



## Aviation Safety Management Tools

*"SMS software or Safety Management Tools" should be more than a reporting or documentation system. There needs to be a system that captures risk mitigation/economic risk financial information, quality/IEP issues (including a process to track corrective actions), identifies and tracks risk, ensures a traceable safety communication process, and can house manuals/policy all in one easy to access system that the entire organization can use.*

### Table of Contents

ROOT(S) CAUSE ANALYSIS (RCA) SOFTWARE .....	2
RCA---various methodologies.....	2
Apollo--- Root Cause Analysis "RealityCharting" .....	2
BowTieXP --- Risk Management Tool .....	2
TapRoot® --- Root Cause analysis in SMS.....	2
SOFTWARE .....	2
AeroGuard --- Specialist Aviation Solutions .....	2
Air Maestro .....	2
AIRS --- International Safety Systems Pty Ltd (ISS).....	2
AQD --- Super Structure Group .....	3
ART --- Aviaso Inc. ....	3
AVSiS --- Air Charter Safety Foundation (FREE).....	3
CMAS --- HRSI .....	3
CMO-COMPLIANCE .....	3
EtQ --- CAPA .....	3
FIRMA --- Futron Corp. ....	3
GPFS ---Global Planning Flight Software .....	3
INDICATE --- Australian Transport Safety Bureau - FREE.....	3
IndustrySafe Management Software Enterprise .....	4
iSMS ---Abante Intelligent Solutions Inc.....	4
Intelex SMS --- Intelex .....	4
OMNI Air Group: Incident Reporter™ SMS Database (desktop & web based) .....	4
PRISM --- ARG/US International, Inc. ....	4
Q5AIMS --- Q5 Systems .....	4
QIT --- QIT Consulting (desktop & web based) .....	4
Q-Pulse --- Gael .....	4
Safety Net .....	4
ScandiAvia.....	4
Sentinel (formerly BASIS).....	4
SHE® Software --- SHE Health and Safety Software .....	4
SMS Plus --- Baldwin Aviation.....	4
SMS Pro --- NorthWest Data Solutions .....	5
SRCA --- Safety Research Corporation of America .....	5
FLIGHT RISK MANAGEMENT .....	7
Automated Risk Assessment Tool --- NATA .....	7
ASF Flight Risk Evaluator --- AOPA.....	7
FORMS --- Gulfstream.....	7
FAA AC 120-92A accepted 3rd party.....	7
FREE ONLINE - WBAT (WEB BASED ANALYSIS TOOL) REPORTING (I.E. FOQA) .....	9
SMS ROI Calculator --- Baldwin Aviation & Graystone Advisors (FREE).....	9
AVSiS - Air Charter Safety Foundation (free).....	9
FOQA WBAT --- UTRS (Universal Technical Resource Services, Inc.) .....	9
ASAP WBAT ---Medallion Foundation .....	9
REACH --- Risk Assessment Matrix (FREE) .....	9
Product Development Company - PTC.....	9
PAPER-BASED SMS MANUALS, TOOLKITS.....	10
IS-BAO SMS Toolkit --- NBAA & IBAC .....	10
SMS Development Guide (Manual) --- MITRE Aviation Institute & ATC Vantage Inc.....	10
MAAT --- (CASA compliant manual development) .....	10
ACSF --- Air Charter Safety Foundation .....	10

