

Are you considering ISO-9001 or  
AS9120 as your Quality Management  
System?

What's your next move toward QMS  
excellence?

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# Disclosure

- George Ringger is the Accreditation Manager for ASACB's ISO/AQMS program
- Michele Dickstein is the President of ASACB
- Walter O'Conner is a consultant and auditor for ASACB
- ASACB is an accredited (ANAB) registrar
- ASACB is accredited for ISO 9001:2008; AS9100C; AS9120A audits and is in the application process for AS9110

For those of you pondering **the benefits** in adopting either ISO-9001, AS9100C or AS9120A as your Quality Management System.

Topics to be covered include:

- cost/benefits,
- external/internal motivations,
- company/customer value, and
- the next steps to be taken toward certification.

# Block #1

## Introduction

# Outline

- **Block #1:** Introduction
- **Block #2:** What is ISO 9001?
- **Block #3:** What is AS9120 & AS9100?
- **Block #4:** Cost / Benefits
- **Block #5:** External / Internal Motivators
- **Block #6:** Company / Customer Value
- **Block #7:** The Next Steps to be Taken

# The purpose of an organization

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- identify and meet the needs/expectations of its customers and other interested parties
  - people in the organization,
  - suppliers,
  - owners,
  - society
- achieve competitive advantage in an **effective** and **efficient** manner.

# The purpose of an organization

- achieve, maintain, and improve overall organizational performance and capabilities.
- manage costs and risks.

# Overall performance may impact:

- customer loyalty,
- repeat business,
- revenue and market share,
- response time to market,
- costs & cycle times through use of resources.

# The application of QMS principles...

- aligns processes to achieve desired results,
- provides competitive advantage through improved organizational capabilities,
- motivates people towards organization's goals and objectives
- increases customer confidence
- creates value to the organization

