chain.

7. Sales and Invoicing

The **Sales and Invoicing** module handles all aspects of commercial transactions related to parts sales:

- **Sales Order Management:** Create and process sales orders for parts sold to external customers.
- **Invoice Generation:** Generate invoices compliant with financial regulations, with customizable templates.
- **Financial System Integration:** Export invoice data in compatible formats for seamless integration with external financial systems.
- **Transaction History:** Maintain complete records of sales activities for auditing and reporting purposes.

This module supports MRO organizations engaged in parts trading, ensuring accurate and timely financial reporting.

8. Tools & Manuals Management

The **Tools & Manuals** module ensures proper management of essential maintenance resources:

- **Tool Tracking:** Monitor the availability and location of maintenance tools.
- **Calibration Scheduling:** Manage calibration requirements and expiration dates for precision tools.
- **Manual Control:** Track maintenance manuals and technical publications, ensuring that only the latest revisions are in use.
- **Compliance Assurance:** Maintain records for audit purposes, ensuring that tools and manuals meet regulatory requirements.

This module supports regulatory compliance and operational efficiency by ensuring that essential maintenance resources are always ready and up-to-date.

9. Human Resources Management

The **Human Resources** module provides essential functions for managing maintenance personnel qualifications:

- **Certification Tracking:** Maintain up-to-date records of employee certifications, including renewal reminders.
- **Stamp Approvals:** Track and manage stamp approvals for authorized maintenance staff.
- **Training Management:** Schedule and track required training courses, ensuring compliance with regulatory standards.

- **Competency Management:** Assign tasks based on individual competencies and certifications.

This module ensures that all maintenance tasks are performed by qualified personnel, supporting regulatory compliance and operational safety.

10. Requisition & Transfer Management

The **Requisition and Transfer** module streamlines internal logistics by managing:

- **Mechanic Requisitions:** Mechanics can submit requisitions directly from the workshop, triggering purchase or transfer processes.
- **Supply Chain Fulfillment:** The purchasing department can initiate purchase orders or transfer requests based on requisitions.
- **Inter-Station Transfers:** Manage the transfer of parts and equipment between maintenance stations, including shipment tracking and estimated delivery times.
- **Tracking Integration:** Store tracking numbers and monitor in-transit goods for complete logistical visibility.

This module enhances operational efficiency by ensuring that required parts and tools are available where and when they are needed.

These MRO modules, when integrated with SAM's CAMO suite, offer a complete solution for managing maintenance operations, ensuring compliance, reducing downtime, and optimizing operational costs across the entire aircraft maintenance lifecycle.

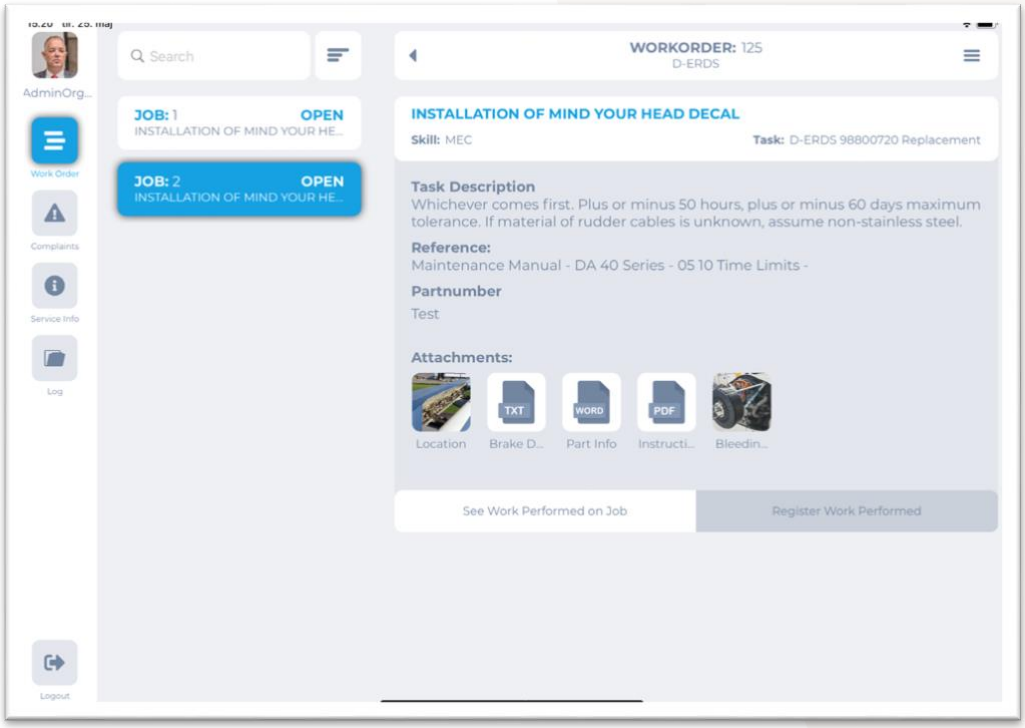
SAM CMMS Special Modules Overview:

