



LORAN AEROSPACE INCORPORATED

AS9120 REV.B QUALITY MANAGEMENT SYSTEM MANUAL (DOC. REF.: 200720 REV. 03)

DISTRIBUTION:

The Quality Manual is available to all company staff through the Loran ERP System. This Quality Manual and our basic quality policies are also available to our Customers, Vendors, and Regulatory Authorities on our website and in our ERP system. Due to legal obligations, some sections of this Quality Manual may not be published.

TABLE OF CONTENTS

REFERENCE	TITLE	PAGE
	TABLE OF CONTENTS	
	REVISION TABLE	6
0.1	INTRODUCTION	7
	CITATION RULES	8
0.2	COMMITMENT	9
0.3	CORE VALUES & MISSION AND VISION	10
0.4	QUALITY POLICY	11
0.5	KEY BENEFITS OF AS9120 REV.B STANDARDS FOR LORAN AEROSPACE	11
0.6	QUALITY MANAGEMENT PRINCIPLES	11
0.7	PROCESS APPROACH	12
0.8	PLAN – DO – CHECK – ACT (PDCA)	13
0.8.1	When to Use Plan-Do-Check-Act	13
0.9	RISK BASED THINKING	14
0.10	TRACEABILITY IN LORAN QUALITY MANAGEMENT SYSTEM	14
0.11	IMPORTANCE OF COMPANY REPORTS	15
QUALITY MANAGEMENT SYSTEM (QMS) REQUIREMENTS		
1	SCOPE	16
2	NORMATIVE REFERENCES	17
3	TERMS AND DEFINITIONS	18
4	CONTEXT OF THE ORGANIZATION	21
	Understanding the Organization and Its Context	21
4.1	Internal and External Issues	21
	SWOT Analysis	21
4.2	Understanding the Needs and Expectations of Interested Parties	21
	Interested Parties	21
	Scope of Loran Quality Management System	22
4.3	Loran Business Scope/Capabilities	22
	Excluded Articles – Excluded Capabilities	22
4.4	Quality Management System and Its Processes	23
	Top Level Processes	23
5	LEADERSHIP	25
5.1	Leadership and Commitment	25
5.1.1	General	25
	Customer Focus	26
5.1.2	Customer Satisfaction Survey	26
	Loran ERP – Customer Portal Capabilities	27
5.2	Policy	27
5.2.1	Establishing Quality Policy	27
	Loran Aerospace Quality Policy	27
5.2.2	Communicating the Quality Policy	27
	Organizational Chart	28
5.3	Organizational Roles, Responsibilities, and Authorizations	28
6	PLANNING	29
6.1	Actions to Address Risks and Opportunities	29

	Loran Risk Management Policy	29
	The purpose of the Loran Risk Management Policy	29
6.1.1	Risk Types	29
	Risk Threshold	30
	Matrix Method	30
6.1.2	Risk – Opportunity Equation	31
6.2	Quality Objectives and Planning to Achieve Them	31
	General Characteristics of Loran Quality Targets	31
6.3	Planning of Changes for Loran Quality Management System	32
7	SUPPORT	33
7.1	Resources	33
7.1.1	General	33
7.1.2	People	33
7.1.3	Infrastructure	33
7.1.4	Environment for the Operation of Processes	33
7.1.5	Monitoring and Measuring Resources	33
7.1.5.1	General	33
7.1.5.2	Measurement Traceability	34
7.1.6	Organizational Knowledge	34
7.2	Competence	34
	Competency-Based Performance Management Model	35
7.3	Awareness	35
7.4	Communication	36
7.5	Documented Information	36
7.5.1	General	36
7.5.2	Creating and Updating	37
	Control of Documented Information	37
	Retention Period	37
7.5.3	ERP System Capabilities	38
	ERP System Design and Security Capabilities	38
	Cyber Security Rules	39
8	OPERATION	41
	Operational Planning and Control (Project Management)	41
	Quotation Risk Assessment	41
8.1	Product Risk Factors	41
	Loran Business Capabilities (Included and Excluded Product Families)	41
	Main Criteria of the Product Acceptance	42
	Project Management and Interaction Diagram	42
	Configuration Management	42
8.1.2	Revision and Configuration Information	43
	Recording the Configuration Requirements	43
8.1.4	Preventive of Counterfeit Parts	44
8.1.5	Preventive of Suspected Unapproved Parts	44
8.2	Requirements for Products and Services	44
8.2.1	Customer Communication	44
	Customer Satisfaction Survey	45
8.2.2	Determining and Reviewing the Requirements for Products and Services	45
	Product Requirement List	45

8.3	Design and Development of Products and Services (EXCLUDED CAPABILITY)	46
8.4	Control of Externally Provided Processes, Products and Services	46
8.4.1	General	46
	Manufacturer On-Site Controls	46
8.4.2	Type and Extend of Control	47
	Supplier Evaluation and Scoring	47
	Supplier Risk Assessment Table	47
	Company Reports (For Suppliers)	47
8.4.3	Information for External Providers	47
	Supplier Audit (Period, Responsible, Portal)	48
	Supplier Qualification Audit (SQA)	48
8.5	Production and Service Provision	49
8.5.1	Control of Production and Service Provision (JUSTIFICATION)	49
	Sample Product Approval (First Part Approval)	49
	Foreign Object Damage (FOD)	50
8.5.1.1	Control of Equipment, Tools, and Software Programs (EXCLUDED CAPABILITY)	50
8.5.2	Identification and Traceability	50
	Process Identification (In-House Traceability)	50
	Document Revision Identification Table	50
	Signature – Approval – Stamp Identification	51
	Product Identification	51
	Identification Labels	51
8.5.3	Property Belonging to Customers or External Providers	51
8.5.4	Preservation	52
	Post-Delivery Activities	52
8.5.5	Loran ERP – Customer Portal Capabilities	52
	Product Warranty	53
8.5.6	Control of Changes (JUSTIFICATION)	53
8.6	Release of Products or Services	53
8.7	Control of Nonconforming Outputs	54
9	PERFORMANCE EVALUATION	55
9.1	Monitoring, Measurement, Analysis, and Evaluation	55
9.1.1	General	55
9.1.2	Customer Satisfaction	55
9.1.3	Analysis and Evaluation	55
	Reporting and Comparing the Process Outputs	56
9.2	Internal Audit	56
9.3	Management Review	57
9.3.1	General	57
9.3.2	Management Review Inputs	57
9.3.3	Management Review Outputs	57
10	IMPROVEMENT	58
10.1	General	58
10.2	Nonconformity and Corrective Action	58



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

REVISION TABLE					
REV. NR.	REV. DATE	SUBJECT	APPROVAL	APP. DATE	SIGNATURE
01	06.25.2024	FIRST RELEASE	HASAN DEMIR GENERAL MANAGER	06.25.2024	
02	11.20.2024	FULL TEXT CONTROL,	HASAN DEMIR GENERAL MANAGER	11.20.2024	
03	12.20.2025	FULL TEXT CONTROL, QUALITY POLICY IS UPDATED – 0.4 SWOT ANALYSIS TABLE IS UPDATED – 4.1 LORAN BUSINESS SCOPE IS UPDATED – 4.3 "LORAN ERP – CUSTOMER PORTAL CAPABILITIES" IS ADDED – 5.1.2 QUALITY POLICY UPDATE INTERVAL IS UPDATED – 5.2.1 "PRODUCT RISK ASSESSMENT AND ACTIONS" IS ADDED – 8.1.2 SUPPLIER CLASS IS UPDATED – 8.4.3 "SUPPLIER QUALIFICATION AUDIT (SQA)" IS ADDED – 8.4.3 "DOCUMENT REVISION IDENTIFICATION TABLE" DEFINITION IS ADDED – 8.5.2	HASAN DEMIR GENERAL MANAGER	12.20.2025	



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

0.1. INTRODUCTION

GENERAL

Loran Aerospace Incorporated (Loran, Loran Aerospace) is located at 5077 Dallas Hwy Suite 211 Powder Springs Georgia 30127 USA, has been in business since 2021 April, servicing spare parts for aerospace platforms. We are proud to present this Quality Manual that has been prepared this quality manual according to SAE AS9120 Rev.B standards, as it represents the combined efforts of all our employees, with a common goal to enhance customer satisfaction, meet customer statutory and regulatory requirements with a goal of continuous improvement with both the company and its services to produce the desired outcome. We are dedicated to continuous improvement of our quality system, from the interaction between employees to our commerce with the marketplace.

Registered Name	LORAN AEROSPACE INCORPORATED
Registered Address	5077 Dallas Hwy, #211 Powder Springs, GA 30127, USA
Date of Formation	APRIL 10, 2021
Date of Registration	APRIL 10, 2021
Telephone	470-728-9573
e-Mail	support@loranaerospace.com
Servers and Domains	Website: https://www.loranaerospace.com/
HPE ProLiant DL380 Gen11 2U Rack Server Bundle Dual Xeon 2GHz x5 Rack-Mounted	Website: https://loranaero.com/
	Online Shop Portal: https://aviation.loranaerospace.com/
	ERP System: https://qmsystem.loranaero.com/
	Online Forms: https://forms.loranaerospace.com/
NAICS Sub Code	336412 Aircraft Engine and Engine Parts Manufacturing
EIN Number	61-1997987

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

CITATION RULES

Ref.:	Quotes for External Documents, or Sections of the Loran ERP System, will be marked in red color and bold character.
Annex.:	Annex for Any Section of This Manual will be marked blue color and bold character.
	If there is an important statement or point that requires attention, this information is marked with the warning logo .
Excluded Capability	Any article included in the AS9120 Rev.B standard but is outside the scope/capability of the Loran Quality Management System is marked as " Excluded Capability " in the title of the relevant article in red color on a yellow background.
Removed Sections	For data security reasons, some sections are kept open only to Loran personnel, OEM level users or certification audits. For this reason, these sections have been removed from the Online version of the Quality Manual (QM). These sections are marked with a dark orange color, and the section removed from the online version is written on a light orange background.
<u>JUSTIFICATION</u>	For the texts which may occur confusion or misunderstanding, may specified in the AS9120 Rev.B Standard like as an article text or a title of the section, but placed out of Loran Aerospace quality management capabilities, Loran makes corrective explanations to eliminate the differences. These texts are published under the heading of <u>JUSTIFICATION</u> , in red and underlined , together with the Warning Logo .



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

0.2. COMMITMENT

I, owner and officer of Loran Aerospace Incorporated, and we accept the responsibility to our profession and aerospace communities we serve and taking full accountability in our mission to advance the state of aerospace science, aviation standards and engineering, technology, operations. We do hereby commit ourselves to the highest ethical and professional conduct as outlined in the commitment topics below:

- ✓ We will hold paramount the safety, health, and welfare of the employees in the performance of their duties.
- ✓ We will act as an honest and fair service supplier in all professional interactions.
- ✓ We will reject bribery, fraud, and corruption in all their forms and avoid unlawful conduct in professional activities.
- ✓ We will properly credit the customers, accept honest and constructive criticism of technical work, and acknowledge and correct errors promptly.
- ✓ We will issue statements or present information in an objective and truthful manner, based on customer requirements and aerospace standards.
- ✓ We will undertake only the projects which our capabilities authorized and qualified.
- ✓ We will receive regular training in every field deemed necessary for continuous development.
- ✓ We will criticize ourselves before our customers' criticism, identify our mistakes and deficiencies and take the necessary precautions.
- ✓ We will develop and embed a business culture in all our activities that recognizes the importance and value of effective quality management and always acknowledges that customer satisfaction and legal regulations are paramount.
- ✓ We will clearly define for all staff their accountabilities and responsibilities for the development and delivery of quality management strategy and performance.
- ✓ We will always minimize the risks associated with our quality management to a point that is as low as reasonably practicable/achievable.
- ✓ We will actively develop and improve our quality management processes to conform to customer satisfaction, legislative and regulatory requirements and aerospace standards.
- ✓ We will ensure that all staff are provided with adequate and appropriate information and training, are competent in aerospace standards and are only allocated tasks commensurate with their skills.
- ✓ We will establish and measure our quality management performance against realistic objectives and/or targets, and we will continually improve our quality management performance.

Hasan Demir
Owner
General Manager



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

0.3. CORE VALUES & MISSION & VISION

VALUES

- ✓ We value each other as people and appreciate the skills and perspectives we each bring to the team.
- ✓ We will always do our best, giving our full attention to the quality of every job, every outcome, and every relationship.
- ✓ Customer satisfaction is our primary objective and guiding principle. We must continually focus on:
 - listening to our customers, anticipating and understanding their requirements, and meeting their needs by being available and responsive,
 - contributing to their success through targeted initiatives and personalized support,
 - we provide the highest level of service and support to our customers.
- ✓ We each accept the responsibility for our actions and for working to achieve desired results and goals,

MISSION

- ✓ We prioritize aviation standards and requirements,
- ✓ We never compromise on quality to be competitive in cost,
- ✓ We create and maintain a fully traceable and measurable work discipline,
- ✓ We make high technology investments in line with aviation requirements,
- ✓ We ensure job and employee safety,
- ✓ We provide timely and complete delivery,
- ✓ We comply with local and international laws and standards.

VISION

In the aviation industry, servicing of hardware parts is a pioneering service provider that meets all standard requirements within its own structure and does not compromise on quality or international standards.