## Traditional Approach



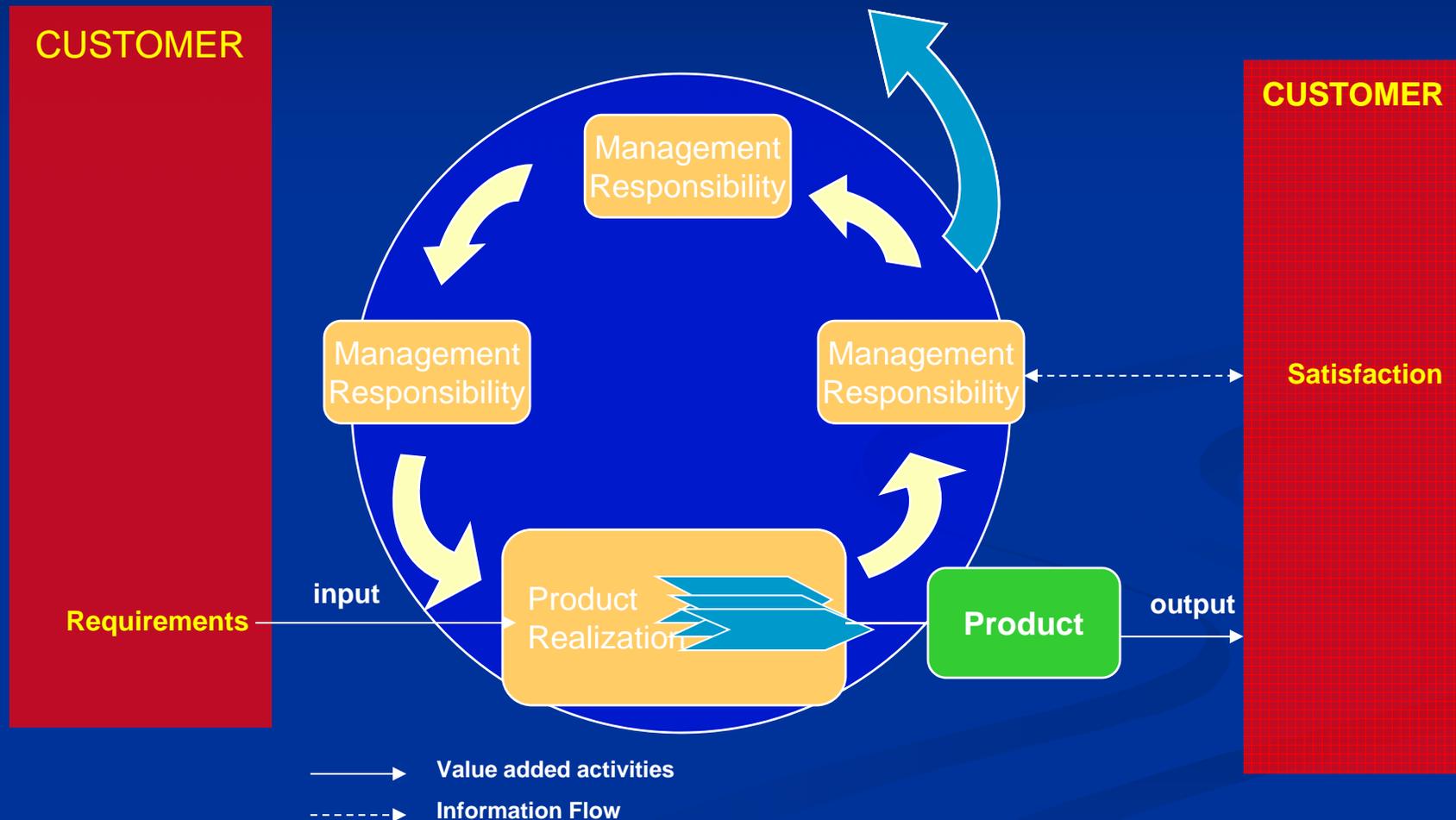
## System Approach

- Fire Fighting
- Quick Fix
- Not taking enough time for analysis
- Going from one crisis to another
- Look for the guilty party. "Who did that?"
- Generate laundry list of solutions to firefight the symptoms.
- Narrow-focus results in sub-optimization of system.
- Focus on \$ metrics, alone and hope processes improve.

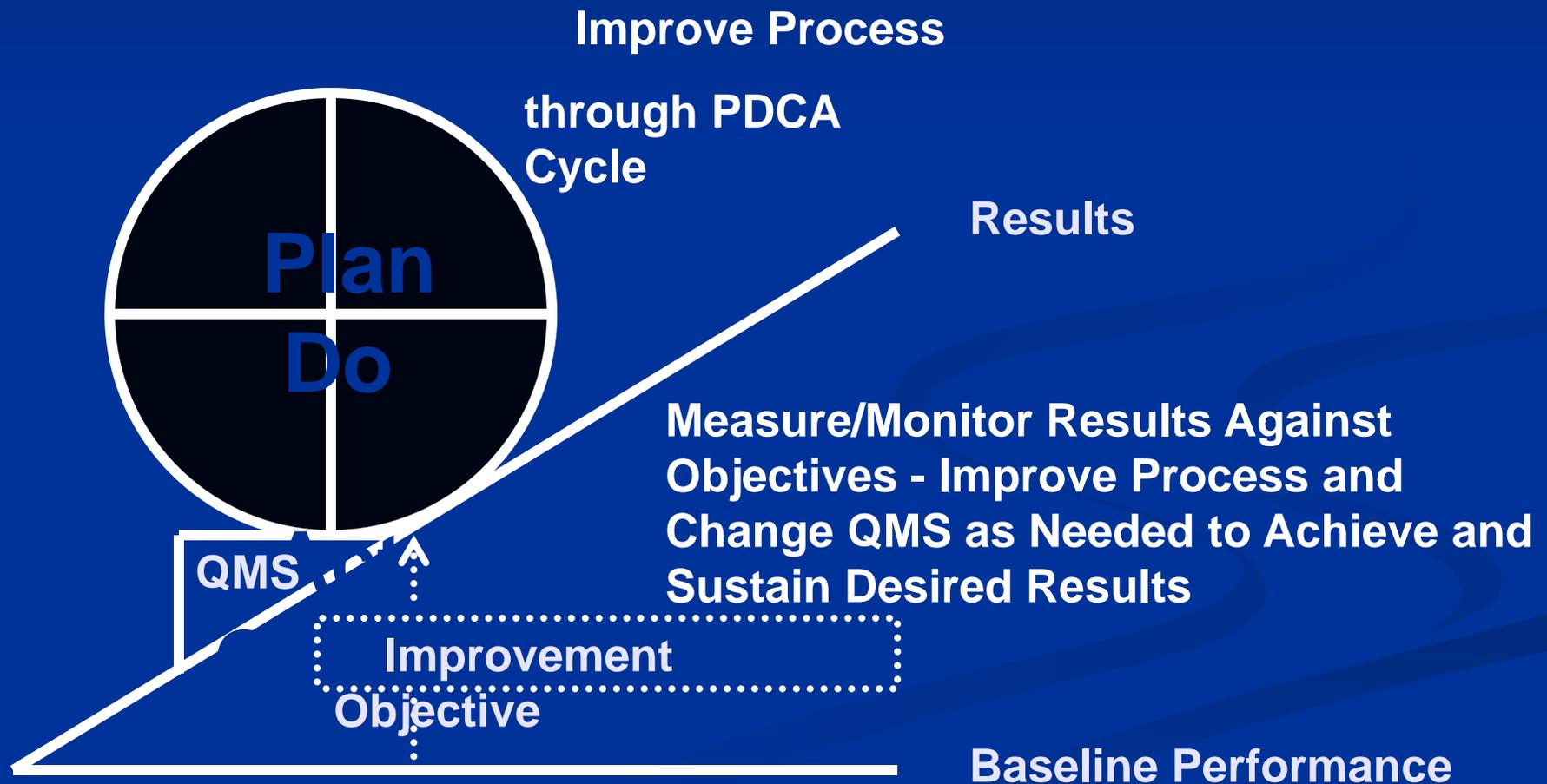
- Many factors making up a complex situation
- Fully understanding the problem. Address the systemic root cause(s)
- Permanently fix and improve performance
- Seek total understanding of the process:
  - How did that happen?"
- Take time to understand the big picture,
- Elicit dialogue, diverse perspectives, to apply the solution.
- Optimize the whole enterprise.
- Focus on improving processes that actually effect performance metrics.