## Root(s) Cause Analysis (RCA) software

RCA---various methodologies	<p>Root Cause Analysis is not quite an adequate description as there are many "roots" or several causes (maybe we should say root causes analysis or roots causes' analysis). There are a variety of methods to accomplish this task. Some various tools/methods we have found for RCA:</p> <ul style="list-style-type: none"> <li>Bow Tie Analysis</li> <li>Fault Tree Analysis (FTA)</li> <li>Failure Modes and Effect Analysis (FMEA)</li> <li>Fishbone "Ishikawa" diagram (Cause &amp; Effect (CE))</li> <li>Why-Why Chart (5 why's)</li> <li>Apollo Root Cause</li> <li>Change Analysis</li> <li>Barrier Analysis</li> <li>Tree Diagrams</li> <li>Pareto Analysis</li> <li>Storytelling</li> </ul> <p>To help guide in developing "roots cause" look at the possible causes in these 6 categories: <b>Man, Machine</b> (technology), <b>Method</b> (process), <b>Management</b>/Money Power, <b>Media</b> (Mother Nature, Environment), <b>Material</b></p>
Apollo--- Root Cause Analysis "RealityCharting"	<p><a href="http://www.realitycharting.com/">http://www.realitycharting.com/</a> This software is free to everyone and relies on the use of RealityCharting® for printing and exporting. It is limited to 4 causes high, 5 causes deep and a maximum of 32 causes.  <a href="http://www.realitycharting.com/downloads/rc-simplified/">http://www.realitycharting.com/downloads/rc-simplified/</a> . Explanations of various RCA (root cause analysis) tools - <a href="http://www.realitycharting.com/methodology/conventional-wisdom/rca-methods-compared">http://www.realitycharting.com/methodology/conventional-wisdom/rca-methods-compared</a>. The full version RealityCharting V6 software is \$595.</p>
BowTieXP --- Risk Management Tool	<p><a href="http://www.bowtiexp.com">www.bowtiexp.com</a> - CGE Risk Management Solutions B.V.          BowTieXP, is a software tool that assists companies in their risk management &amp; analysis using the risk assessment technique of the bow-tie method which brings together quantitative and qualitative risk analysis. Bow-ties provide a clear graphical illustration of the relationships between the causes of business upsets, escalation to a range of possible outcomes, and controls which prevent the event from occurring and limit the consequences which is easy to understand. More importantly, the controls are linked to tasks, procedures, responsible individuals and competencies, thereby identifying how the management system provides assurance that risks will continue to be properly managed.</p>
TapRoot® --- Root Cause analysis in SMS	<p><a href="http://www.taproot.com/">http://www.taproot.com/</a> The patented TapRoot® Single User and Enterprise Software is designed to streamline and organize the incident investigation process for powerful results. The software combines incident identification, analysis, and dynamic report writing into one seamless process.          The TapRoot® Enterprise Software helps organize a team's responsibilities, tracks each stage of the investigation process, and allows report approvals and corrective action tracking.          The TapRoot® Single User Software takes the proven TapRoot® System and delivers it in a Windows application. This means that you have the full advanced human performance and equipment troubleshooting technology of TapRoot® in an easy-to-use patented program. The TapRoot® Software has a large number of pre-developed reports that allow you to easily print, retrieve and trend your data.</p>

## Software

AeroGuard --- Specialist Aviation Solutions	<p>AeroGuard, a web-based safety report management application. It has been developed over the past number of years in conjunction with a regional European airline to ensure that it encompasses all required aspects and has been tried and tested on the front line prior to market launch. It is being offered to Commercial Air Transport Operators as well as Private Owner / Operators and FTO's. A number of JAR-OPS 3, EU-OPS 1 and other ICAO compliant companies have signed up and are enjoying the reduced workload (compared to manual report management) and increased results and visibility of their SMS.</p>
Air Maestro	<p><a href="http://www.airmaestro.co.uk">www.airmaestro.co.uk</a> Air Maestro</p>
AIRS --- International Safety Systems Pty Ltd (ISS)	<p><a href="http://www.safeware.com.au/detail.aspx?p=SAFETY">http://www.safeware.com.au/detail.aspx?p=SAFETY</a> Airline Integrated Reporting Software (airs) provides corporate safety managers with the latest information and the tools required to analyse this information.  <a href="http://www.safeware.com.au/detail.aspx?p=AIRS">http://www.safeware.com.au/detail.aspx?p=AIRS</a></p>