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

0.4. QUALITY POLICY

- ✓ Loran's Quality Policy reflects our mission and core business values in the aerospace industry.
- ✓ We are committed to providing dependable, traceable, and timely products while consistently meeting customer, statutory, and regulatory requirements.
- ✓ We are committed to consistently meeting customer and regulatory requirements and strive to enhance customer value by continually improving our business processes and delivering safe, reliable products.
- ✓ Through the effective implementation and continual improvement of our Quality Management System in accordance with AS9120 Rev. B, we ensure that every product delivered meets the highest standards of quality and reliability.
- ✓ This commitment reinforces our ongoing pursuit of excellence and customer satisfaction with every.

The top-level requirement that directs our entire quality management system is our Quality Policy. Loran Quality Policy is reviewed annually, and it is discussed in the management review meetings.

0.5. KEY BENEFITS OF AS9120 REV.B STANDARDS FOR LORAN AEROSPACE

The AS9120 Rev.B Standards provide us to assurances:

- ✓ Loran adheres to specific requirements and procedures to ensure safe and reliable product delivery,
- ✓ Loran is able to meet customer expectations with respect to quality, cost, delivery, and service,
- ✓ Loran can supply the products which are handled properly through the chain of custody, traceability, and the availability of records,
- ✓ Understanding and consistency in meeting requirements,
- ✓ Consideration of processes in terms of added value,
- ✓ Effective process performance,
- ✓ Improvement of processes based on evaluation of data and information,
- ✓ Efficient handling of documentation and records,
- ✓ Detecting opportunities for operational improvements and reduction of costs,
- ✓ Eliminate and mitigate business risks.

0.6. QUALITY MANAGEMENT PRINCIPLES

The AS9120 standard applied by Loran is based on the quality management principles described in ISO 9001. Loran Aerospace company working discipline is defined by processes, procedures and application forms in its own context in each process. While applying these principles, it is our basic principle to increase the performance of Loran, to meet aviation standards and customer requirements.

The main quality management principles of Loran Aerospace are as follows:

- ✓ Customer orientation,
- ✓ Procurement management,
- ✓ Leadership,
- ✓ Employee participation,
- ✓ Process approach,



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

- ✓ Configuration management,
- ✓ Continues development,
- ✓ Evidence-based decision making,
- ✓ Relationship management
- ✓ Reporting and accountability.

Loran Aerospace establishes, implements, maintains and continually improves a quality management system, including the processes and interactions needed.

Loran's quality management system also meets customer and applicable legal and regulatory quality management system requirements.

0.7. PROCESS APPROACH

ANNEX 1: Process Value Diaphragm

Loran Aerospace **Quality Management System (QMS)** promotes the adoption of a process approach when developing, implementing, and improving the effectiveness of a quality policy, to enhance customer satisfaction by meeting customer requirements.

Loran is dedicated to improving our customer service commitment by recognizing that the parts we supply play a critical role in our customers operations. It is our commitment to provide the highest quality parts and the most complete airworthiness documentation in the industry. We pride ourselves in responding to the needs of the customer quickly and completing customer orders on time:

- ✓ consistently provide products that meet customer expectations and applicable regulatory requirements, and
- ✓ enhance customer satisfaction through effective application of the quality system, including processes for continual improvement of the system and assurance of conformity to customer and applicable regulatory requirements.
- ✓ The requirements of the AS9120 Standards are implemented through written quality manual, procedures, forms and work instructions where applicable.

To deliver on our commitment to total customer focus we constantly work on our internal processes to maximize their effectiveness and efficiency. We recognize that it takes countless individual activities to deliver our products and services and that the process approach ties them all together.

Several key processes make up our business. Our processes depend on one another and individually need continual attention and improvement. We constantly challenge ourselves to refine and change how we do things to reduce the time it takes to get something done with the fewest errors. When errors do occur, we use them as opportunities to learn and improve.

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

0.8. PLAN – DO – CHECK – ACT (PDCA)

ANNEX 2: Plan-Do-Check-Act (PDCA) Cycle

In supporting continual improvement, Loran encourages the Plan-Do-Check-Act (PDCA) cycle. This tool can be utilized to develop new processes based upon customer requirements or may be used as a problem-solving tool when there is a need to improve performances. A brief description of the PDCA is as follows:

Plan:

- Establish the objectives and processes needed to provide the desired results in accordance with the customer requirements, Loran Quality Management Policy (QMP), or performance expectations,
- Develop a measurement process to measure the process performance and the objective,
- Identify alternatives solutions, evaluate, and determine what needs to be done to achieve the desired results.

Do:

- Implement the determined solution. Plan the implementation – Who, What, When, Where, & How Schedule of events (Training)

Check:

- Monitor and measure the new or revised process or product against policies, objectives, and/or requirements,
- Measure the process, study the results. Did the new process resolve the issue?
- Were any new problems created?
- Was the change beneficial for costs/benefits?

Act:

- If it worked, institutionalize / standardize the change,
- If it didn't, try something else,
- Repeat the PDCA cycle



The Plan–Do–Check–Act cycle (See annex 2) is a four-step model for carrying out change. Just as a circle has no end, the PDCA cycle should be repeated and again for continuous improvement.

0.8.1. When to Use Plan-Do-Check-Act

- As a model for continuous improvement.
- When starting a new improvement project.
- When developing a new or improved design of a process, product or service.
- When defining a repetitive work process.
- When planning data collection and analysis in order to verify and prioritize problems or root causes.
- When implementing any change.



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

0.9. RISK BASED THINKING

Loran Aerospace manages its risk management in accordance with the **ISO 31000 Risk Management Standard**. Depends on this standard, Loran defines the concept of Risk-Based Thinking as carrying out corrective actions to eliminate potential nonconformities, analyzing any nonconformities that occur, and preventing the recurrence of the nonconformity by performing appropriate actions and obtaining opportunities from these nonconformities, and its management system is based on risk-based thinking. In this direction, the concept of risk-based thinking covers the determination of the risk by Loran Aerospace as an organization, the decision of whether to act or not, and then taking action.

Loran is based on risk-based thinking in the following cases and carries out risk management as an integral part of the company's operation, inclusive and dynamically:

- ✓ During strategic planning,
- ✓ During planning for product and service suitability,
- ✓ During the management review,
- ✓ Corrective action processes.

Loran Aerospace has recognized that risk-based thinking is essential to achieve an effective quality management system. Loran interprets the concept of risk-based thinking as taking preventive measures to eliminate potential nonconformities and analyzing nonconformities as taking precautions and giving necessary trainings to avoid these nonconformities in the future.

Loran Aerospace plans and implements actions that address risks and opportunities to comply with **AS9120 Rev.B Standards**. It is the basis for addressing both risks and opportunities, improving the effectiveness of the quality management system, achieving improved results and preventing negative effects.

Loran Aerospace evaluates risks and opportunities together. Opportunities can arise as a result of a favorable outcome, for example, a set of conditions that allow Loran to attract customers, develop services, reduce waste, or increase productivity. Actions to address opportunities may also include considering associated risks. Risk is the effect of uncertainty, and such uncertainty may have positive or negative effects. A positive deviation from a risk can provide an opportunity, but not all positive effects of the risk lead to opportunities.

0.10. TRACEABILITY IN LORAN QUALITY MANAGEMENT SYSTEM

Loran aims to ensure the traceability of all its processes to establish an effective, sustainable, reliable, and open-to-improvement quality management system. In this direction, the codification of forms and traceability are vital for Loran process management.

- ✓ **Forms, Documents and Procedures:** All forms, documents and procedures within the quality management system have a reference number (Document and Form Tracking Table (Form No: 030120))
- ✓ **Project Traceability:** In the Loran ERP system, traceability is provided with the same reference number, starting from the quotation stage until the package slip (including CofC) document.

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02



In the scope of the same project, if necessary to create and follow a corrective action, non-conformity, material return authorization (RMA), counterfeit part or suspect counterfeit part process, the system can create with the same reference number. The code of the forms is giving by the system automatically or manually entered.

- ✓ **In the scope of the same project**, Loran Aerospace always uses the **same reference number** in the forms below to establish a secure and dependable project traceability and process security.
 - Quotation,
 - Proforma Invoice (Invoice),
 - Purchase Order,
 - Inventory-In Voucher,
 - Inventory-Out Voucher,
 - Package Slip includes CofC,
 - Claim and Support requests if applicable,
 - Corrective Action if applicable,
 - Return Material Authorization if applicable,
 - Non-Conformity Form if applicable,



Loran quality policy is based to creating a corrective action and immediate preventive decisions against all nonconformity experienced.

0.11. IMPORTANCE OF COMPANY REPORTS

Ref.: Loran ERP → Project Management → Company Reports

Company Reports is a section in the Loran ERP system where both customers and suppliers are evaluated, reported, and provided recommended management decisions as needed.

This reporting is not for legal purposes; it is only to prevent negative situations and scenarios that may arise during Loran project management.

For Loran, concrete evidence(s) must be required to list a company and halt its business operations.

For Suppliers:

- ✓ Suppliers that supply inappropriate products and provide misleading information about the authenticity of the product.
- ✓ Suppliers who provide products with fake or forged traceability documents.
- ✓ Companies that supply products with their own CofC without supplying manufacturer documents.

For Customers:

- ✓ Companies that provide contradictory or fake end-user documents.
- ✓ All companies or persons are listed as "Entity Listed (Blacklisted)" in the International Trade Administration search platform.
- ✓ Customers who inquire about the same products with companies are added to blacklists.

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

QUALITY MANAGEMENT SYSTEM (QMS) – REQUIREMENTS

1. SCOPE

While Loran establishes a quality management system, it is based on ISO 9001:2018 quality management system requirements, AS9100 Rev.D aviation, space, and defense industry standards, and the OEM requirements, definitions, and notes.



If there is a conflict between the requirements of AS9120 Rev.B Standards and customer or applicable statutory or regulatory requirements, the Customer Requirements and Legal Requirements shall take precedence. This situation may require Configuration Management.

Loran QMS covers the following topics:

1. How all managerial and other processes should be within the scope of Loran management and the working environment,
2. Keeping the processes and all related stages under record, documenting, and ensuring their traceability,
3. Risk - Opportunity management,
4. Ensuring personnel participation in the company's working discipline,
5. Customer relations and satisfaction,
6. Supplier relations and management,
7. Management decisions and management review meetings,
8. The company reports to prevent any faults in project management processes,
9. Process control, reporting, and analysis,
10. Delivery and post-delivery relations,
11. Analysis of internal and external audit processes and results,
12. Analysis of management review decisions and results,
13. Establishing corrective action against the problems encountered during the operation of the company and examining the root causes of the problems,
14. Human resource management and trainings,
15. Customer claims (nonconformity and warranty)



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

2. NORMATIVE REFERENCES

Ref.: Loran ERP → Document Management → File Management → AS9120 (2026) → Standards

The following standards and documents were used as a reference during the preparation of the Quality Management System. The final (most recent) version of the standards is basic for all standards.

Standard	Description of the Standard
AS9100	Quality Management Systems - Requirements for Aviation, Space, and Defense Organizations
AS9120	Quality Management Systems – Requirements for Aviation, Space, and Defense Distributors
ISO 31000	Risk Management Guideline
SAE ARP9134	Supply Chain Risk Management Guideline
AS9131	Aerospace Series – Quality Management Systems – NonConformity Data Definition and Documentation
AS13000	Problem Solving Requirements for Suppliers
SAE ARP9136	Aerospace Series – Root Cause and Problem Solving (9S Methodology)
AS6832	Counterfeit Material, Assuring Acquisition of Authentic and Conforming Fasteners
AS6174	Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel
AS9163	Aerospace Series - Certificate of Conformity Requirements
ISO 10002	Quality management — Customer satisfaction — Guidelines for complaints handling in organizations
ISO 10007	Quality management — Guidelines for configuration management
AS9146 2017-04	Foreign Object Damage (FOD) Prevention Program - Requirements for Aerospace and Defense Organizations Standard



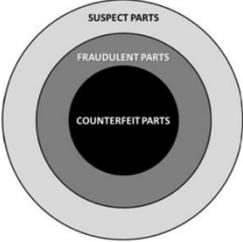
AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

3. TERMS AND DEFINITIONS

Term	Definition
Authorized Release Certificate	Document attesting that a product is released for use (e.g., release or return to service) and certifying that the activities performed, and the results achieved, conform to established organization, regulatory, and customer requirements.
Nonconformance	A condition of any article, material or service in which one or more characteristics do not conform to requirements specified in the contract, drawings, specifications, or other approved product description. Includes failures, discrepancies, defects, anomalies, and malfunctions. Loran Aerospace uses the SAE AS9131 (Rev.D) Aerospace Series - Quality Management Systems - Nonconformity Data Definition and Documentation for Nonconformance processes.
Disposition	Appropriate action to resolve the nonconformance.
Product Safety	Maintaining the state of product so that it is able to perform to its designed or intended purpose without causing unacceptable risk of harm to persons or damage to property.
Splitting	The division of product either physically or by batch quantity, without affecting the product characteristics or conformity.
Unapproved Part	A part that was not produced or maintained in accordance with approved or acceptable data and applicable statutory, regulatory, and customer requirements.
CAR	Corrective Action Report
Root Cause	The fundamental deficiency or failure of a process that when resolved, prevents or significantly reduces the likelihood of recurrence of the problem.
Root Cause Corrective Action	Root cause corrective action (RCCA) is an effective process for finding the causes of an event and facilitating effective corrective actions to prevent recurrence.
8D Problem Solving	A problem-solving model establishes a permanent corrective action based on statistical analysis of the problem and focuses on the origin of the problem by determining its root causes. Although it originally comprised eight stages, or disciplines, the eight disciplines system was later augmented by an initial planning stage. The purpose of the 8D methodology is to identify, correct, and eliminate recurring problems, making it useful in product and process improvement. Loran Aerospace uses the SAE AS13000 (2014-05) Problem Solving Requirements for Suppliers Standard for CAR processes.
Failure Event	The failure event is a description of the problem that Loran team is analyzing.
Supplier	External provider of goods, processes or services. This may include outsourced services, contract employees, and vendors. The party to the purchase agreement supplying material, parts, assemblies, subassemblies, systems, or services in accordance with the provisions of the purchase order.
Approval Status	Currently there are three possible approval status designations, i.e., Approved Supplier, Conditionally Approved Supplier, and Cancelled Supplier.
Approved Supplier	Suppliers whose have a score depending on the on-time delivery and product quality with a minimum of 75 or Maximum 1 product rejection within a year.
Conditionally Approved Supplier	They are the suppliers classified as supplier can supply the products of Purchase Exceptional or the supplier whose newly starts the work with Loran and will deliver their first products. Their supplier score is between 50-75.
Cancelled Supplier	Suppliers whose scores are below 50. The cancelled supplier term covers all companies that provide counterfeit products and or forge traceability documents, and or cannot provide adequate technical support and warranty.
Approval Scope	Approval scope indicates the process(s), product(s), service(s) and/or product/service family(s)for which the supplier is approved.
Purchasing Exception	If the product is not available from another company in the market, or the product is " hard to find ", or the customer has a special supplier request for the product, Loran carries out the product order subject to the approval of the Senior Management, except for the supplier being an