# ISO9001 Model of a process based QMS

Continual Improvement of the Quality Management System



It is *everyone's* role to continually improve the company...



# Block #2

What is ISO 9001?

# What is ISO 9001?

- INTERNATIONAL ORGANIZATION OF STANDARDIZATION
- Registrars issue certifications
- American National Standards Institute
- Registrars conduct regularly scheduled audits

# What is ISO 9001?

Is an international standard for quality management systems.

- It is customer focused.
- It contains requirements and guidelines for establishing and maintaining a quality management system.

# ISO 9001

Is comprised of the following 8 clauses:

1. Scope
2. Normative references
3. Terms and definitions
4. Quality management system
5. Management responsibility
6. Resource management
7. Product (and/or service) realization
8. Measurement, analysis & improvement

# The Objectives of the ISO 9001 Standard are to...

- Achieve, sustain, and improve product/service quality by managing the processes that create them
- Give the organization confidence that customer requirements are being met
- Give the customer confidence that products and services are consistent
- Provide or sustain market entry

# ISO 9001 Isn't ...

- **A Panacea.** It alone won't solve all problems related to quality.
- **Prescriptive.** It tells you What, not How.
- **All we need to do.** It only specifies minimum requirements for an effective quality system.
- **The Ultimate Goal.** Our competitive edge depends on our ability to constantly improve and strive for excellence.
- **Sufficient.** It requires supplementation with more specific and detailed customer and/or sector specific requirements.

# ISO 9000 Status today...

- **400,000+ Companies registered in over 150 countries**
- **35,000+ Companies registered in the U.S.**
- **20,000+ U.S. Companies pursuing registration**
- **DoD & many other “sectors” or industries have adopted ISO 9000 based standards**

# Block #3

What is AS9120?

IAQG

International Aerospace  
Quality Group (IAQG)

Who are they and Why  
AS9120?

# A Global Organization



**Whose purpose is:**

To establish and maintain a dynamic cooperation, based on trust between international aerospace companies, on initiatives to make significant improvement in quality and reductions in cost throughout the value stream.