AOD --- Super Structure Group	<a href="http://www.superstructuregroup.com">http://www.superstructuregroup.com</a> AOD, is an integrated Safety and Risk Management solution. AOD covers all functions from accident/incident reporting, risk assessment, compliance, analysis and investigation through to auditing and corrective action tracking; combines quality assurance audits with flight, cabin, maintenance and ground safety occurrence reporting
ART --- Aviaso Inc.	<a href="http://www.aviaso.com">www.aviaso.com</a> ART, <i>Airline Reporting Tool</i> , which our clients use for SMS. The <i>Airline Portal</i> is the central place for information exchange within an airline and <i>CCP - Crew Capacity Planning</i> . (Zürich Area, Switzerland) We currently primarily have European clients but also prospects from the US and Asia. In the next days we will upload a brochure of our ART-module - at the moment, there is just a short description on the website. Pricing: At the moment (no differentiation depending the size of an airline) -License: 27,500 EUR (and 12.5 % yearly maintenance fees) On Request: -Options for yearly pricing available on request &Options for hosting
AVSiS --- Air Charter Safety Foundation (FREE)	(FREE) <a href="http://www.acsf.aero/AVSiS/">http://www.acsf.aero/AVSiS/</a> -- (safety reporting program). See below
CMAS --- HRSI	CMAS is a Comprehensive Medical Aviation Safety database. It consists of more than 600 entries culled from twenty years of medical aviation operations. Each entry contains dozens of parameters allowing for searches on specific safety issues. Individual parameters can be combined for a more detailed understanding of contributing factors. Data is drawn from multiple sources including NTSB accidents and incident reports, FAA incident reports and industry self-reports. Supporting material for each entry was read, analyzed and standardized. This is the only database in which reports from so many sources have been integrated. The data can be examined together or sorted in any number of ways. The CMAS database allows for search of accidents AND/OR incidents AND/OR events.
CMO-COMPLIANCE	<a href="http://www.cmo-compliance.com">www.cmo-compliance.com</a> CMO offers enterprise audit, risk and compliance solutions across multiple industries, focusing on highly regulated industries such as oil, gas, energy & mining, food, and of course aviation. What sets CMO-COMPLIANCE apart from many of the SMS solutions out there is that it is based on global best practice for management systems but includes airport/aviation specific functions such as Logbooks, GIS/GPS, Voluntary safety reporting, and the widest range of offline mobile inspection/audit/incident/risk assessment capabilities including Smartphones/PDA's, Tablets and iPads/iPhones/iPod Touch
EtQ --- CAPA	<a href="http://www.etq.com/airsafety/">http://www.etq.com/airsafety/</a> EtQ, Excellence through Quality. EtQ provides an integrated SMS software solution that has been pre-configured to specifically address the needs of the Aviation industry and its regulatory agencies. EtQ's unique modular approach provides unparalleled flexibility and automation. The modules are tightly integrated to deliver a best in class Safety Management Software solution. Modules and utilities include Job Safety Analysis, Risk Register, Safety Reports, Deviation, Audits and Surveys and more. (Clients: Air Canada, Bell Helicopter Textron Canada Ltd, ExpressJet Holdings, Gulfstream Aerospace Corp.)
FIRMA --- Futron Corp.	<a href="http://www.futron.com">http://www.futron.com</a> Futron Integrated Risk Management Application (FIRMA)Providing innovative Decision Management Solutions (DMS) analysis of safety metrics and the forecasting of risk lead to more complete and informed decisions for aerospace leaders; product and process management solutions that infuse safety and risk management into organizational decision making processes. Our solutions integrate safety and risk management into the enterprise, program, or project. A web-enabled application database for documenting and communicating information about risks. <a href="http://www.futron.com/risk_management/tools/futron_integrated_risk_management_application.htm">http://www.futron.com/risk_management/tools/futron_integrated_risk_management_application.htm</a>
GPFS ---Global Planning Flight Software	<a href="http://www.gpflightsoftware.com">http://www.gpflightsoftware.com</a> GPFS is a flight management software application containing several modules. The software is self-contained. However, additional modules can provide additional specialized functionalities. The modules are: SMS, Maintenance, Inventory Management, Flight Planning Management, Reservations and Workshop Management. A profiler is also included in all modules.
INDICATE --- Australian Transport Safety Bureau - FREE	(FREE) INDICATE (Identifying Needed Defenses In the Civil Aviation Transport Environment) is a FREE safety program created by ATSB. INDICATE is an airline self-management safety tool! Simple and reliable; focus on safety hazards; Microsoft Access. <a href="http://www.atsb.gov.au/publications/1999/sir199906_002.aspx">http://www.atsb.gov.au/publications/1999/sir199906_002.aspx</a> . Australian regional airline industry - proactive in identifying and addressing aviation safety hazards. Results from the trial suggest that the program can have a positive influence on airline safety performance, specifically: improving staff confidence in how safety is managed, increasing staff willingness to report safety hazards and incidents, improving organizational safety culture and reducing staff perceptions of the severity and likelihood of safety hazards occurring within the airline. The success of the trial has resulted in a number of Australian and Intl airlines adopting the program.