SAM CMMS offers a set of specialized modules designed to enhance system functionality, improve operational workflows, and provide seamless integration with industry-standard tools and applications. These modules add flexibility, mobility, and customization options, ensuring that the system can be tailored to meet the unique needs of maintenance organizations.

1. Web Service Module

The **Web Service Module** extends SAM's functionality to mobile devices, providing an intuitive iPad and Android tablet application specifically designed for mechanics. Key features include:

- **Mobile Work Recording:** Mechanics can record performed work on work orders directly from their tablets.
- **Documentation Access:** Review manuals, job cards, and technical documentation anytime, anywhere.
- **Defect Reporting:** Issue maintenance defects, including the ability to attach photos for clearer problem identification.



- **Automatic Experience Log Updates:** Mechanics' experience logs are updated in real time with performed tasks, ensuring their certifications remain current.
- **User-Friendly and Free:** The SAM mobile app is available at no additional cost for mechanics, promoting widespread adoption and ease of use.

This module significantly improves operational efficiency by enabling mechanics to work more independently and accurately in the field.

2. Veryon/ATP Interface Module

The **ATP Interface Module** seamlessly integrates SAM CMMS with ATP's regulatory compliance database. Key capabilities include:

- **Direct Access to ATP Libraries:** Provides access to ATP's comprehensive library of Airworthiness Directives (AD) and Service Bulletins (SB) directly from SAM.
- **Automated Data Transfer:** Automatically transfers relevant AD and SB information into the SAM **Service Information Management** module, ensuring that compliance data is always up to date.
- **Subscription Requirement:** Requires an active ATP library subscription for full functionality.

This module reduces administrative workloads and ensures continuous regulatory compliance by streamlining access to critical service information.

3. Dent & Buckle Interface Module

The **Dent & Buckle Interface Module** provides seamless integration with the Dent & Buckle app (dentandbuckle.com), offering enhanced damage tracking and defect reporting. Key features include:

- **Automatic Complaint Issuance:** Automatically generates complaints and defects in SAM based on reports submitted through the Dent & Buckle app.
- **Damage Mapping Integration:** Ensures accurate recording of structural damages, dents, and buckles, complete with photographic evidence and positional data.
- **Streamlined Defect Management:** Defects reported through the app are instantly available in SAM for further maintenance action and compliance tracking.

This module enhances airframe damage management processes by providing an efficient, paperless solution for defect reporting and resolution.

4. EFB Interface Module

The **EFB (Electronic Flight Bag) Interface Module** integrates SAM CMMS with **IFS's EFB solution** (ifs.aero), automating flight data management. Key functionalities include:

- **Automatic Journey Log Transfer:** Flight logs and journey reports are automatically transferred from the EFB system into SAM, ensuring real-time synchronization.
- **Operational Efficiency:** Reduces manual data entry, eliminating errors and saving valuable time for both flight crews and maintenance personnel.
- **Seamless Integration:** Enables CAMO and MRO teams to access up-to-date flight data for accurate maintenance scheduling and compliance reporting.

This module significantly improves data accuracy, enhances operational visibility, and reduces administrative burdens related to flight data management.

5. Report Designer Module

The **Report Designer Module** provides powerful customization tools for modifying and creating reports within SAM CMMS. Key features include:

- **Custom Report Creation:** Design entirely new reports or modify existing ones to meet specific operational, customer, or regulatory requirements.
- **Extensive Report Library:** SAM includes approximately 55 standard reports, all of which can be easily tailored for a desired appearance or structure.
- **Compliance and Branding:** Adapt reports to comply with internal standards, regulatory guidelines, or corporate branding requirements.
- **User-Friendly Interface:** Offers an intuitive design environment, allowing users without programming skills to create professional-grade reports.

This module ensures that users can generate and distribute tailored reports that meet exact organizational and regulatory demands, enhancing both internal workflows and external communications.

These **Special Modules** extend the core capabilities of SAM CMMS, delivering enhanced mobility, integration, and customization. Together, they provide powerful tools for optimizing operational workflows, ensuring regulatory compliance, and streamlining data management across the entire aircraft maintenance and operational lifecycle.