# IAQG International Members

## Asia - APAQG

- [AIDC \(Aerospace Industrial Development Corp.\)](#)
- [AVIC I](#)
- [AVIC II](#)
- [Fuji Heavy Industries, Ltd.](#)
- [Hawker de Havilland](#)
- [IHI Co. Ltd.](#)
- [Indonesian Aerospace](#)
- [KAI \(Korea Aerospace Industries\)](#)
- [Korean Air](#)
- [Kawasaki Heavy Industries, Ltd.](#)
- [MHI](#)

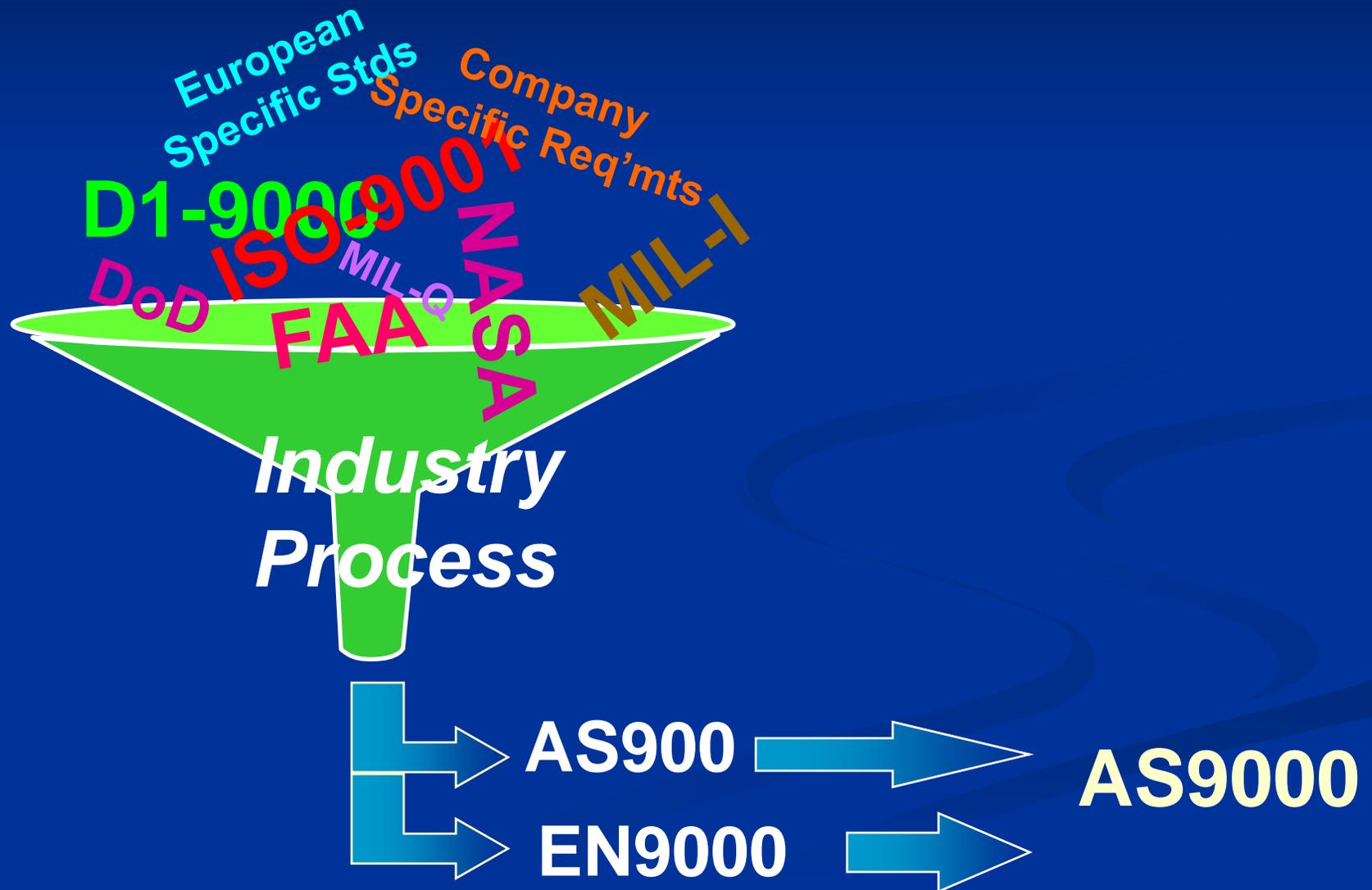
## Europe - EAQG

- [Advanced Electronics Company \(AEC\)](#)
- [Airbus](#)
- [Airbus Military](#)
- [Alenia Aermacchi](#)
- [AgustaWestland](#)
- [Astrium](#)
- [Avio](#)
- [BAE Systems](#)
- [Cassidian](#)
- [Dassault Aviation](#)
- [ELBIT Systems](#)
- [Eurocopter](#)
- [Fokker Aerospace](#)
- [GE Aviation Systems](#)
- [HEGAN](#)
- [Israel Aerospace Industries LTD](#)
- [Liebherr-Aerospace](#)
- [MBDA](#)
- [Meggitt](#)
- [Messier-Bugatti-Dowty](#)