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information
Revision No	03	Revision Date	12.20.2025	Cancelled Revision 02

	"approved" supplier. These suppliers are classified as " Conditionally Approved " suppliers for Loran. If traceability is unavailable, or the documentation is suspected of being falsified, Loran discontinues efforts to procure the part.
Traceability	The traceability term is a capability to track and document the history, location and (if exist) usage of the product or the materials from the manufacturing stage to (if exist) the distributors/suppliers and to the current end-user.
Certificate of Conformity (CoC/CofC)	It is also known as a Certificate of Compliance or Certificate of Conformance, is a document that verifies that a product or service meets required standards or specifications. The document may include information such as manufacturer, distributor, quantity, lot and/or date code, inspection date, etc., and is signed by a responsible party for the supplier. Loran carries out its policy covering the preparation, preservation and transmission of CoC documents to the customer in accordance with the AS9163 2022-12 Standard.
Certificate of Origin (CoO)	It is an origin country declaration for supplied product.
Materiel	In our QMS, refers to material, parts, assemblies, and other procured items (except for electronic and chemical parts).
Manufacturer	In our QMS, refers to the point of origin of any materiel covered by the standard, including factories, mills, foundries, mines, chemical plants, laboratories, etc.
	Suspect Materiel: Materiel, items, or products in which there is an indication by visual inspection, testing, or other information that it may meet the definition of fraudulent materiel or counterfeit materiel provided below.
	Fraudulent Materiel: Suspect materiel misrepresented to the customer as meeting the customer's requirements.
	Counterfeit Materiel: Fraudulent materiel that has been confirmed to be a copy, imitation or substitute that has been represented, identified, or marked as genuine, and/or altered by a source without legal right with intent to mislead, deceive or defraud.
Identity	Information such as the current design authority, original manufacturer, trademark or other intellectual property, performance, unique item identifier, part number, date code, lot number, testing methods and results, inspection, documentation, warranty, origin, ownership history, packaging, storage, handling, physical condition, previous use, etc.
Authentic	Produced with legal right or authority granted by the legally authorized source.
Aftermarket Manufacturer	A manufacturer that meets one or both of the following criteria: The manufacturer is authorized by the original manufacturer to produce and sell replacement materiel, usually due to an original manufacturer decision to discontinue production of materiel. Materiel supplied is produced from dies, molds, or other manufacturing equipment that has been: transferred from the original manufacturer to the aftermarket manufacturer, produced by the aftermarket manufacturer using original manufacturer tooling and intellectual property (IP), or produced by the aftermarket manufacturer through redesign to match the original manufacturer's specifications without violating the original manufacturer's intellectual property rights (IPR), patents, or copyrights. The manufacturer produces materiel by emulating or reverse-engineering obsolete materiel to satisfy continuing customer needs without violating the original manufacturer's intellectual property rights, patents, or copyrights.
Authorized Reseller	An entity who has a legally binding relationship with the legally authorized source but does not provide direct product support to the customer.
Authorized Supplier	Aftermarket manufacturers as defined above, and suppliers authorized by the current design activity or the original manufacturer to produce and/or sell materiel.
Certificate of Authenticity	A statement to the effect that all materiel items listed above furnished on this contract are genuine, new and unused unless otherwise specified in writing herein; are suitable for the intended purpose; are not defective, suspect, or counterfeit; have not been provided under false pretenses; and have not been materially altered, damaged, deteriorated, or degraded.



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

Disposition	Decisions made by authorized representatives within an organization concerning future treatment of nonconforming materiel. Examples of dispositions are to scrap, mutilation, use-as-is (normally accompanied by an approved variance/waiver), retest, rework, repair, or return-to-supplier.
Original Manufacturer	An organization that designs and/or engineers and produces materiel and is pursuing or has obtained the intellectual property rights to that materiel. Notes: The materiel and/or its packaging are typically identified with the original manufacturer's trademark. Original manufacturers may contract out manufacturing and/or distribution of its product. Different original manufacturers may supply product for the same application or to a common specification.
Supply Chain Traceability	Documented evidence of materiel's supply chain history. This refers to documentation of all supply chain intermediaries and significant handling transactions, such as from original manufacturer to distributor, or from excess inventory to broker to distributor.
Heat Number	The heat number is used to trace the material's origin to ensure metal quality. It's similar to a batch number as it relates to quality control in manufacturing facilities. This number should match the number that is printed or stamped on the surface of the material.
Uncertainty	Lack of understanding of an event or its knowledge, outcome or probability. It should not be confused with measurement uncertainty.
Risk	Negative impact of uncertainty
Opportunity	The positive effect of uncertainty
Controlled Document	All documents reviewed and approved before they are published for use or reference.
UN-Controlled Document:	All documents or forms which are need to approval before the use.
Interested Party	The companies who buy the products from Loran, or the companies who supply the products to Loran, or any parties which have in a relationship with Loran Aerospace.
Foreign Object Damage (FOD)	All kinds of non-process tools, consumables, equipment, product protective devices, personal items, product process wastes, operational wastes, environmental residues are considered as foreign objects as Damage Objects.
Configuration	It is a documented information covers the technical and physical specifications of the product. This documented specs are open for the distributors and customers, to avoid any fault or mis-ordering process.
Calibration	Calibration is the process of configuring an instrument to provide a result for a sample within an acceptable range.

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

4. CONTEXT OF THE ORGANIZATION

4.1. Understanding the Organization and Its Context

When determining the boundaries of the scope of the QMS by Loran, internal and external issues are considered with their positive and negative results. As a result of continuously developing approach, Loran Aerospace regularly reviews and analyzes its key aspects to determine the strategic direction of the company.

Loran Aerospace evaluates **Internal (strengths and weaknesses)** and **External (opportunities and threats) issues** in the **SWOT Analysis table**.

[ANNEX 3: SWOT Analysis Table](#)



The reason why SWOT analysis is used by Loran Aerospace

SWOT analysis allows us to see the internal strengths and weaknesses, and to start thinking about external opportunities and threats that may affect the performance of our QMS. At the same time, SWOT Analysis allows us to discover the differences between Loran and its competitors.

Those that present risks and/or opportunities are initially addressed by top management, recorded on the Risk Register in ERP system and then monitored through the Risk Register in ERP and Management Review meetings.

4.2. Understanding the Needs and Expectations of Interested Parties

Who is the Interested Party?

The companies who buy the products from Loran, or the companies who supply the products to Loran, or any parties which have in a relationship with Loran Aerospace.

Information and documents containing interested parties are used by top management to determine the strategic direction of the company. This is defined in the Management Review Meeting and is updated periodically as conditions and situations change.

[ANNEX 4: Interested Parties and Relevant Requirements Table](#)

Interested Parties

This requires an understanding of internal and external issues concerning Loran. Loran Aerospace are defined the interested parties in the documents listed below:

- ✓ Quotation,
- ✓ Proforma Invoice (Invoice),
- ✓ Purchase Order,
- ✓ End User Statement,
- ✓ Inventory-In Voucher,
- ✓ Inventory-Out Voucher,
- ✓ Package Slip includes CofC,
- ✓ Claim and Support requests if applicable,
- ✓ Corrective Action if applicable,

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

- ✓ Return Material Authorization if applicable,
- ✓ Non-Conformity Form if applicable,

4.3. Scope of Loran Quality Management System

When determining the boundaries of the scope of the QMS by Loran, the following significant factors are considered:

- ✓ Internal Issues,
- ✓ External Issues,
- ✓ Interested Parties,
- ✓ Requirements of the Interested Parties,
- ✓ Products available from Loran:

Loran Business Scope/Capabilities: Distribution of Aerospace Hardware and Components for Commercial Platforms. Loran is a company that supplies hardware and fasteners in the field of aerospace industry. Loran's quality policy and all processes applied in the system cover fastener group products and their raw materials. Loran quality policy applies to metallic and non-metallic components that mechanically attach two or more objects whose fasteners are defined as United States Federal Supply Classification Group codes as shown in the following list:

- ✓ 5305 Screws
- ✓ 5306 Bolts
- ✓ 5307 Studs
- ✓ 5310 Nuts and Washers
- ✓ 5315 Nails, Machine Keys, and Pins
- ✓ 5320 Rivets
- ✓ 5325 Fastening Devices
- ✓ 5340 Miscellaneous Hardware (specific parts in this hardware industry code are applicable, including, but not limited to, clamps)

Products Excluded from Loran Scope



*Electronic components and their all-sub-equipment (connectors, cables, etc.),
Chemical products,
Nuclear products and their spare parts,
Products containing mercury or similar environmentally harmful components,
Shelf-Life Expired Products cannot be procured and sold even if the product is in its original package.
Obsoleted products,
Serviceable or As-Is (AR) conditioned products.*

Excluded Articles – Excluded Capabilities:

8.3 Design and Development

Loran Aerospace does not design or develop products for our customers, Loran Aerospace Inc. purchases and sells components per manufacturer specifications.

8.5.1.1 Control of equipment, tools and software programs

Loran Aerospace does not use any automated equipment to monitor, control or measure activities. There is no production of materials.

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

4.4. Quality Management System and Its Processes

Loran Aerospace has established, documented and implemented a Quality Management System (QMS) in accordance with ISO 9001: 2015 International standards and SAE AS9120 Rev.B requirements. Loran quality management system also meets customer, legal and regulatory quality management system requirements.

Loran Aerospace maintained and continuously improved the Quality Management System through quality policy, quality targets, audit results, data analysis, corrective and preventive action and review of management.

Loran Aerospace has adopted a Process Approach for its management system. Loran identifies the top-level processes and then manages each of them confidentially; this reduces the potential of unsuitable products or services discovered during final processes or post-delivery. Non-conformances and risks are identified in real time by actions taken in each of the top-level processes.

Top-Level Processes

- ✓ Quality Management,
- ✓ Quality Control Laboratory Management,
- ✓ Sales and Marketing,
- ✓ Purchasing,
- ✓ Order Fulfillment,

Each process can be supported by other activities, such as tasks or sub-processes. Monitoring and control of top-level processes ensures effective implementation and control of all sub-tasks or sub-processes.

Each top-level process has a process description that includes:

- ✓ Applicable inputs and outputs expected from these processes,
- ✓ Determine the sequence and interaction of these processes,
- ✓ Process owners responsible and authorized for these processes,
- ✓ Applicable risks and opportunities,
- ✓ Identifying critical and supportive resources of the processes,
- ✓ Criteria and methods used to ensure the effectiveness of the process,
- ✓ Determine and apply the criteria and methods (including monitoring, measurements and related performance indicators) needed to ensure the effective operation and control of these processes,
- ✓ Evaluate these processes and implement any changes needed to ensure that these processes achieve their intended results,
- ✓ Quality objectives related to the process

Process objectives have been developed considering the following:

- ✓ To be consistent with the quality policy,
- ✓ Being measurable,
- ✓ Consider current requirements,



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

- ✓ Being concerned with the suitability of products and services and increasing customer satisfaction,
- ✓ Being traceable,
- ✓ To be accessible,
- ✓ To be properly updated.



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

5. LIDERSHIP

5.1. Leadership and Commitment

5.1.1. General

Loran Aerospace top management actively participated in the implementation of the Quality Management System (QMS). Our top management provides a vision and strategic direction for the growth of the QMS and establishes quality targets and quality policy.

Our top management holds the ultimate responsibility for the quality management system. Our top management is dedicated and committed to ensuring that our quality management system is effective, understood and improved. Our company's values, vision and mission commitments are our top management's biggest responsibility commitment for our QMS.

Ref.: Loran Quality Manual → 03. Core Values & Mission & Vision

Top management includes the following members, and authorization letters are also available in the Loran ERP system.

