

## Process Control Requirements

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### INTRODUCTION

Process Control is the variation management strategy utilized within United Technologies Corporation (UTC). This document defines the requirements for Process Control as agreed upon by the following business entities herein referred to as "Member".

UTC Aerospace Members	
Collins Aerospace	Collins
Pratt & Whitney	PW
Pratt & Whitney Canada	P&WC
UTC Commercial Members	
Otis Elevator	OE
UTC Climate, Controls and Security	CCS

This document has been developed based upon the requirements of SAE [AS13004 - Process Failure Modes and Effects Analysis \(PFMEA\) and Control Plans](#) and [AS13006 - Process Control Methods](#).

**Note:** For guidelines on implementing process control methods, reference AESQ Strategy Group [AS13006 Process Control Methods – Appendix D – Guidance Materials](#).

When a supplier provides product or service to more than one Member, the requirements contained herein are to be uniquely applied for each individual Member.

### REVISION SUMMARY

This document has been significantly revised and restructured to apply industry standards.

## 1 SCOPE

- 1.1 Process Control and Certification needs to be considered for all processes including manufacturing, assembly and test, and maintenance through effective application of the requirements of AS13004 and AS13006 or equivalent requirements per AIAG documents for Commercial Members.
- 1.2 This specification applies internally to UTC members and their respective supply chains.

## 2 NORMATIVE REFERENCES

### 2.1 Required Aerospace Documentation

It is the responsibility of the Supplier providing products and services to UTC Aerospace Members to obtain the latest revisions of the documents listed in Table 1.

Document	Title
AS13004	<a href="#">Process Failure Mode &amp; Effects Analysis (PFMEA) &amp; Control Plans</a>
AS13006	<a href="#">Process Control Methods</a>

*Table 1: Required UTC Aerospace Member documents*

### 2.2 Required Commercial Documentation

It is the responsibility of the Supplier providing products and services to UTC Commercial Members to obtain the latest revisions of the documents listed in Table 2.

Document	Title
AIAG FMEA	<a href="#">Potential Failure Mode &amp; Effects Analysis</a>
AIAG SPC	<a href="#">Statistical Process Control</a>
AIAG MSA	<a href="#">Measurement Systems Analysis</a>

*Table 2: Required UTC Commercial Member documents*

## 3 REQUIREMENTS

### 3.1 Aerospace Supplier Requirements

- 3.1.1 The Supplier and all members of its supply chain related to UTC product shall develop and implement a process control system in compliance with the requirements of AS13004 and AS13006.
- 3.1.2 The Supplier shall perform and document a self-audit of its process control system using the checklists referenced in AS13004 and AS13006 at a minimum of once every 12 months. Equivalent self-audit checklists may be used when approved by the Member.

**Note:** More frequent audits may be necessary depending on the ability of the Supplier organization to consistently meet the requirements of AS13004 and AS13006.

### 3.2 Commercial Supplier Requirements

- 3.2.1 The Supplier and all members of its supply chain related to UTC product shall develop and implement a process control system in compliance with an industry standard such as AIAG core tool documents related to process control and process risk identification, prevention, and mitigation in lieu of AS13004 and AS13006 (i.e., Potential Failure Mode and Effects Analysis, Statistical Process Control, and Measurement Systems Analysis).