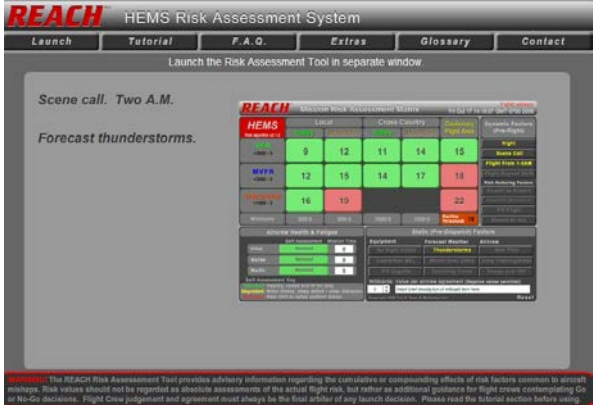
IndustrySafe Management Software Enterprise	<a href="http://www.industrysoafe.com/features.asp">http://www.industrysoafe.com/features.asp</a>
iSMS --- Abante Intelligent Solutions Inc	iSMS by Abante Intelligent Solutions Inc. <a href="http://www.abanteintelligentsolutions.com/">http://www.abanteintelligentsolutions.com/</a> Modular INTELLIGENT SAFETY™ software product to match your organization's distinct operational QA and SMS needs. Meeting "ICAO patterned" reporting requirements for a complete SMS, the AISI iSMS Portal incorporates co-creative (client input) modular design so it works precisely for your needs, not as an "on the shelf" and often compromising solution. iSMS facilitates causal analysis, risk management and just as important to the organization, helps to quantify true costs of safety within the organization.
Intelex SMS --- Intelex	Safety and Integrated Management Software Systems <a href="http://www.intelex.com/default.aspx">http://www.intelex.com/default.aspx</a> & <a href="http://www.intelex.com/aviation-sms/">http://www.intelex.com/aviation-sms/</a> <a href="http://www.intelex.com/Safety_Management-193-3product.aspx">http://www.intelex.com/Safety_Management-193-3product.aspx</a>
OMNI Air Group: Incident Reporter™ SMS Database (desktop & web based)	<a href="http://www.omniairgroup.com">http://www.omniairgroup.com</a> Web-Based, hazard reporting system. Incident Reporter™ is far more than a hazard reporting system. Aligned with ICAO and FAA SMS Frameworks, IR helps you perform many Safety Risk Management (SRM) and Safety Assurance (SA) processes reliably and efficiently. IR is also a Quality Management database. IR is also a Quality Management database.
PRISM --- ARG/US International, Inc.	<a href="http://www.aviationresearch.com/ProductsServices.aspx">http://www.aviationresearch.com/ProductsServices.aspx</a> PRISM Solutions > PRISM Solutions offers comprehensive line of System Management services. SMS Solutions > SMS Solutions is a line of Safety Management products and services. ARG/US Professional Resources In Safety Management (PRISM) PRISM is a unique internet-enabled solution.
Q5AIMS --- Q5 Systems	<a href="http://www.q5systems.com/index.htm">http://www.q5systems.com/index.htm</a> - Incident Management Software - <a href="http://www.q5systems.com/incident.htm">http://www.q5systems.com/incident.htm</a>
QIT --- QIT Consulting (desktop & web based)	<a href="http://www.qitconsulting.com/">http://www.qitconsulting.com/</a> & <a href="http://www.qitconsulting.com/Safety/index.htm">http://www.qitconsulting.com/Safety/index.htm</a> QIT Aviation Safety Management System. Aviation Safety Audit Manager (SAM) Web-based Edition, Aviation Safety Audit Manager Desktop Edition, Safety Action Management System Desktop Edition, QM software. QIT Aviation Safety Audit Manager has been tested and used for handling LOSA, IEP, ACT IEP, and NOSS programs for airlines and airport safety program. Desktop version available which includes *Internal Evaluation Program (IEP) *Line Operation Safety Audit (available in Standard Edition) *Normal Operation Safety Survey for Air Traffic Control (NOSS) *Human Factor and Risk analysis and trending *Root Cause Analysis functions to ensure that all issues are resolved from the root *ATOS compatible (EPI and SAI formats)