- ✓ Owner
- ✓ Assistant Manager (Management Representative)
- ✓ Quality Control Manager
- ✓ Customer Support and Procurement Manager

Loran Aerospace leadership approach describes how top management continues to lead and commit to the improving of the QMS. While the Loran leadership approach is implemented by top management, it covers the following issues:

- ✓ To be responsible for the effectiveness of the quality management system,
- ✓ To ensure that the Quality Policy and quality objectives for the management system are established and compatible with the strategic direction and context of Loran Aerospace,
- ✓ To ensure that our work environment is sufficient to achieve conformity and safety of our people, products and quality targets,
- ✓ Ensuring that the decisions taken at management review meetings are effectively implemented,
- ✓ To ensure the integration of management system requirements into other business processes as deemed appropriate,
- ✓ To raise awareness of the process approach,
- ✓ To ensure that the necessary resources are available for the management system,
- ✓ To Report the importance of effective quality management and compliance with management system requirements,
- ✓ To ensure that the management system achieves its intended results,
- ✓ To encourage, direct and support employees to contribute to the effectiveness of the management system,
- ✓ To promote continuous improvement,
- ✓ To support other relevant management roles to demonstrate their leadership as they apply to their areas of responsibility,
- ✓ To be held responsible for the effectiveness of the quality management system,
- ✓ To ensure that quality policy and quality targets are established for the quality management system and that Loran is compatible with its context and strategic direction,



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

- ✓ To ensure the integration of quality management system requirements into Loran's business processes,
- ✓ To encourage the use of process approach and risk-based thinking,
- ✓ To ensure that the necessary resources are available for the quality management system,
- ✓ To communicate the importance of effective quality management and compliance with quality management system requirements,
- ✓ To ensure that the quality management system achieves its intended results,
- ✓ To support employees to contribute to the effectiveness of the willing, guiding and quality management system,
- ✓ To promote development,
- ✓ To support other relevant management roles to demonstrate their leadership as they apply to their areas of responsibility.

5.1.2. Customer Focus

Loran top management, to determine customer needs and expectations, transform them into QMS requirement and defined them as the Customer Focus Approach to increase customer satisfaction. Loran Aerospace carries out its customer relations and satisfaction process in accordance with the **ISO 10002 Customer Satisfaction Standard**.

Our top management demonstrates the leadership approach and commits to ensure that all applicable customer requirements are met, risks and opportunities are addressed, and the focus on customer satisfaction is maintained. Our top management carries out customer requirements through our QMS Plan, ERP Risk Register, Process Plans and Quality Policy.

Our top management takes the following topics into consideration when determining customer requirements:

- ✓ Customer and applicable legal and regulatory requirements are identified, understood and met consistently,
- ✓ Risks and opportunities that may affect the suitability of products and the ability to increase customer satisfaction are identified and addressed,
- ✓ Maintaining the aim of increasing customer satisfaction,
- ✓ If the planned results cannot be achieved, customer performance is evaluated,
- ✓ Focus on increasing customer satisfaction.

Loran has prepared a **Customer Satisfaction Survey**, which is open to all customers on its website, to measure and maintain customer satisfaction regularly. The results of this survey are collected in the Loran server database and evaluated at Management Review meetings or external meetings.

While Loran determines customer satisfaction based on the feedback it receives from its customers through the Customer Satisfaction Survey, Loran also scores itself on a project-by-project basis according to product suitability and on-time delivery criteria.

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

Loran ERP – Customer Portal Capabilities



[Knowledge Base](#)
[My](#)
[Trainings](#)
[Projects](#)
[Invoices](#)
[Quotation](#)
[Support](#)
[Shipments](#)
[Warranties](#)
[Properties](#)

Files
 Calendar

One of the biggest advantages of the Loran ERP System is its extensive capabilities for customers. The customers can manage the following actions through the Loran ERP system:

- Knowledge Base:** the customers can reach Loran's policies 7x24 bases,
- My Trainings:** the customers can participate the trainings prepared by Loran team,
- Projects Management (Projects with Documents, Invoices, Quotations, Shipments, and Warranties):** the customers can reach the quotations, invoices, financial statements etc.
- Support:** the customers can manage their all type of support requests including the nonconformity claims and corrective action processes.
- Properties:** the customers can see and manage their all properties with Loran in the scope of the projects.

5.2. Policy

5.2.1. Establishing Quality Policy

Loran Aerospace Quality Policy is planned and implemented to provide a framework for setting quality goals by top management, and it is in line with Loran's purpose and context and supports its strategic direction.

Loran's Quality Policy includes a commitment to meeting applicable requirements and a continuous improvement commitment to the quality management system.

LORAN QUALITY POLICY



- ✓ Loran's Quality Policy reflects our mission and core business values in the aerospace industry.
- ✓ We are committed to providing dependable, traceable, and timely products while consistently meeting customer, statutory, and regulatory requirements.
- ✓ We are committed to consistently meeting customer and regulatory requirements and strive to enhance customer value by continually improving our business processes and delivering safe, reliable products.
- ✓ Through the effective implementation and continual improvement of our Quality Management System in accordance with AS9120 Rev. B, we ensure that every product delivered meets the highest standards of quality and reliability.
- ✓ This commitment reinforces our ongoing pursuit of excellence and customer satisfaction with every.

*The top-level requirement that directs our entire quality management system is our Quality Policy.
Loran Quality Policy is reviewed annually, and it is discussed in the management review meetings.*

5.2.2. Communicating the Quality Policy

Loran provides all its personnel with access to the ERP system within the scope of their duties and authorities. There is an in-company communication channel open only to the Loran server through the ERP system.

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>
Revision No	03	Revision Date	12.20.2025	Cancelled Revision 02

- ✓ All personnel can access Loran company policy through the in-company training department,
- ✓ In-Service and QMS **trainings** are also part of the quality policy,
- ✓ To maintain high standards in our establishment, **warning signs** have been placed at important places throughout the facility,
- ✓ **Job descriptions** define the responsibilities and powers of each position in the organizational chart. Job descriptions and organization chart are reviewed and approved by top management in terms of qualification,
- ✓ An **organizational chart** showing the mutual relationship of the staff in the organization has been created.

5.3. Organizational Roles, Responsibilities, and Authorities

Ref.: Loran ERP → Property Management → Staff Authorizations

Loran Aerospace has adopted an organizational responsibility and delegation of authority approach as required by the company operation and quality system. Accordingly, Loran has been divided into departments and responsible persons have been assigned within each department. By transferring top management authority to the responsible persons, it has ensured that the operating processes of the company are carried out in a more comfortable and easier but disciplined manner.



While distributing duties and authorities, Loran top management targets the following:

*Compliant with aviation standards and targeted outputs,
Increasing customer satisfaction,
Quality policy developer*

In addition, when QMS responsibilities and authorities are distributed within Loran, these assignments are made clearly and clearly to the relevant person and are kept regularly updated in the ERP system.

The following general QMS responsibilities and powers are assigned within Loran Aerospace as follows:

TASK DESCRIPTION	RESPONSIBLE
Ensuring that the management system complies with applicable standards	Top Management
Ensuring that processes deliver their intended output	Current process officers
Reporting the performance of the management system and providing opportunities for improvement of the management system	Quality Assurance Manager
Promoting customer orientation throughout Loran	Top Management
Ensuring that the integrity of the management system is maintained when changes are planned and implemented	Top Management



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

6. PLANNING

6.1. Actions to Address Risks and Opportunities

6.1.1. Loran Risk Management Policy

Ref.: 200724 - RISK MANAGEMENT PROCEDURE REV.02

Loran interprets the concept of “risk” as follows:

Risk is the combination of loss and severity consequences arising from potential situations and the degree of harm.

Risk management is not just a simple subject for Loran Aerospace; risk management forms the basis of the Loran Quality Management System, and risk assessment is made in all processes while start in taking a new decision. Loran top management plans, implements, and regularly controls the processes to establish an effective and efficient quality management system.

Loran carries out its risk management in accordance with the **ISO 31000 Risk Management Standard**.

While managing Risk Policy, Loran considers AS9120 Rev.B Article 4.1 (4.1. Understanding the Organization and Its Context) and Article 4.2 (4.2. Understanding the Needs and Expectations of Interested Parties). Loran keeps and manages all records related to the risk management process on the **ERP system**.

The purpose of the Loran Risk Management Policy is to create and protect value, it also improves performance, encourages innovation, and supports achieving objectives. The risk management policy for Loran QMS is based on **Principles, Leadership, and Process** pillars. These three trivets have a manageable and updatable structure that complies with Loran quality targets.

ANNEX 5: Loran QMS and Risk Management Policy Diagram

Risk Types: Loran QMS defines the types of risks that may be experienced during management processes as follows.

Total Risk	The sum of identified and unidentified risks.
Identified Risk	Risk that has been determined through various analysis techniques. The first task of system safety is to identify all possible risks within practical limitations.
Unidentified Risk	A risk that has not yet been identified. Some unidentified risks are subsequently identified when a mishap occurs, and some are never known.
Unacceptable Risk	Risk that the managing activity cannot tolerate. It is a subset of identified risks that must be eliminated or controlled.
Acceptable Risk	Acceptable risk is the part of the identified risk that is allowed to persist without further engineering or management action. Making this decision is a difficult yet necessary responsibility of the managing activity. This decision is made with full knowledge that is the user who is exposed to this risk.
Residual Risk	Residual risk is the risk left over after system safety efforts have been fully employed. It is not necessarily the same as acceptable risk. Residual risk is the sum of acceptable risk and unidentified risk. This is the total risk passed on to the user.

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

Risk Threshold (IMPORTANT):



According to Loran Aerospace risk assessment and management policy, Risk Threshold is the **maximum acceptable level** of the risk severity. A **corrective action process** must be started for all risk factors reaching the threshold level. For every risk factor that is equal to or above this level, preventive policies are initiated, and policies aimed at reducing the severity of the risk are implemented by Loran top management. Depending on the severity of risk, implemented policies and results are evaluated in management review meetings or external meetings.

Risk assessment is made by Loran top management in all processes while starting a project or taking a new decision to plan and manage of the process and aims to create new opportunities from the potential risks.

Risk Severity:

The extent of the damage for Loran, its employees, and its quality goals resulting from a risk event occurring.

When planning the quality management system, Loran considers problems and requirements and identifies the risks and opportunities that need to be addressed:

- ✓ Assuring that the quality management system can achieve its intended results,
- ✓ Increasing the desired effects,
- ✓ Prevent or reduce unwanted effects,
- ✓ To ensure improvement, to always renew itself and to follow the daily.

Risk Scale:

ANNEX 5: Risk Scale Table

Loran top management examines the risk analysis in Loran ERP system depending on the Risk Scale it has created according to the Matrix Method. In doing this review, Loran considers its own process operations, aviation requirements, customer requirements and international requirements.

Matrix Method:

ANNEX 6: Risk Matrix Table

Loran Aerospace conducts risk analysis according to the Matrix Method. This risk assessment method is a technique that considers the risks experienced in the past and using workplace / sector statistics. Loran conducts Risk Assessment as follows:

- ✓ Determination of the activity,
- ✓ Determining the risk source (process),
- ✓ Determining the owner of the process,
- ✓ Determination of the risks,
- ✓ Determining the possibilities,
- ✓ Determining the damage (it will cause when risk occurs),
- ✓ Evaluation of the risks,
- ✓ Determining the results of the risk,
- ✓ Deciding the results depending on the risk and determining the measures to be taken.



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

6.1.2. Risk – Opportunity Equation

ANNEX 7: Risk – Opportunity Equation Table

Loran interprets the risk and opportunity approach as follows:

Loran sees the "uncertainty" as neutral (ineffective), but the "risk" has a negative effect of the uncertainty and the "opportunity" as a positive effect of the uncertainty.

Loran Aerospace **identifies the opportunities** depending on the risks to give assurance for the QMS to achieve the desired results, increase the positive effects and implement the continuous improvement.

Loran **determines** the probability, frequency and severity of each of the identified opportunities by considering the risks separately. In the light of the information and Loran collects the data and creating risk preventive decision to turn the risks into new opportunities. Loran keeps and manages all records related to the risk management process on the ERP system.

The Biggest Opportunity of the Very-High Level Risks:

In very-high-risk groups, the priority is to improve the process and reduce the risk value one level. This is the biggest opportunity for Loran from very high risk.

6.2. Quality Objectives and Planning to Achieve Them

6.2.1. General Characteristics of Loran Quality Targets

Loran top management is setting the quality objectives/targets to support the efforts to implement of quality policies. The general characteristics of Loran quality targets are listed in the quality manual, and the quality targets are also kept in the **Measurement Plan** form. The result of the objectives also addressed at the Management Review meeting held annually.

General Characteristics of Loran Quality Targets: Loran takes the following points into consideration when determining the new quality target:

- ✓ To establish a **consistent** quality policy,
- ✓ To establish a **measurable** quality policy,
- ✓ To create a reliable management system that **meets** international standards,
- ✓ To establish a quality policy **targeting** customer satisfaction,
- ✓ To establish a quality policy **targeting** product safety,
- ✓ To establish an **accountable** and **auditable** management system,
- ✓ Ensuring the **traceability** of products and services,
- ✓ To provide healthy and trouble-free **communication** opportunities with customers and suppliers,
- ✓ Establishing a specific, measurable, accessible, realistic and **updateable** quality policy,
- ✓ A **whole** quality policy covering Loran as a team with employees,
- ✓ To establish a user-friendly quality policy that is always easily **accessible**.

Loran top management takes the following basic questions consideration when establishing a new quality policy

- ✓ **what** will be done?
- ✓ **what** resources will be required?



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

- ✓ **who** will be responsible?
- ✓ **when** it will be completed?
- ✓ **how** the results will be evaluated?