- [MTU Aero Engines](#)
- [PFW](#)
- [RAFAEL](#)
- [Rolls-Royce](#)
- [Saab](#)
- [SAFRAN](#)
- [SAGEM](#)
- [SNECMA](#)
- [Sonaca](#)
- [THALES](#)
- [Turbomeca](#)
- [UAC \(United Aircraft Corporation\)](#)
- [Volvo Aero](#)
- [Zodiac Aerospace](#)

## Americas - AAQG

- [ATK](#)
- [Ball Aerospace](#)
- [Boeing](#)
- [Bombardier Aerospace](#)
- [Embraer](#)
- [GE Aviation](#)
- [Goodrich Corporation](#)
- [Gulfstream](#)
- [Honeywell Engines and Systems](#)
- [Lockheed Martin Corporation](#)
- [Northrop Grumman](#)
- [Parker Aerospace](#)
- [Raytheon](#)
- [Rockwell Collins](#)
- [Rolls-Royce](#)
- [Spirit Aerosystems](#)
- [Textron](#)
- [Triumph Group](#)
- [UTC \(United Technologies Corporation\)](#)

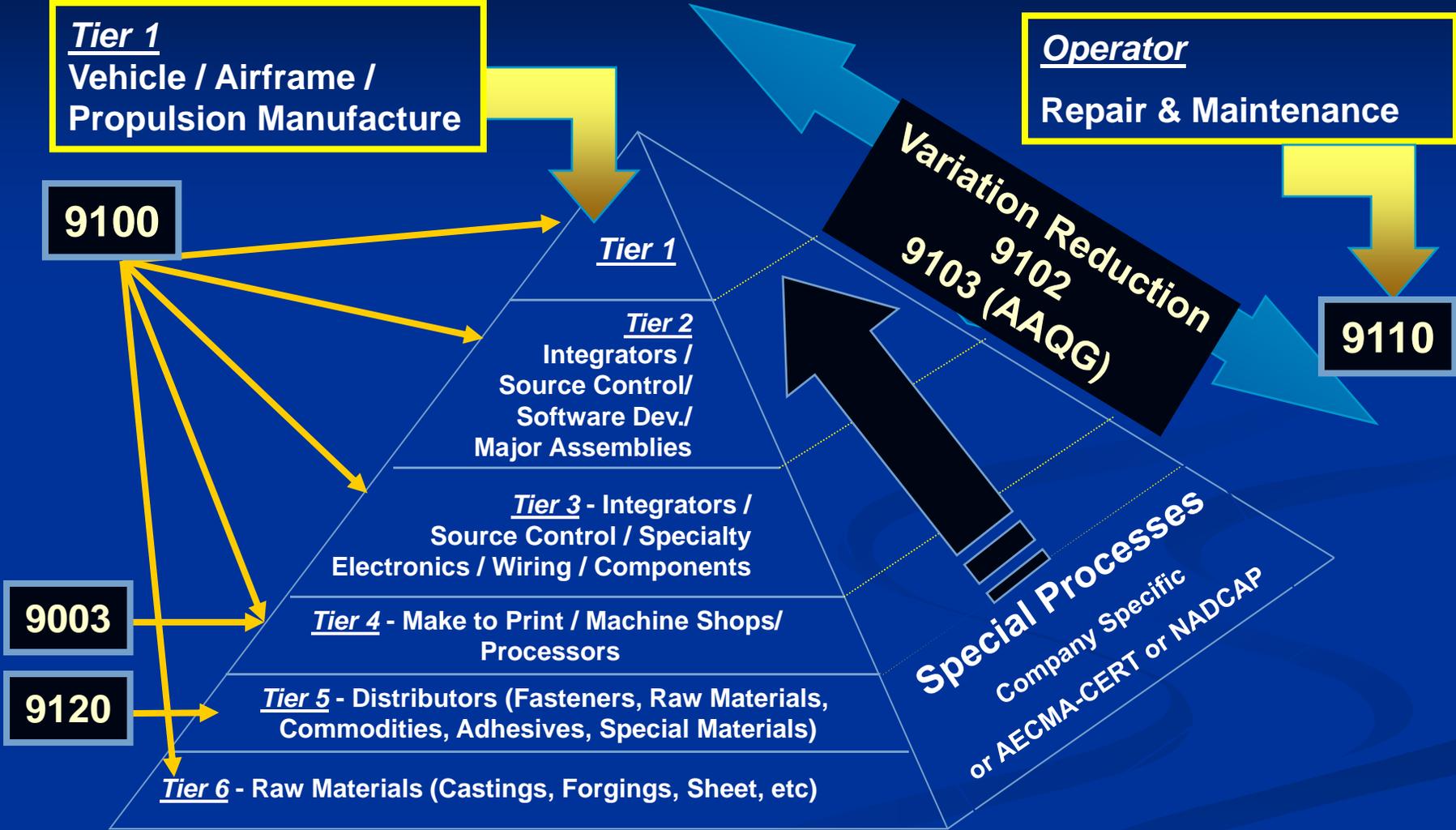
# The Need to Standardize Aerospace Quality System Requirements