Q-Pulse --- Gael	( <a href="http://www.gaelquality.com">www.gaelquality.com</a> ). Gael Ltd. Q-Pulse "it is very good as a SMS tool: It is used in around 4000 companies in all continents over 20 years; widely used in the airline industry and with regulatory bodies such as UK CAA and UAE GCAA. It has a LAN and web facility for all pilot and cabin crew reporting. It also comes with mindmapping software mindgenius which is also an excellent tool for root cause analysis and a whole load of other stuff from writing reports, to project management complete with Gantt chart facility." With Q-Pulse, you should have a complete picture of all your corporate governance requirements under one system which is future proofed using SQL database technology. <a href="http://www.gaelquality.com/resources/recorded-webinars">http://www.gaelquality.com/resources/recorded-webinars</a>
Safety Net	Safety Net ( <a href="http://www.vistair.com">www.vistair.com</a> )
ScandiAvia	<a href="http://www.safetyreports.aero">www.safetyreports.aero</a> Web-based Reporting System for Airlines. Report management (Electronic Report, Offline report, eMail reports, automated and/or manual forward, email/SMS alert, ...) - Follow-up (Assessments / Actions, confidential/public notes, Activities list,...) - Specific Web Site for your crew and your staff (Corporate Site functions) - Risk assessment (definition of your own matrix, alert module...) - Statistics and Performance reports - Investigation module (based on ICAO annex 13) - Unlimited type of reports possible
Sentinel (formerly BASIS)	Used by 100 + companies-- <a href="http://www.sentinel.aero">http://www.sentinel.aero</a>
SHE® Software --- SHE Health and Safety Software	<a href="http://www.shesoftware.com/products.html">http://www.shesoftware.com/products.html</a> Health and Safety Software --- SHE® Software to report on both specific (resulting from an incident) and routine performance; track preventative information, such as training records, risk assessments, asset maintenance and actions, along with reactive data from incidents and investigations; and spread health and safety throughout your workforce or organization. Monitoring and reporting
SMS Plus --- Baldwin Aviation	<a href="http://www.baldwinaviation.com/">http://www.baldwinaviation.com/</a> Surefire Safety Management Program: Online subscription data software - helicopters, aviation & FOQA, Safety & Compliance(SMS), RotorSMS™, SMSplus™, FDMplus™, safetysherpa™, Safety