6.3. Planning of the Changes (Revision or Update or Cancellation) for Loran Quality Management System

Loran top management regularly observe, audit, reports and review all results of the quality management system, and if need a (revision or update or cancellation) change in the quality management system and its processes, changes are carried out in a planned manner, taking into the followings:

- ✓ Revisions of International Standards,
- ✓ Changing of customer requirements,
- ✓ Changing of Loran company structure,
- ✓ New customer requirements,
- ✓ Changes of the regulatory requirements

When Loran determines that changes should be made to the quality management system, the changes are made in a planned manner. Important issues such as resources for changes, process responsible, integration of the change into the quality system and determining the purpose of the change are taken into consideration by Loran top management. The changes are managed and are recorded in the **Management Review Minutes** as appropriate for the change.

Ref.: <https://forms.loranaerospace.com> → **Management Review Meeting (Form No: 030121)**



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

7. SUPPORT

7.1. Resources

7.1.1. General

Loran Aerospace always monitors its resources to meet new developments and requirements to keep up to date the quality management system. In this direction, Loran determines and provides the necessary resources for the establishment, implementation, maintenance and continuous improvement of the quality management system.

Ref.: Loran ERP → Property Management → Quality Documents

During our Management Reviews, our top management discusses all internal and externally provided resources needed for maintenance and continual improvement of our quality management system and ensures that they are provided.

7.1.2. People

During our Management Reviews and through daily management activities, our top management determines the people necessary for the effective implementation of our QMS and for the operation and control of our processes and ensures that the resources are provided.

7.1.3. Infrastructure

Loran determines the necessary infrastructure, provides the necessary resources and guarantees the continuity and ensuring the suitability of products and services. Loran has determined the infrastructure required to meet its quality targets and requirements.

7.1.4. Environment for the Operation of Processes

Loran top management ensures that our work environment is sufficient to achieve conformity and safety of our people, products and quality targets as discussed during management review meetings. This is one of our top management **main responsibilities**.

7.1.5. Monitoring and Measuring Resources

7.1.5.1. General

Loran top management determines and provides the resources needed to monitor and measure the products to ensure that they continue to meet requirements and specifications.

The resources used and provided within Loran QMS are essential to be appropriate for the type of monitoring and measurement activities carried out and are preserved to ensure compliance with their objectives.



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

The resources management is documented in the **Measurement Plan** and reviewed during **Process Plan** audits.

Ref.: Loran ERP → Document Management → File Management → AS9120 (2026) → Management Planning → Measurement Plan (Form No: 030122)

7.1.5.2. Measurement Traceability

Loran Aerospace monitors, reports, compares, documents and ensures full traceability of all outputs of the quality management system processes through the ERP system. Loran ERP system is designed with programming protocols in accordance with **AS9115 (A – 2017-02 Quality Management Systems - Requirements for Aviation, Space, and Defense Organizations - Deliverable Software)** standard and the Infrastructure of the ERP system adequacy suitable for innovations and updates.

Loran explains the Quality Control and Calibration policy in the **Quality Control and Calibration Procedure Handbook**.

7.1.6. Organizational Knowledge

Loran top management determines the necessary information to operate the quality management policy processes and ensure the suitability of products. For Loran, the protection of this information and its availability to the extent necessary is essential.

In addressing changing needs and trends, Loran considers its current knowledge and determines how to obtain or access the necessary additional information and necessary updates. Organizational information for Loran Aerospace is based on the followings:

- ✓ Internal sources such as capabilities learned, feedback from the experts and / or intellectual property,
- ✓ Outsourcing, such as standards, academia, conferences and / or information from customers or suppliers.

in the scope of Loran QMS, the organizational knowledge is experienced and maintained in its **ERP system**, and this knowledge are available for the users depends on responsibilities. Any innovations and updates to be made in organizational information and related processes are put on the agenda of **management review meetings** when necessary.

7.2. Competence

Loran takes care to periodically review the required competence for all positions described in the QMS. Loran top management determines the required competencies for our employees, whose work may impact the effectiveness and performance of our QMS. We hire employees with specific knowledge, skills and education that best fit our needs and provide training to fulfill any missing competencies.

To ensure Loran personnel competence, job descriptions that define the qualifications required for each position affecting product quality have been prepared. Loran regularly prepares a personnel



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

performance evaluation for all its personnel, this form is kept quarterly and shared with the relevant personnel to the extent necessary or upon the request of the personnel.

Loran QMS carries out the employee performance reviews based on the "**Competency-Based Performance Management Model**" (CBPM). Loran Aerospace's CBPM model focuses on assessing and developing employees based on specific competencies or skills deemed essential for success in a particular role or within the company. The CBPM model is a periodic review process of evaluating employee performance is carried out by Loran top management.

Loran company values play a crucial role in shaping this model because they serve as a compass for the company in providing a framework for decision-making and employee interaction. Implementing a CBPM model requires a commitment to ongoing communication, development, and alignment with Loran's mission and vision.

Loran performance evaluation criteria and minimum requirements are explained in the **Performance Evaluation Table**. For personnel who fall below the minimum value in any evaluation criteria, Loran arranges in-company training or external training if necessary.

[ANNEX 8: Performance Evaluation Criteria Table](#)

Loran top management evaluates the annual training plans at the January **management review meeting** and implements them as a **management decision**. It also arranges internal and external training programs for Loran staff in the following situations:

- ✓ According to the performance evaluation results,
- ✓ In case of training deficiencies identified because of corrective action,
- ✓ Personnel development and performance enhancing training requests requested by personnel

The training programs and certificates attended by all personnel are kept in the **ERP system** where the person's personal information is located.

Any updates to be made in the competence of the job descriptions and the output of the performance evaluations are reviewed during management review meetings.

7.3. Awareness

Ref.: Loran ERP → Document Management → File Management → AS9120 (2026) → Awareness and Training Documents

The Quality Manual, procedures, forms, annexes, operating instructions and awareness training documents are available to all company staff through Knowledge Base or In-Service Training Sections of our **ERP System** is publishing in our own controlled company website.

In this way, Loran aims to reach the following target:

People doing work under our control are made aware of our quality policy, objectives, how our quality management system works and the implications of not working within our quality management system as defined on the **Communication and Awareness Plan**. They also are made aware of their contribution to product and service conformity, traceability, customer satisfaction, other management procedures and product safety, and the importance of ethical behavior.



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

Ref.: Loran ERP → Document Management → File Management → AS9120 (2026) → Management Planning → Communication and Awareness Plan (Form No: 030124)

7.4. Communication

Loran Aerospace allows any employee to access Management for discussions to improve the Quality Management System. Methods of communicating the effectiveness of the QMS include the online forms, management review meetings, employee meetings, internal audit practices.

Meetings and discussions for all processes implemented within Loran can be controlled and recorded via the ERP system.

Company employees can communicate with Loran through the following channels:

- ✓ Direct communication,
- ✓ Contact via phone, private messaging applications (e.g. WhatsApp) or e-mail,
- ✓ In-company meetings,
- ✓ Employee Satisfaction Survey,
- ✓ Leave and Request Form,
- ✓ Event Record Form,

7.5. Documented Information

7.5.1. General

Loran top management has determined which documented information is necessary for the effectiveness of our quality management system and control as per the requirements listed below. Loran quality management system covers the following documents:

- ✓ Documents and records required by the International Standard,
Ref.: Loran Quality Manual → Article 2. Normative Reference
- ✓ Documents and records required for the effectiveness of the QMS.
Ref.: Loran ERP → Document Management → File Management → AS9120 (2026) → Document and Tracking Table (Form No: 030120)
Ref.: Loran ERP → Property Management → Quality Documents

All documents and forms used within the Loran quality management system are managed through the ERP system.

Depending on the backup, recall and encryption features in the ERP system, all documents can be accessed, even if there are revisions in the documents.

7.5.2. Creating and Updating

It is essential that all documents used in the Loran quality management system are prepared on Loran letterhead. Additionally, the following elements are considered when preparing a document:

- ✓ The document must be prepared in LORAN letterhead **format**,

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

- ✓ The **descriptive name** of the document is written clearly,
- ✓ There is a **commitment text** stating that the document does not contain information within the scope of ITAR or military security,
- ✓ Document **reference** number, **revision** number, **first issue** date, revision date, canceled revision information,
- ✓ **Copyright** notice for the document and the information contained therein,
- ✓ Obligation to check the **latest version** of the document by the user,
- ✓ If the document is used online, it is a **Controlled and Valid** document,
- ✓ If the document is used by the user by printing it out, it is necessary to make a final revision control because it is **uncontrolled**, and the information and statements contained in the document **may be invalid**.

The forms prepared and used through the Loran ERP system must include the following information:

- ✓ Form reference number, revision number, first issue date, revision date, canceled revision information,
- ✓ The descriptive name of the form is written clearly,



*If a revision is needed in a document or form, this revision or update comes into force with the **approval** of Loran top management.*

Revision or update of the process, carried out within the scope of Loran QMS, is performed based on customer demands or feedback, applicable standard requirements, legal regulations or the company management's decision to improve the process operation.

Revisions and updates in the documents and forms used in the QMS operation are discussed in the Loran management review meetings.

7.5.3. Control of Documented Information

Loran top management is responsible for checking that all documents, forms and software used within the scope of the QMS are up-to-date, comply with standards, comply with legal regulations and Loran quality targets. When there is a need to update or revise a document, form or process, this situation is evaluated at the **management review meeting** and carried out with the **approval** of Loran top management.

In addition, Loran's standard **retention period** is for all documents for **at least 7 years** and ensures their security by **archiving** (as **disposal method**) them after 7 years.



*Loran Aerospace **not only uses** forms or documents under its own control within the scope of quality management processes. As a supplier company, Loran must deliver manufacturer or supplier documents, test reports or CofC documents to the customers through ERP system to provide product security and traceability responsibilities. **Loran is not responsible** for the validity and data accuracy of these documents. Loran's responsibility is to share supplier documents with the customer and ensure full product safety and traceability.*



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

Loran Aerospace carries out all its processes in accordance with AS9120 Rev.B standards through the **ERP system**. Our own programming protocols are designed under two bases. First, **design quality of the ERP system is suitable for AS9115 (A - 2017 02) Quality Management Systems - Requirements for Aviation, Space, and Defense Organizations - Deliverable Software Standard** in terms of data usage.

The Infrastructure of the ERP system adequate for large data entry and simultaneous multi-user, and all the system is also suitable for innovations and updates.

ERP System Capabilities:

- ✓ **Staff Login:** <https://qmsystem.loranaero.com/admin/authentication>
- ✓ **Supplier Login:** https://qmsystem.loranaero.com/purchase/authentication_vendor/login
- ✓ **Customer Login:** <https://qmsystem.loranaero.com/authentication/login>
- ✓ **Project Management Controls:** Product, customer, quotation, invoice, vendor, purchase order, supplier, inventory-in and inventory-out, customer and supplier control panels,
- ✓ **Administrative Processes Controls:** Company reports, Risk management, corrective actions, management decisions, nonconformities, counterfeit parts, performance management, management meetings, event records, file manager, in-system communication, financial processes,
- ✓ **Customer Satisfaction Management:** Customer satisfaction surveys, product return form, knowledgebase (for customers, suppliers and online visitors), customer support, communication channel with customers and suppliers,
- ✓ **Human Resources Management:** Job descriptions, responsibility assignment, training follow-up, personnel rights, in-service training (open to all personnel and provides access to all quality manuals and procedures), new recruitment processes.
- ✓ **Reporting and Comparing the Process Outputs:** Loran can report the results of its activities through the ERP system according to the time intervals it determines or pre-defined in the system.
- ✓ **Reporting Capabilities:** Loran ERP uses aggregate data summary, periodic data summary, comparative data summary and customized data analysis methods in data analysis.
- ✓ **Design Code Protocols:** Codification, traceability for all connected internal/external process, task management, backup, recall, security, reporting, user/role control,

ERP System Design and Security Capabilities:

- ✓ **Design Quality:** Loran ERP system is designed with programming protocols in accordance with **AS9115 (A – 2017-02 Quality Management Systems - Requirements for Aviation, Space, and Defense Organizations - Deliverable Software)** standard and the Infrastructure of the ERP system adequacy suitable for innovations and updates.

For Security Reasons, This Section Has Been Removed from the Online Version of the Quality Manual

- ✓ **New-User Registration Authentication:** Loran ERP system and shopping portal are open for online registration, but the user account activation must need to approval of Loran top management.
- ✓ **Location Restriction:** Loran ERP system and shopping portal have the location restriction option to cut off any connection from the blacklisted or desired locations.

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>
Revision No	03	Revision Date	12.20.2025	Cancelled Revision 02

- ✓ **Data Compression and Encryption:** Due to intense data entry and data security, data compression and encryption protocol is applied in the Loran ERP system. All data can be recalled with 4-stage recall security steps (save ↔ encryption ↔ back-up ↔ storage).
- ✓ **Multifactor User Authentication:** This protocol includes e-mail security code authorization, Google Authentication security code authorization, SMS security code authorization, WhatsApp security code authorization options.
- ✓ **Reuse Security:** Loran ERP provides the opportunity for all system users, including customers and suppliers, to fully track time (hour-minute-second) and transactions via IP address. In this way, full traceability of any Reuse-induced data changes that may occur in the system is ensured.
- ✓ **Data Loss Prevention:** At the same time, since the system backup capability is based on simultaneous backup to the multiple databases, if a data accidentally deleted on the system, that can only be recalled from the backup sections by the system security chief.
- ✓ **Other Security Features:** Brute Force Settings, Max. login retries, Lockout period, Max. Lockouts, Extended Lockout, Password Reset Retries, Max. Email Sending, IP/Range/User Blacklists, Password change function (max. 180 days).