# AS 9000 is a Family of Standards

- AS9000 Aerospace Basic Standard
- AS9004 Direct-Ship Practices
- AS9003 Inspection & Test Quality Systems
- AS9006 Deliverable Aerospace Software
- **AS9100 QS Design, Development, Production, Installation, & Services**
- AS9101 Checklist Quality Systems Assessment
- AS9102 First Article Inspection Requirements
- AS9103 Variation Management of Key Characteristics
- AS9104/1/2/3- Requirements for Certification Bodies & Auditors
- **AS9110 QMS – Requirements for Maintenance Organizations**
- **AS9120 QMS – Requirements for Distributors**
- AS9131 QS for Non-Conformance Documentation
- AS9132 Data Matrix Coding Quality Requirements for Parts Markings
- AS9133 Qualification Procedures for Aerospace Standard Parts

# Aerospace Supply Chain



# AS9120 – Aerospace Quality Management System Standard

- Defines quality system for aerospace distributors
- Uses ISO 9001 as a base
- Adds aerospace expectations
  - Includes Civil Airworthiness Authority considerations
- Defines “what” – not “how to”
- Published jointly in Europe, the Americas & Asia
- Reduces variation across the supply chain

# BLOCK #7

## The Next Steps to be Taken

# Your next steps...

- 1) Determine which of the Standards are you eligible for: ISO 9001, AS 9100, AS 9110, or AS 9120.
- 2) Determine the cost factors associated with:
  - Registration
  - Preparation
  - Use of consultants
  - Training
  - Conducting a Pre-Assessment Audit
- 3) Identify needed resources:
  - People
  - Finances
  - Facilities

# Your next steps...

## 3) Conduct management & employee awareness training

- Do you need an outside training provider?

NOTE: Train all personnel, but the training depth can vary

## 4) Generate your QMS documentation

## 5) Roll-out your new/updated QMS processes

## 6) Conduct your 100% internal audit

## 7) Select your Registrar

- This may be a long term relationship and you have leverage to ask questions.
- Is the registrar appropriate for your company.

# Your next steps...

## 8) Quote/Application process

- Company information:
  - Processes, Special Processes and Technical Areas
  - Outsourced work and use of consultants
  - Specific Aerospace Questions
  - Scope of certification
  - Shifts, Language, Number of Employees

# Your next steps...

## 9) Certification schedule

- Consider a Pre-Assessment Audit
- New certifications require a Stage 1 and Stage 2 audit. The audits can not be conducted back to back. Typically 3-6 weeks between the two audits.
- Common to have NCRs
- Typically surveillance audits are yearly but can also be set at 6 month intervals.

## 10) Pass your certification audit

- Maintain your QMS

# What is a Reasonable Timeline?

- 6-9 months from initiation to the registrar audit is quite common
- Allow an additional 1-2 months to address any additional concerns or NCRs

See the sample timeline in your handouts...