	<p>Gauge™. Baldwin programs range from a full subscription Safety and Compliance program to SMSplus™ for those flight departments only needing certain components of their comprehensive safety management program. <a href="http://www.baldwinaviation.com/sms/sms.aspx">http://www.baldwinaviation.com/sms/sms.aspx</a></p>
<p>SMS Pro --- NorthWest Data Solutions</p>	<p><a href="http://www.aviation-sms.com/Home.aspx">http://www.aviation-sms.com/Home.aspx</a> - <a href="http://www.asms-pro.com/Products/SMSProLite.aspx">http://www.asms-pro.com/Products/SMSProLite.aspx</a>            SMS PRO: Small Operators (Starter, Basic, Lite) &amp; Basic SMS Pro Packs: Standard Edition, Enterprise Edition, &amp; Flight-School Edition (may be hosted on own intranet) Highly recommended. "SMS software" should be more than a reporting system. There needs to be a system that captures quality/IEP issues (including a process to track corrective actions), identifies and tracks risk, ensures a traceable safety communication process, and can house manuals/policy all in one easy to access system that the entire organization can use. Additionally, a system should capture risk mitigation/economic risk financial information.</p> <p>SMS Pro Modules (Functionality): GAP Analysis; Hazard Reporter; Issue Manager; Corrective Actions Manager; Policy Manager; Policy Reviewer; Duties &amp; Requirements; Interactive Org Chart; Implementation Manager; Safety Survey; Read File; SMS Documentation/Version Control; SMS FAQs; Newsletter Manager; Document Library; Lessons Learned Library; Goals &amp; Objectives Manager; SMS Induction Manager; Policy Templates; User &amp; Roles Manager; Safety Performance Board (KPIs); Hazard Analyzer/Quick Charts; Quick Sort; Quick Table; Qualifications &amp; Training Manager; Proactive Safety Risk Manager; Custom Inspection Forms; Custom ORP Monitoring/Evaluation Tool; Meeting Manager; Individual Flight Risk Assessment.</p> <p>SMS PRO is available free for small organizations with 10 or less employees. To register for the Free Tools, visit <a href="http://asms-pro.com/Support/RequestFreeSMSSoftwareTools.aspx">http://asms-pro.com/Support/RequestFreeSMSSoftwareTools.aspx</a>.</p> <p>SMS Pro™ is recognized as being a great solution because:</p> <ul style="list-style-type: none"> <li>• It is designed specifically for the aviation industry;</li> <li>• Very price competitive;</li> <li>• Best customer service (according to independent consultants);</li> <li>• Flexible - able to make software conform to your business processes;</li> <li>• Most customizable.</li> </ul>
<p>SRCA --- Safety Research Corporation of America</p>	<p><a href="http://www.srca.net/">http://www.srca.net/</a>            Single PC, Intranet or web based. Risk Management &amp; Data Tracking  <a href="http://www.srca.net/Products/riskassessment.html">http://www.srca.net/Products/riskassessment.html</a></p>