*Loran also provides QMS and product safety **Awareness Training Documents** to all personnel through the ERP system.*

Cyber Security Rules:

Loran QMS pays attention to data security and secure communication issues in all its processes and considers these two issues as vital factors for the process safety. Awareness training and documents were provided to all personnel regarding Data Security and Secure Communication.

Ref.: Loran ERP → Document Management → File Management → AS9120 (2026) → Awareness and Training Documents → Awareness and Training Documents – Data Security

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

8. OPERATION

8.1. Operational Planning and Control

Project Management

Project Management is the main core of Loran Aerospace business capability. Definition of the project management is an order fulfillment process starts from the quotation request by the customers to end of the acceptance of the product by the customer or end users. In addition, Loran project management also covers any nonconformities and solutions for that may occur during the lifetime of the products supplied by Loran and within the scope of the supplier warranty.

In the scope of project management approach, Loran Aerospace plans, implements and controls the processes depending on the requirements of Article 4.4 and manage the risk factors of the process in according as the Article 6.1 for the procurement and supplying of the products. Loran manages all project management processes through the ERP system. When received a quotation request from the customer, Loran top management starts a Quotation Risk Assessment.

Ref.: Loran Quality Manual → Article 4.4 Quality Management System and Its Processes

Ref.: Loran Quality Manual → Article 6.1 Actions to Address Risks and Opportunities

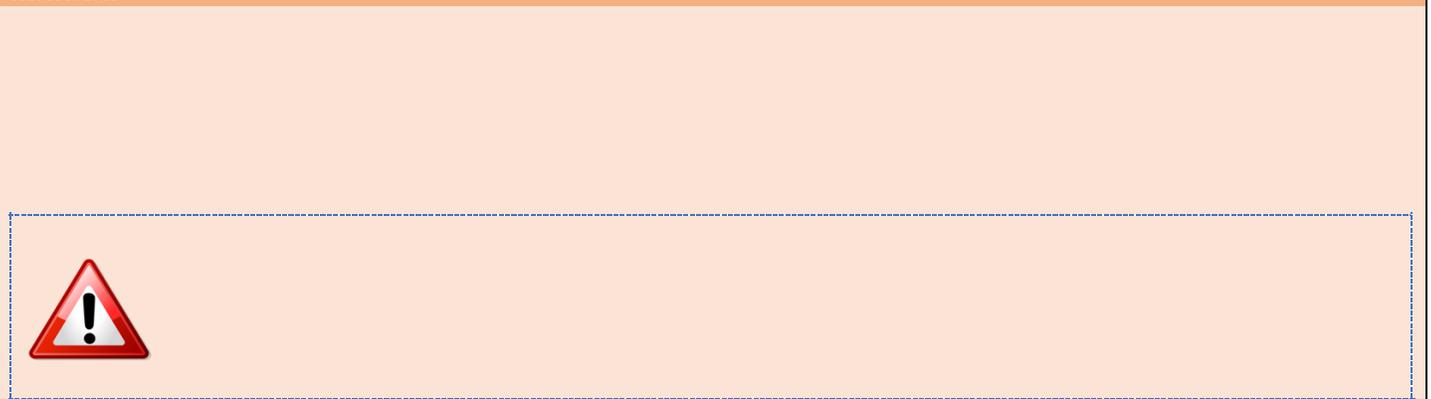
Ref.: Loran ERP → Project Management

Quotation Risk Assessment

Quotation Risk Assessment is the quotation evaluation process performed by Loran top management, depending on the customer records, the requested product and Loran business capabilities. Loran maintains a **Quotation Risk Assessment Checklist** for all bidding processes. This form is kept in the Loran ERP system and provides detailed reporting. **Ref.: Loran Form Management System → Quotation Risk Assessment Checklist (Form No: 040122)**

During the quotation phase, Loran top management pays particular attention to the following issues:

For Security Reasons, This Section Has Been Removed from the Online Version of the Quality Manual



- ✓ **Product Control:** Have any blacklisted companies searched for the same product with a similar quantity and in the same period?
- ✓ **Product Capability Control**
- ✓ **Product risk factors,**
- ✓ **Win rate** of previous quotations for the same product and for the customer (if any),

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

- ✓ **Special Requests:** If the customer has a special request for the product, Loran's capability status for this request (For example, while the customer wants stock or near-term delivery, Loran has a long offer status for this product.)

Product Risk Factors:

If there is any risk factor regarding the product, special attention is paid to these factors, and these risk factors (if need) are stated to the customer during the quotation. (org. Haz-Mat product notification, configuration requirement, revision notification). **Product risk factors are recorded in the Risk Assessment section of Product record page.**

Ref.: 200723 - PREVENTION AND DETECTION OF COUNTERFEIT PARTS PROCEDURE REV.02
ANNEX 9: Product Risk Assessment and Actions



Loran classifies product risk factors as follows:

Safety Classification: *In accordance with product acceptable level (Acceptable Quality Level - AQL) requirements (Critical parts, Major parts or Minor Parts),*

Security Requirements: *In accordance with regulatory authority requirements (export license, domestic material, Haz-Mat product)*

Special Process Involvement: *Those processes where the parameters are directly influenced by component, geometry and/or the results cannot be confirmed by inspection,*

Design Complexity: *Capability to design innovative solutions that meet customer requirements,*

Manufacturing Complexity: *Capability to manufacture components to meet the design intent*

Loran Business Capabilities (Included and Excluded Product Families)

Loran Aerospace determinates and confirms its business activity limit as follows:

Loran is a company that supplies hardware and fasteners in the field of aerospace industry. **Loran quality policy and all processes applied in the system cover fastener group products and their raw materials.** Loran quality policy applies to metallic and non-metallic components that mechanically attach two or more objects whose fasteners are defined as United States Federal Supply Classification Group codes as shown in the following list:

- 5305 Screws
- 5306 Bolts
- 5307 Studs
- 5310 Nuts and Washers
- 5315 Nails, Machine Keys, and Pins
- 5320 Rivets
- 5325 Fastening Devices
- 5340 Miscellaneous Hardware (specific parts in this hardware industry code are applicable, including, but not limited to, clamps, hinges, coiled insert fasteners, and clinch-nut fasteners)

- ✓ Loran **IS NOT** a wholesale company that does not work for stocking purposes. When activating a purchase order by Loran, a confirmed supply request must be made by a customer for the relevant product. Loran determines the order quantity according to the customer order quantity.
- ✓ Products whose procure and sale are **EXCLUDED** from Loran business activity:
 - **Electronic components** and their all-sub-equipment (connectors, cables, etc.),
 - **Chemical products**,
 - **Nuclear products** and their spare parts,

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

- Products containing mercury or similar **environmentally harmful components**,
- **Shelf-Life Expired Products** cannot be procured or sold even if the product is in its original package.
- Loran does not supply **obsoleted product**, **serviceable** or **As-Is** conditioned products because they can increase the risk of acquiring counterfeit material.

Loran's **main criteria for an acceptance of the product** (both as a customer and as a supplier) are based on the completeness of the **Manufacturer CofC**, **Test Documents** and **uninterrupted traceability** of the product from raw material to the authorized distributor or supplier. At the same time, Loran controls the products and packages to ensure that the product to be supplied does not come into contact with foreign matter, that it is packaged correctly, and that the label of the product is complete.

For a deformed product or package, Loran initiates the non-conformance process. The picture and details of the product are shared, and the delivery of the product is completed upon approval. Without customer approval, Loran cancels the supply of these products or replaces them with new products.

IMPORTANT NOTICE:

The most important point for the aerospace industry is **authorization** of the company who want to service as manufacturer, repair shop or supplier.

Loran Aerospace does not have authorization to change or revise the package or the label of the product. For this reason, Loran delivers the products in their own package and label as received from its supplier.



BUT

If there is any non-conformity (for example, not fully closed or broken packages) in a package or any deformation or external factors (FOD) in the product, Loran shares this situation with its supplier and marks the relevant products as Non-Conforming Products and returns them to the supplier. At the same time, the customer is informed about the issue and if there will be a delay in product delivery, customer approval is requested.

Loran Aerospace project management policy, based on the method to achieve operational planning and controls, uses integrated phased processes. For this reason, Loran has prepared project interaction sequence and all related phases that make up this interaction.

ANNEX 10: Project Management and Interaction Diagram of All Related Phases

Loran Aerospace always control planned changes and review the consequences of unintended changes, taking action to mitigate any adverse effects, as necessary. For this reason, Loran runs the entire quality management system through the ERP system, where effective traceability and results can be reported.

8.1.2. Configuration Management

Ref.: Loran ERP → Document Management → File Management → AS9120 (2026) → Procedures → Nonconformity and Corrective Action (Form No: 200721)

Configuration is a documented information covers the technical and physical specifications of the product. This documented specs are open for the distributors and customers, to avoid any fault or mis-ordering process.

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

Configuration Management is a discipline to keep, manage and reports the records, technical and physical revisions for a product in its lifecycle.

According to Loran quality management policy, the configuration management is a supplying discipline covers the phases from production to the distributors operations. For this discipline to be implemented safely, procurement specifications must include the following explanations:

- ✓ Internal control stages of the processes and procedures,
- ✓ Customer purchase order identification of products to be shipped,
- ✓ Manufacturer's identification of products supplied,
- ✓ Documentation associated with quality control and test reports,
- ✓ Product status including revision level, shelf life and life cycle information.

ANNEX 11: Project Lifecycle and Configuration Process

Loran carries out configuration management according to the **ISO 10007:2017 (3rd Edition) Quality management — Guidelines for Configuration Management Standard**. At the same time, Loran implements the following technical guidelines when determining its configuration policy:

- ✓ **"Piece Parts" Requirements** are clarified in the SAE technical report of the **"CMB5 Configuration Management Requirements for Subcontractors/Vendors Rev.A 2014"** of when determining its configuration policy.
- ✓ **SCMH 7.5.3 Configuration Management Guidelines (Rev. B 2021)**

In Loran configuration management, all approval negotiations between customer requirements and supplier specifications are carried out by **Loran top management**. Loran's **main target** is to prevent any problems between customer demands and the manufacturer's product arising from the following:

- ✓ Traceability and documented information requirements,
- ✓ Production revision number,
- ✓ Alternate Raw material and standards,
- ✓ Acceptance conditions and classification of test reports,
- ✓ Delivery lead time,
- ✓ Product quality and revision of the product,

Revision and Configuration Information:

Unless specified in the manufacturer's technical documentation or **unless** specifically stated in the customer requirements, Loran's supply responsibility is to supply the latest version of the product is manufactured by the manufacturer, depending on the product descriptive reference information. Loran is not responsible for stating the revision number or configuration status of the product in the quotation. Product revision and configuration information is a matter under the responsibility of the customer, which must be specified by the customer in their purchase order. Loran also states this requirement in the Terms of Conditions of Quotation and Order Acknowledgement.

Recording the Configuration Requirements:

If there are special requirements regarding the product requested by the customer or if there are configurations applied to the product by the manufacturer, Loran records this information in the

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

Properties → Special - Configuration Requirements section during product registration in the ERP system.

To avoid any problems related to the configuration or revision level of the product, Loran clearly states all information about the offered products in its quotations.

Ref.: Prevention and Detection of Counterfeit Part Procedure → Article 5.1.2

If Loran knows the revision or configuration status regarding the production condition of the product, it also states in the quotation text. If the quotation is accepted by the customer, the supplied depending on this revision / configuration.

For Security Reasons, This Section Has Been Removed from the Online Version of the Quality Manual



IMPORTANT

Since Loran is not a manufacturer or authorized distributor, it is not obliged to decide on the configuration status of a product or recommend it to its customer or keep a configuration diagram for the product based on its technical ability, competence and authorization.

8.1.3. NOT USED

8.1.4. Prevention of Suspected Unapproved Parts

Ref.: Loran ERP → Document Management → File Management → AS9120 (2026) → Procedures → Purchasing Procedure (Form No: 200722)

Ref.: Loran ERP → Document Management → File Management → AS9120 (2026) → Procedures → Prevention and Detection of Counterfeit Parts Procedure (Form No: 200723)

8.1.5. Preventive of Suspected Unapproved Parts

Ref.: Loran ERP → Document Management → File Management → AS9120 (2026) → Procedures → Purchasing Procedure (Form No: 200722)

Ref.: Loran ERP → Document Management → File Management → AS9120 (2026) → Procedures → Prevention and Detection of Counterfeit Parts Procedure (Form No: 200723)

8.2. Requirements for Products and Services

8.2.1. Customer Communication

Loran Aerospace carries out its customer relations and satisfaction process in accordance with the **ISO 10002 Customer Satisfaction Standard**. All customer relations are recorded in the ERP system, reported and carefully reviewed in management meetings. For Loran, customer satisfaction output is one of the most important results showing the success of the implemented quality management system.



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

Loran has prepared a **Customer Satisfaction Survey**, which is open to all customers on its website, to measure and maintain customer satisfaction regularly. The result-output of this survey is collected in the Loran database and evaluated at Management Review meetings or external meetings.

Loran implements an effective policy to communicate with customers regarding the product capabilities, technical issues, order fulfillment, feedback and claims, financial subjects, and another specific subjects. Loran uses the basic and specific communications technologies including email, telephone, online or face to face meetings.

Loran is also providing customer log-in opportunity into ERP system to manage their all relations with Loran including quotations, invoices, traceability documents of the orders, order tracking and shipments, knowledgebase, financial statements, claims and support management and reporting all of the history.