# www.aviationsuppliers.org

## Click on "ISO Registrar"



*Serving the Aviation Distributor Community Worldwide*

**Membership**

**ASA-100**

**ISO Registrar**

**FAA AC00-56**

**Lists/Databases**

**Committees**

ASACB Application

Commitment to Impartialty and Confidentiality

Feedback

Steps For Certification

Trademark/Logo Usage

Transfer to ASACB



on Yours  
n More »

# ASACB Steps to Certification...



Return to [ISO Registrar](#)

## Steps For Certification

### Interested in becoming certified to ISO 9001:2008?

You are in the right place. ASACB is an accredited certification body.

Below is a description of the ASACB's Certification Process.

1. ASACB values its relationship with our Clients and strives for a long-term relationship. Therefore it is our goal that our Clients have all their questions and issues answered. Each Client will be assigned a contact person for all stages of the certification process. If you have any questions regarding the process [email](#) ASACB.
2. ASACB has an online application that needs to be completed. The application provides ASACB with the information needed to determine if ASACB is competent to conduct the audit; the parameters of the audit; and the pricing associated with the audit. There may need to be some communication between ASACB and the Client in order to assess the Client's needs.
3. ASACB will send via email a contract to the Client which includes legal terms and pricing. If ASACB is unable to support the proposed audit, ASACB shall notify the company and explain why we will not provide the certification audit.
4. Client shall review the contract and, if needed, ask questions. Once the Client determines to use ASACB as its registrar, Client needs to return an executed contract.
5. Client will be introduced to their team at ASACB which includes an administrative contact, Accreditation Manager, Application Reviewer, Certification Decision and the Auditor(s).
6. ASACB will begin to work on preparing for the audit. All new registrations shall have a two-part audit, referred to as Stage 1 and Stage 2. If the contract is for a Transfer of Certification then the audit steps will change. Recertification Audits typically do not need a Stage 1 audit. Please contact [ASACB](#) for details about the transfer and recertification process.
7. Client will be required to work with ASACB to gather all the information needed for the audit including manuals, process cross reference matrix, review of auditor qualifications, approval of audit schedule, etc.
8. The audit process typically includes corrective action. Details for responding to findings shall be discussed with Client during the audit.
9. Once all the findings have been completed, the ASACB Auditor shall forward to ASACB the audit package. ASACB Auditor does not make the certification decision. ASACB shall review the audit package and determine approval status.
10. Client will be notified of approval and provided with a certificate, a letter of passage and the license agreement to use the ASACB Mark. ASACB shall also communicate with Client a tentative date for their surveillance audit.
11. Client will be asked to complete a Client Survey so as to provide critical feedback to ASACB for improvement.
12. While we hope that this does not happen, it is necessary to discuss what happens if ASACB determines to not certify the Client. Client has the right to appeal that decision. ASACB has a robust appeals process and Clients will be provided with information about the appeals process.
13. ASACB can also audit to FAA AC 00-56 and ASA-100. If you want those audits conducted, let us know!

# ASACB – ASA's Certification Body

## ■ ASACB

- ANAB accredited to perform ISO 9001:2008;
- AS9120A; & AS9100C
- CB under the ICOP program for AS9100 and AS9120 (ANAB conducted the accreditation)
- Will be applying for AS9110

# Are you a new company to ISO or AS?

- Determine which standard is best for your company
- Develop an implementation plan
- Implement the QMS or AQMS
- Sign contract with CB
- Get audited
- Address the NCRs
- Steps for Certification can be found at:  
<http://www.aviationsuppliers.org/Steps-For-Certification>

# Already ISO or AS Certified?

- Interested in transferring?
  - Process is not difficult but there are specific rules and timelines that must be followed
  - Different rules for ISO v. AS
  - Different rules for transferring during surveillance time period rather than last 12 months

# Already ISO or AQMS Certified?

- Interested in adding ASA-100 or AC 00-56?
  - Can be done all at the same time. Planning is critical
  - If new to ASA-100, must have a full ASA-100 audit and then incorporate the surveillance audit elements
  - AC 00-56 can almost be incorporated in ISO 9001 but for AS need additional time

# Looking Ahead...

- ISO and AS world is changing rapidly
  - Revision to 17021 which is the CB operating document
  - Revision to aerospace document 9101 which details how the auditor conducts the audit
  - Change to ISO 9001
  - Addition of Counterfeit Parts Standards
- Prediction – Big increase in audit fees!

# Trademark for ASACB



# QUESTIONS