## Flight Risk Management

Automated Risk Assessment Tool --- NATA	<p><a href="http://www.nata.aero/racheck">http://www.nata.aero/racheck</a></p> <p>FAA Endorsed NATA's RA Tool At Safety Symposium. NATA's Automated Risk Assessment Tool. The program was developed, and is hosted and managed by, NATA</p> <p>The National Air Transportation Association (NATA) launched a tool which effectively combines safety management system-required risk assessment with convenience at the Air Charter Safety Foundation's 2010 Air Charter Safety Symposium on March 3. The association's new online risk assessment tool, NATA RA Check, combines a highly comprehensive FAA-endorsed risk assessment tool with the automation necessary to make its use quick, easy, and accurate. NATA says its RA Check fully automates the FAA-published Flight Risk Assessment Tool (FRAT), a worksheet-based tool designed to consider the probability, severity and weighted value of 38 leading accident causal factors. Developed by FAA officials, respected aircraft operators, and other industry representatives, the FRAT is designed to identify potential hazards prior to flight and weigh the risk associated with each hazard through a five-step process.</p> <p>To use the FAA-published tool, operators must create numerical thresholds that trigger additional levels of scrutiny prior to a flight. RA Check removes subjectivity and standardizes results, saving operators time and money while improving safety. RA Check streamlines data-entry processes and provides further convenience as it is fully integrated with the Computing Technologies For Aviation (CTA) Flight Operating System (FOS). "RA Check fulfills a vital role in safety management programs with the perfect combination of sound safety risk assessment methodology and convenient automation features," said NATA President James K. Coyne. "Safety and compliance tools such as RA Check and IC Check are greatly improving the business balance between safety and productivity."</p>
ASF Flight Risk Evaluator --- AOPA	<p><a href="http://www.aopa.org/flightplanning/">http://www.aopa.org/flightplanning/</a></p> <p>ASF Flight Risk Evaluator product that combines the interactive style of AOPA courses with a "risk calculator" that gives meaningful, objective feedback about the safety of a proposed flight, customized to your operation. It's made up of three parts: plain-spoken introduction to risk management issues, a "Quick Check" that lets you fill in a few details about an upcoming flight and get a personalized list of guidelines and an "In-Depth" option that asks for a number of details about the flight and then rates its safety across several different area</p>
FORMS --- Gulfstream Flight Operations Risk Management Service	<p>Gulfstream's Flight Operations Risk Management Service (FORMS) resembles Flight Monitoring/Flight Operations Quality Assurance (FDM/FOQA) programs utilized by the commercial airline industry. Gulfstream says FORMS increases operational safety by objectively and accurately measuring exposure to known risks, such as unstable approaches, system operating limits and adverse runway operations. FORMS consists of two components, a Quick Access Recorder (QAR) to collect data and a monitoring service provided by Austin Digital Inc. of Texas to analyze it. The system records when defined takeoff, climb, cruise, descent, and approach and landing parameters have been exceeded. When this occurs, the system identifies and analyzes the conditions present during the event and provides a summary to the operator. Gulfstream then receives consolidated fleet data with which to enhance pilot training.</p>
FAA AC 120-92A accepted 3rd party	<p>"Objective evidence of external audit findings (e.g., International Air Transport Association Operational Safety Audit (IOSA), International Business Aviation Council (IS-BAO), Air Charter Safety Foundation (ACSF), and FAA)"</p>