8.2.2. Determining and Reviewing the Requirements for Products and Services

Loran Aerospace explains the processes to be applied during project management and the interaction of these processes with each other in the **"Project Management and Interaction Diagram of All Related Phases"**.

Ref.: Annex 10: Project Management and Interaction Diagram of All Related Phases

Product Requirement List:

Depends on Project Management approach of Loran Aerospace the requirement of the product is determined with the customers and suppliers together. The following points are vital to determine the product requirement:

- ✓ Exact Product Reference Number (Manufacturer part number or OEM part number) including extension codes:
 - material codes,
 - drill or undrilled codes,
 - head style codes,
 - coating codes,
 - other specific codes
- ✓ Revision or configuration status of the product,
- ✓ Design and/or manufacturer cage code,
- ✓ Required product authorization documents including test reports, CofC and (if applicable) FAA/EASA certificates.

For Loran, determining product requirements begins with making sure that the right product is offered within the scope of Quotation Risk Assessment at the bidding stage. The **Sales and Marketing Manager** reviews all requirements to ensure that we have the ability to meet the product and service requirements prior to offering the product or service.

If any changes are requested from the customer and/or manufacturer during order fulfilment, this requires mutual approval and configuration management. In case of a customer-related process change (for example, a product change due to part number and a special coating request on the product), the manufacturer's approval and warranty conditions are important for Loran. If the

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

manufacturer requests a change during production (for example, the use of alternative raw materials), customer approval at this point is a condition of acceptance for Loran.

In addition, if the customer has special requests regarding the product (e.g. packaging change for products stored in extremely humid or salty water environments), Loran discuss these special requirements with the manufacturer and/or authorized distributor as a configuration. If the manufacturer confirms and accepts these configurations, Loran adds these configurations to the terms and conditions for quotation/invoice for the customer, and to the terms and conditions of purchase order for the supplier.

For special production projects, all technical information, documents and other necessary requirements (tools, gauges, raw material etc.) are provided by the customer, and the project can be started once the manufacturer approves these. For special production projects, First Part Approval is vital obligation and always given by the customer.

8.3. Design and Development of Products and Services – **Excluded Capability**

Loran Aerospace does not design or develop products for the customers. Loran Aerospace Inc. purchases and sells components per manufacturer specifications.

8.4. Control of Externally Provided Processes, Products, and Services

8.4.1. General

Manufacturer On-Site Controls:

If Loran carries out **special production project** only, it requests production process control from the manufacturer when determining the manufacturer who will carry out special production. Otherwise, it **does not apply the production process control** condition in product supplies with the main Manufacturer traceability. However, for traceability reasons, **Loran requests manufacturer test reports and CofC certificate** in all supply processes, whether from the main manufacturer or from the market.



Quality control capabilities will be engaged into our quality management system by the end of 2024 that is a taken decision in our management review meeting.

Scope of the business capabilities and excluded activities are clearly determined by Loran top management, and all of them published in our ERP system and it is also enclosed into the quotation and order acknowledgement condition texts.

Loran Aerospace QMS ensures that all our purchasing processes, supplier evaluation criteria, customer requirements for the product, if available configuration management processes conform to all applicable requirements. Loran has explained the scope of the supplying capability and excluded products in its purchasing procedure.

Ref.: Loran ERP → Document Management → File Management → AS9120 (2026) → Procedures → Purchasing Procedure (Form No: 200722) → Article 5.1



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

Another important supplying policy step is the traceability of the product. Depends on purchasing procedure, Loran is aiming to work with the manufacturer and/or authorized distributor.

Ref.: Loran ERP → Document Management → File Management → AS9120 (2026) → Procedures → Purchasing Procedure (Form No: 200722) → Article 5.2

8.4.2. Type and Extent of Control

Loran is used the criteria are described in the **SAE ARP9134 Rev.A Supply Chain Risk Management Guideline (Aerospace Recommended Practice)** document while supplier qualification evaluation performing. The frequency of reassessment of the supplier is always active. Loran has chosen the factors given in the table below as Supplier Risk Assessment criteria. Among these criteria, those classified as "**Main Criteria**" are kept active for each project in the **ERP system** and supplier scoring is done based on these criteria.

Supplier Evaluation and Scoring

Supplier Evaluation and Scoring criteria are described in detail in the Loran Purchasing Procedure.

Ref.: 200722 - PURCHASING PROCEDURE REV.02

Supplier Risk Assessment Table

Loran monitors its suppliers on a project basis, according to the criteria specified in the Supplier Risk Assessment Table, and scores them based on the main criteria. If Loran needs to work with a supplier other than the main manufacturer or authorized distributor, it considers all the criteria specified in the

Supplier Risk Assessment Table.

Ref.: 9043642 - SUPPLIER QUALITY MANUAL QUALIFICATION AND EVALUATION REV.2

Ref.: 200722 - PURCHASING PROCEDURE REV.02

Company Reports (For Suppliers)

This is the section in Loran ERP where both customer and supplier companies are evaluated and reported as needed. It is the responsibility of Loran top management to evaluate, report and make managerial decisions about the companies in this section. For Loran, concrete evidence must be presented for a company to be banned and its business potential to be stopped.

- ✓ In case of non-compliance due to a supplier, the supplier is immediately reported in the "Company Reports" section in the ERP system, and it is mandatory to first check the manufacturer's documents for supplier product deliveries, and a Corrective action process is initiated regarding non-conformity.
- ✓ Suppliers who provide products with fake or forge traceability documents,
- ✓ Companies that supply products with their own CofC without supplying manufacturer documents,

Ref.: Loran ERP → Project Management → Company Reports

8.4.3. Information for External Providers

Supplier Audit:

Period: minimum once a year,

Responsible: Management Representative

Audit Portal: Loran ERP System

Loran Aerospace plans and implements its supplier review processes to ensure that there is no adverse impact on conformity to customer requirements and aerospace standards. Loran requests a direct visit



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

or online meetings from the supplier companies, if necessary and with prior information, for the purpose of company audit and quality document review. **Periodic review is carried out once a year**, depending on the supplier company's suitability. **Management Representative** is responsible for controlling the purchasing process and for maintaining appropriate records. Approved suppliers are listed in our ERP Software. External providers are evaluated using the Supplier Evaluation Form and reviewed during our **Management Reviews**. Loran divides its suppliers into 4 main classes.

Ref.: 9043642 - SUPPLIER QUALITY MANUAL QUALIFICATION AND EVALUATION REV.2
Ref.: 200722 - PURCHASING PROCEDURE REV.02

All documents, certificates and all other Loran requirements that must be met and provided by suppliers in outsourced processes are listed in the purchase order form and it is published for all online visitors at Loran Knowledgebase through ERP system. Unless otherwise requested by the customer, the requirements we use for all our purchase orders are attached to the purchase order document and delivered to the supplier in a single document.

While conducting supplier qualification evaluation by Loran, it also published the **Supplier Quality Manual** document for these companies. In this document, Loran determined the general rules that its suppliers must comply with and requested that these rules be implemented.

Ref.: 9043642 - SUPPLIER QUALITY MANUAL QUALIFICATION AND EVALUATION REV.2

Supplier Qualification Audit (SQA)

According to the Loran QMS, one of the most important quality management legs is to establish, maintain, and increase customer satisfaction, as well as to meet AS9100, AS9120, and OEM requirements.

The Loran **Supplier Qualification Audit (SQA)** aims to evaluate suppliers who are doing business with Loran or want to establish business relations with Loran, in accordance with the Loran QMS. According to the Loran QMS, Loran conducts SQA for actual and potential suppliers **annually**, unless there is a nonconformity claim against the supplier.

The SQA results are discussed at the **Management Review Meeting**, and evaluations of SQA results are conducted for both new and existing suppliers.

Supplier performance reviews will be conducted at the top management level, and supplier performance will be discussed at the management review meeting.

Actions for the Non-Compliant Result(s):

Questions Marked "Low": No action required.

Questions Marked "Medium": Supplier is notified on this subject, and a maximum of 120 days is required to fix the non-compliant status.

Questions Marked "High": This is a major non-compliant status; the supplier is notified of this issue to resolve it within a maximum of 30 days. The supplier will be hold in **"Pending"** status during this process.

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

8.5. Production and Service Provision

8.5.1. Control of Production and Service Provision



JUSTIFICATION: *Loran quality management capabilities does not provide itself to control or approval of a **production process**, because Loran does not have authorization for quality control, approval and certify of the **production processes for the aerospace platforms**. For this reason, Loran evaluates the title of "8.5.1. Control of Production and Service Provision" as "Control of Product and Service".*

Loran is a service supplier company in the field of aerospace fasteners industry. Main purpose of Loran to aim to work with the manufacturers and/or their authorized distributors. To reach this target, Loran also implements purchasing procedure and the prevention of counterfeit parts and nonconformity procedures.

We control all phases of our product or service realization. These controls may include, as appropriate:

- ✓ documented characteristics,
- ✓ monitoring and measurement,
- ✓ validations or reviews of products and/or processes,
- ✓ workmanship criteria,
- ✓ foreign object detection,
- ✓ utility and supplies control,
- ✓ and release and post-delivery activities.

While managing a project, Loran's **main purpose** is to provide full traceability of the product and on time delivery, maximize customer satisfaction, and minimize any suspect counterfeit or counterfeit product. For this reason, Loran **first and always seeks to work** with manufacturer and their authorized distributors.



*The **most negative aspect** of working directly with the main manufacturer is the **long delivery time**. While many of our customers are satisfied with our price advantage, they cancel their product orders due to the long delivery time.*

Ref.: Loran ERP → Risk Management

Loran Aerospace has explained the **product acceptance criteria** for all suppliers including the main manufacturer, authorized distributor and out of authorized seller, its Prevention and Detection of Counterfeit Parts Procedure. Monitoring and measurement for product production or service delivery are defined in the **Measurement Plan**.

Sample Product Approval (First Part Approval)

If Loran manages a special production project, all technical information, documents and other necessary requirements (tools, gauges, raw material etc.) are provided by the customer, and the project can be started once the manufacturer approves these. For special production projects, **First Part Approval (sample product approval)** is vital obligation and always given by the customer.

If Loran has more than one authorized manufacturer option for the same product and needs to choose the most suitable manufacturer, it takes into account the Supplier Risk Assessment and Qualification table explained in the Purchasing Procedure.



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

Foreign Object Damage (FOD)

Another important point for Loran while it is managing the product acceptance process, is the nonconformities arising from the "Foreign Object Damage (FOD)". Loran is based the FOD Requirements on the criteria are described in the **AS9146 2017-04 (Foreign Object Damage (FOD) Prevention Program - Requirements for Aerospace and Defense Organizations) Standard**. The FOD subject is defined by Loran top management in its Nonconformity and Corrective Action Procedure, and Loran is requesting the preventive actions from its all suppliers that this requirement is listed in the terms and condition of Purchase Order.

8.5.1.1. Control of equipment, tools and software programs – Excluded Capability

Loran Aerospace does not use any automated equipment to monitor, control or measure activities. There is no production of materials.

8.5.2. Identification and Traceability

One of the foundations of Loran QMS is providing the secure identification of the **processes** and **products**.

Process Identification (In-House Traceability):

Loran has defined all the processes that make up the QMS system separately and manages them with a controllable structure in the ERP system. All these processes can be controlled separately or if need they can be track with the same reference number. With this ERP capability, Loran QMS is warranted that full and secure traceability can be established for all the projects are carried out by Loran.

Ref.: Loran Quality Manual → Article 0.10 – Traceability in Loran Quality Management Processes

Form and Document Identification:

In addition, all documents and forms that make up the Loran QMS are referenced separately with a document numbers. This referencing is an important factor in terms of both document tracking and Loran quality policy discipline. The processes controlled in the ERP system are identified as "**Status**" title.

Ref.: Loran ERP → Document Management → File Management → AS9120 (2026) → Document and Form Tracking Table (Form No: 030120)

Ref.: Loran ERP → Property Management → Quality Documents

Document Revision Identification Table

Loran has a Document Revision Identification Table placed in the first page of the documents and includes the following

- ✓ Revision Number
- ✓ Revision Date
- ✓ Revision Subject
- ✓ Approval of the Revision
- ✓ Approval Date of the Revision
- ✓ Signature



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

Signature – Approval – Stamp Identification:

Loran also defines signature or approval authority in some of the forms that make up the quality management system. This signature or approval is provided through the ERP system. Since laboratory testing is not applied in the product acceptance processes in Loran QMS, no stamp requirement is applied. Signature authority is given by Loran top management and continues throughout the person's responsibility process unless otherwise stated.

Ref.: Loran ERP → Document Management → File Management → AS9120 (2026) → ERP System User Authorization Table (Form No: 9043639)

Product Identification:

The most important criteria for product identification are the **Part Number, Batch (Lot, Serial) and Description of the Product**. Loran requires all products to be identified with exact part numbers and product descriptions together, which is the main precaution action Loran takes against nonconformities. Additionally, Loran's policy against nonconformity, counterfeit, or suspicious counterfeit parts is explained in detail in the counterfeit parts procedure.

Ref.: 200722 - PURCHASING PROCEDURE REV.02

Ref.: 200723 - PREVENTION AND DETECTION OF COUNTERFEIT PARTS PROCEDURE REV.02

Identification Labels:

Loran uses the descriptive labels listed below as product classification within the scope of Identification requirements for products received from third parties. All classified products are kept in different places on our product storage shelf.

- ✓ **DELIVERABLE – STOCK PRODUCTS**
- ✓ **REJECTED PRODUCT**
- ✓ **NONCONFIRMED PRODUCT**
- ✓ **SCRAP PRODUCT**
- ✓ **WITNESS SAMPLE PRODUCT**
- PROPERTY BELONGING PRODUCT**

8.5.3. Property Belonging to Customers or External Providers

Loran Aerospace **applies** all kinds of product, tools, software and other all type information provided by the customers and or suppliers, taking into account under the property management policy during the quality process management, product verification and any types of configurations. Property management is carried out through the **Loran ERP** system, the entire process is under the control of Loran top management.

Ref.: Loran ERP → Property Management

Loran **stores** the property classified goods in a separate shelf with "**PROPERTY BELONGING PRODUCT**" label, all the products are kept during the project or mutual agreement periods. This protection of the property product includes identification, transportation, packaging, storage and protection.

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

8.5.4. Preservation

Loran Aerospace is planning and applying the preservation cautions for all capabilities including the products are ordered and will be delivered, property classified products or nonconformity classified products. All products specified above are recorded in their related sections of the **ERP system**. Also, the products are stored in their segregated shelves labeled as their classify.



*The **protection cautions** of the products also applies to the constituent parts of the product.*

Product preservation includes, where applicable, in accordance with the product specifications and / or related regulations:

- ✓ Prevention, detection, and removal of foreign objects,
- ✓ Special handling and storage for sensitive products,
- ✓ Marking and labeling, including safety warnings and cautions,
- ✓ Shelf-life control and stock rotation,
- ✓ Special handling and storage for hazardous materials,
- ✓ User restrictive measures, encryption and authorization.

8.5.5. Post-Delivery Activities

The two most important pillars of Loran QMS are **customer satisfaction** and **product safety** policies. Loran does not plan these two policies only for the period during which the project is carried out, these policies are taken into account and implemented in all processes of Loran QMS.

Loran ERP – Customer Portal Capabilities



[Knowledge Base](#) [My](#) [Trainings](#) [Projects](#) [Invoices](#) [Quotation](#) [Support](#) [Shipments](#) [Warranties](#) [Properties](#) 

 Files  Calendar

Any customer claims or technical support request which may occur after product delivery have an important place in product safety and customer satisfaction policies. While customers can convey these claims and requests directly via e-mail or phone, they can also create a Claim/Support Record through the Loran ERP customer panel.

Ref.: Loran ERP → “Customer Control Panel” → Support

Product Warranty:

Loran product warranty is directly related to the product condition. Loran's warranty conditions are open to all personnel and all online visitors through the knowledge base in the ERP system. While Loran manages these claims and requests, the product supply condition (information on the offer and invoice) has a very important place.

When determining the scope of required post-delivery activities, Loran takes into account the following:

- ✓ Statutory and regulatory requirements,

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

- ✓ The potential undesired consequences associated with its products and services,
- ✓ The nature, use, and intended lifetime of its products and services,
- ✓ Customer requirements,
- ✓ Customer Feedback,
- ✓ Collection and analysis of in-service data (e.g., performance, reliability, lessons learned)

Loran top management is **directly responsible** for any claims or technical support request created by the customer. These demands and requests can be resolved with technical support requested from the supplier, or a corrective action process may be required.

8.5.6. Control of Changes



JUSTIFICATION: *Loran **does not have authorization** to monitor, approval and certify any of the production process. For this reason, Loran's responsibility within the scope of "Control of Changes" **is not** to review and approve the changes in production processes.*

If the manufacturer or supplier has a revision or configuration notification regarding the products included in the scope of supply within the scope of the requirements of the Loran Aerospace quality management system, Loran shares this notification with its customer during order confirmation. Within the scope of product update, customer relations and product revision follow-up are the responsibility of the **Sales and Marketing Manager**.

Loran shares the revision or configuration notification of the manufacturer or authorized distributor or supplier with the customer. In addition, if there is a special process request or revision requirement by the customer, Loran submits this issue to the manufacturer for approval, and based on the manufacturer's approval status, Loran approves or disapproves the customer request.

8.6. Release of Products and Services

In the scope of Loran quality management, **the requirements of product acceptance are listed** at the Prevention and Detection of Counterfeit Part procedure. Loran Aerospace plans, implements and controls the traceability documents depending on the requirements of customer requirements.

Ref.: 200723 - PREVENTION AND DETECTION OF COUNTERFEIT PARTS PROCEDURE REV.02

Loran's **main criteria for an acceptance of the product** (both as a customer and as a supplier) are based on the completeness of the **Manufacturer CofC, Test Documents** and **uninterrupted traceability** of the product from raw material to the authorized distributor or supplier. The **traceability documents are listed** at the Purchasing Procedure.

Ref.: 200722 - PURCHASING PROCEDURE REV.02

Loran does not deliver any products until the product acceptance conditions are fully and completely completed. In this case, only if there is a special requirement by the customer, delivery can be made without waiting for the product delivery documents, but for this, the customer's clear declaration must be included in the purchase order.



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

Management Representative is responsible for ensuring any product qualification requirements are met and all records are retained in our ERP system.

8.7. Control of Nonconforming Outputs

Loran Aerospace has defined special processes to prevent nonconformity product deliveries that do not comply with customer requirements or international standards or their own process operations. Loran manages the determination and (if any) notification of non-conforming products in accordance with **SAE AS9131 Quality Systems Non-Conformity Documents Standard**.

Within the Loran QMS, Loran Aerospace handles Nonconformity subjects in two types. First is the **“before product delivery”** and second is the **“after product delivery”**.

Ref.: 200721 - NONCONFORMITY AND CORRECTIVE ACTION PROCEDURE REV.02

Ref.: 200722 - PURCHASING PROCEDURE REV.02

Ref.: 9043642 - SUPPLIER QUALITY MANUAL QUALIFICATION AND EVALUATION REV.2

The term **“nonconforming outputs”** includes nonconforming products that are generated internally, received from an external provider, or identified by a customer.

When nonconforming product is detected after delivery, the customer and/or any other relevant interested parties, (e.g., regulatory bodies if required, suppliers/external providers, etc.) are notified of the nonconformance **within max. 1 (ONE) business day** and Loran takes preventive and corrective decisions to mitigate effects of the nonconformance. All these policies are listed at Nonconformity procedure.

The **Assistant Manager is responsible** to confirm the nonconformance and ensure its segregation from good product. In addition, the Assistant Manager and Management determines if the nonconformity could impact any other products, services, and/or processes, and acts, as appropriate to contain such effects.

Loran records any nonconformities it encounters during the quality management system in the "Nonconformity Report" form and initiates Corrective Action against the nonconformity. The entire process is recorded in the **ERP system**.

Ref.: Loran ERP → Nonconformity Management → NC Claims



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	Does Not Contain ITAR Controlled Information	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

9. PERFORMANCE EVALUATION

9.1. Monitoring, Measurement, Analysis, and Evaluation

9.1.1. General

Loran Aerospace determines and measures which aspects of the quality management system to monitor. Loran identifies the methods to be used and records to maintain them, and when to analyze and evaluate the results from monitoring and measurement is included in this Quality Handbook and Measurement Plans, and the review of this plan is retained in our Management Review minutes.

Ref.: Loran ERP → Document Management → AS9120 (2024) → Management Planning → Measurement Plan (Form No: 030122)

9.1.2. Customer Satisfaction

Customer Satisfaction Survey

Loran Aerospace carries out its customer relations and customer satisfaction processes in accordance with the **ISO 10002 Customer Satisfaction Standard**. Loran determines and implements the methods of obtaining, monitoring and reviewing the information. Customer feedback is collected and managed through the Loran Customer Satisfaction Survey, which is open and accessible 7x24 to online visitors.

Ref.: Customer Satisfaction Survey (Form No: 9043637)

Loran follows customer surveys as indicators of customer perception monitoring, customer feedback on delivered products and services, any complaints or claims, meetings with customers, market share analysis, praise, and warranty requests.

Loran also follows product and service compliance, on-time delivery performance, customer complaints and corrective action requests among the information to be monitored and used to evaluate customer satisfaction.

Loran develops plans to increase customer satisfaction for the shortcomings identified in these evaluations and evaluates the effectiveness of the results. All customer satisfaction data is discussed during our Management Reviews.

9.1.3. Analysis and Evaluation

Loran Aerospace identifies, collects and analyzes appropriate data to demonstrate the suitability and effectiveness of the quality management system and to evaluate where the continuous improvement of the quality management system can be made.

The process of identifying, collecting and analyzing this data is defined in the Measurement Plans and all data are retained in our ERP system and all are discussed within our Management Review meeting minutes.

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

Reporting and Comparing the Process Outputs:

Loran can report the results of its activities through the ERP system according to the time intervals it determines or pre-defined in the system. Loran ERP uses aggregate data summary, periodic data summary, comparative data summary and customized data analysis methods in data analysis.

Loran describes and evaluates the results from monitoring and measurement outputs from the quality management system, and all data are retained in the Measurement Plans, and the review of the outputs are retained in our Management Review minutes.

9.2. Internal Audit

Loran Aerospace implements an internal audit process to monitor, measure and evaluate the functioning of the quality management system and the importance of related processes, changes, results and methods of applied policies, safety and responsibilities, planning requirements and reporting efficiencies.

The **benefits aimed** by Loran from the internal audits applied are as follows:

- ✓ To audit the Loran quality management system requirements and the policies implemented to meet these requirements, the results of these policies and the decisions taken in accordance with the results,
- ✓ To audit the requirements of Customer requirements and the policies implemented to meet these requirements, the results of these policies and the decisions taken in accordance with the results,
- ✓ To audit the requirements of AS9120 Rev.B standard and the policies implemented to meet these requirements, the results of these policies and the decisions taken in accordance with the results,
- ✓ To audit the policies implemented for the applicable legal and regulatory requirements, the results of these policies and the decisions taken based on these results.

When **planning internal audits**, Loran considers the following:

- ✓ The internal auditor must be fully independent,
- ✓ The internal auditor must be qualified and certified,
- ✓ The necessity of supporting evidence for the answers given during the audit,
- ✓ Keeping internal audit results and result evidence recorded and reporting them to top management,
- ✓ Following up the decisions and corrective action processes taken by the top management against detected non-conformities, other subjects and evaluating them at the Management Review meeting.



The answer space in the Loran internal audit consists of "Yes", "No", "Missing" or "Not Applicable" and if need there is available of evidence loading function in the answer space.

Unless otherwise stated, Loran **conducts** internal auditing before each management review meeting and the results are reported to top management. **Records** of the internal auditor certificates are maintained in our ERP system. The **Management Representative is responsible** to oversee the internal auditing system and for retaining appropriate documented information.

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

9.3. Management Review

9.3.1. General

Loran management reviews are planned and occur at planned intervals, **annually**, using the Management Review Plan. Management review meetings are organized and managed **by the management representative**. These reviews are attended by:

- ✓ General Manager,
- ✓ Assistant Manager (Management Representative),
- ✓ Sales and Marketing Manager

9.3.2. Management Review Inputs

Loran determines the meeting agenda to be discussed in management review meetings according to the SAE AS13100 (2021) standard and AESQ RM13005 Quality Audit Requirements (2021) document, and the whole process is controlled through the ERP system and the decisions taken at the meeting are immediately recorded in the system.

Ref.: Loran ERP → Management Decisions → Management Review Meetings



Loran Aerospace prepares the Management Meeting Minutes form as a supplier, not a manufacturer, and fills it out accordingly.

Unless otherwise stated or needed, the main agenda minute subjects of LORAN management review meetings are tabulated. Additionally, non-agenda issues are discussed under the title "20. AOB - any other business". If needs to upload any document or evidence for the discussed subject, the ERP system provides to upload the documents into the system securely.

9.3.3. Management Review Outputs

One of the most important features of Loran top management's leadership approach is "Ensuring that the decisions taken at management review meetings are effectively implemented,".

In addition, the risk-opportunity assessment for the decisions taken is made in detail within the scope of Article 4. In line with the decisions taken, the need for additional resources and the company's improvement processes are also discussed in management review meetings.

The corrective actions, training programs and other decisions that need to be implemented, are planned, and all the results are received from the decision outputs are reported to discuss at the next management review meeting.

Loran also retains the minutes of the management review meeting as evidence like as all documented information.



AS9120 QUALITY MANAGEMENT SYSTEM MANUAL

Document No	200720	First Release Date	06.25.2024	<i>Does Not Contain ITAR Controlled Information</i>	
Revision No	03	Revision Date	12.20.2025	Cancelled Revision	02

10. IMPROVEMENT

10.1. General

One of the most important management processes of Loran QMS is providing constantly improves the effectiveness of the quality management system. Loran top management aims to reach this improvement target through evaluation of the results from the results of internal audit, customer satisfaction surveys, data analysis or management review meeting.

Loran sees the most important management process for its understanding of quality as its greatest virtue, taking corrective action for the nonconformities it encounters or implementing preventive policies for the risk factors it identifies.

10.2. Nonconformity and Corrective Action

Ref.: 200721 - NONCONFORMITY AND CORRECTIVE ACTION PROCEDURE REV.02

Nonconformance:

A condition of any article, material or service in which one or more characteristics do not conform to requirements specified in the contract, drawings, specifications, or other approved product description. Includes failures, discrepancies, defects, anomalies, and malfunctions.

Loran Aerospace uses the **SAE AS9131 (Rev.D)** Aerospace Series - Quality Management Systems - Nonconformity Data Definition and Documentation for Nonconformance processes.