## Free Online - WBAT (Web Based Analysis Tool) Reporting (i.e. FOQA)

<p>SMS ROI Calculator --- Baldwin Aviation &amp; Graystone Advisors (FREE)</p>	<p>(FREE) <a href="http://www.graystoneadvisors.com/SMS_ROI_Calculator.html">http://www.graystoneadvisors.com/SMS_ROI_Calculator.html</a> The Economics of an SMS: Return on Investment Calculator to Evaluate an SMS Investment. Gray Stone Advisors and Baldwin Aviation have developed this SMS ROI Calculator to help you quantify the benefits of safe operation through the establishment of an SMS System. This tool will help you take a quantified look at the financial justification for developing, implementing and maintaining a Business Aviation SMS.</p>
<p>AVSis - Air Charter Safety Foundation (free)</p>	<p><a href="http://www.acsf.aero/AVSis/">http://www.acsf.aero/AVSis/</a> (safety reporting program) AVSIS is the premier software for reporting, tracking and responding to safety occurrences. AVSIS contains powerful tools that allow you to conduct comparative analyses with other users using de-identified data. ACSF is committed to ensuring your data is secure and remains anonymous. ACSF is providing AVSIS to the Part 135 and 91K operational community at absolutely no charge. Membership in ACSF is not required in order to obtain, use and benefit from having AVSIS as part of your safety program. We will house your data on our secure servers at no charge for as long as you continue to be an active user of AVSIS. You will of course have internal costs to deploy the AVSIS tool to all appropriate employees, maintains an Internet connection (broadband speeds preferred but not required) and develop staff dedicated to performing the role of safety manager to review and act upon reports submitted via AVSIS. How can ACSF offer AVSIS to Part 91K programs and 135 operators at no charge? AVSIS was initially purchased by the National Air Transportation Association (NATA) under a grant from the FAA. NATA is a founding member of ACSF and believed the foundation was perfectly positioned to accomplish the grant's purpose of wide scale deployment of a safety event reporting system to this industry segment. NATA has provided AVSIS to ACSF at no cost to the foundation, and we likewise are offering it free to the industry.</p>
<p>FOQA WBAT --- UTRS (Universal Technical Resource Services, Inc.)</p>	<p><a href="http://www.utrs.com/aviation_safety.html">http://www.utrs.com/aviation_safety.html</a> Employee Reporting Database Resource - offers Flight Operational Quality Assurance (FOQA) &amp; information management expertise worldwide to airlines, corporate operators, and the military.</p>
<p>ASAP WBAT --- Medallion Foundation</p>	<p><a href="http://www.medallionsafety.org/">http://www.medallionsafety.org/</a> - ASAP WBAT. Medallion Foundation, in cooperation with our employee labor organizations and the FAA, has established an Aviation Safety Action Program (ASAP) for Cabin Crew, Dispatch, Flight Crews, Maintainers, and Ground Crews. The Medallion Foundation ASAP is a voluntary, self-reporting program designed to identify and reduce possible flight safety concerns. ASAP uses employee input to identify significant safety concerns and issues; operational deficiencies; non-compliance with regulations; deviations from company policies and procedures; and unusual events. In partnership with the all relevant departments, labor organizations, and the FAA, each report is investigated and corrective actions determined based on a non-disciplinary approach to flight safety.</p>
<p>REACH --- Risk Assessment Matrix (FREE)</p>	<p><a href="http://www.hemrisk.com">http://www.hemrisk.com</a> – REACH Risk Assessment Matrix</p> 
<p>Product Development Company - PTC</p>	<p>Windchill FTA (formerly Relex Fault Tree) By helping you construct a graphical representation of the critical issue and its contributing events, Windchill FTA (formerly Relex Fault Tree) provides the analysis tools required to help mitigate its occurrence or impact. The powerful analytical capabilities of Windchill FTA quantify system risk and reliability, helping you make targeted decisions about design, maintenance, and controls to reduce the probability of failures. <a href="http://www.ptc.com/products/windchill/fta?kw=fault%20tree%20analysis">http://www.ptc.com/products/windchill/fta?kw=fault%20tree%20analysis</a></p>

## Paper-Based SMS Manuals, Toolkits

IS-BAO SMS Toolkit --- NBAA & IBAC	<a href="http://www.nbaa.org/admin/sms/tool-kit/">http://www.nbaa.org/admin/sms/tool-kit/</a> The SMS Toolkit, developed by NBAA and the International Business Aviation Council (IBAC), is designed to assist business aircraft operators develop and implement safety management systems (SMS) that meet the ICAO Standards and Recommended Practices and the regulatory requirements of major aviation regulatory authorities. The Toolkit is included with the purchase of the IS-BAO. The Toolkit: 57pg SMS Tools booklet that provides a step by step process to develop and implement a SMS and a CD-ROM that contains an electronic copy of the booklet plus 18 tools, 6 reference documents, and links to other related resources
SMS Development Guide (Manual) --- MITRE Aviation Institute & ATC Vantage Inc.	SMS Manual with forms, reports in template format – has suggestions for various sized organizations (large, small) and types of organizations (airline, airport, CAA, maintenance)....
MAAT --- (CASA compliant manual development)	CASA MAAT (Manual Authoring & Assessment Tool - <a href="http://test.maat.icemedia.com.au/overview/">http://test.maat.icemedia.com.au/overview/</a> ) Ian Dix developed an online Manual builder for the Australian Civil Aviation Safety Authority. It is actually designed to guide someone through any Manual build which requires a Regulator to review - and seamlessly interacts between author/regulator through the assessment process. Here is an overview link: This program assists organizations to prepare Manuals for submission to CASA. It is an interactive program which aims to improve efficiency and enhance communication between CASA and aviation organizations during the Manual development process. <a href="http://test.maat.icemedia.com.au/">http://test.maat.icemedia.com.au/</a>
ACSF --- Air Charter Safety Foundation	<a href="http://www.acsf.aero">http://www.acsf.aero</a>