

Risk Management

Galaxy Aerospace Sdn Bhd

Part of the notes

Risk Management in the Aircraft Industry

Introduction

All activities in the aircraft industry are about aircraft to be airworthy. The aircraft industry comprises design, manufacturing, production, and Maintenance. The word airworthy means the aircraft complies with its Certification Basis (CB) and the aircraft is in condition for safe operations. Each activity is managed under organization approval. Design is by Designed Organization Approval (DOA), Manufacturing and Production is managed by Production Organization Approval (POA), and

Program Learning Outcomes set by GAM

Short Course 2020 - Risk Management - Google Docs - Mozilla Firefox

https://docs.google.com/document/d/1me3waTIOOI98Y-utDBCAZ7FonQZd/90%

Short Course 2020 - Risk Management

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Requirement of in house Risk Assessment Training for GAM staff by proposed trainer.

Learning outcomes. After the training the participant will able to:

1. Identify the hazards created at work and evaluate the risks associated with these hazards, to determine what measures they should take to protect the health and safety of aircraft safety and operational safety with include working condition and working environment, employees and other workers with regard to legislative requirements;
2. Evaluate the risks in order to respond the notification by voluntary report, incident or accident thru collected data, related documentation, investigation, surveillance, selection of work, equipment and the organisation of work (operational);
3. Check whether the safety measures taken in place are adequate;
4. Prioritize action if further measures are found to be necessary as a result of the assessment;
5. Demonstrate to themselves, the authorities, workers and their representatives that all factors pertinent to the work have been considered, and that an informed valid judgment has been made about the risks and the measures necessary to safeguard health and safety thru filled in the Galaxy HIRARC form.
6. Ensure that the preventive measures and the working and production methods, which are considered to be necessary and implemented following a risk assessment, provide an improvement of acceptable level of safety.

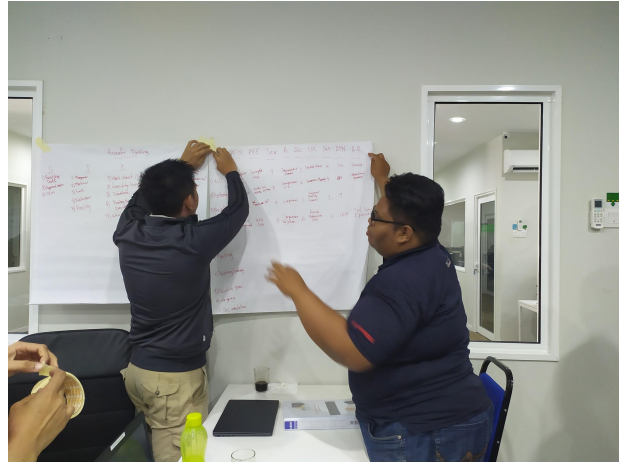
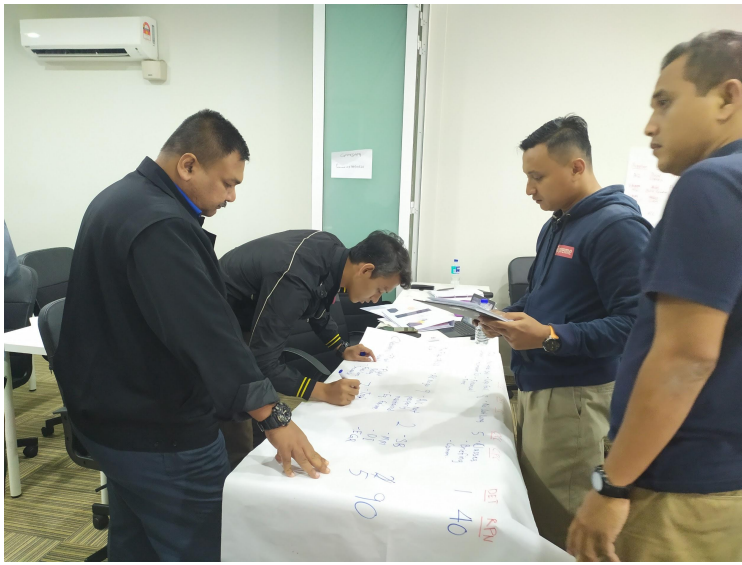
I've loop in our safety Manager, Mr M. Nizam for further details. Please provide quote for the said training. Hope we can get good price for this training.



Participants work group - to develop SIPOC



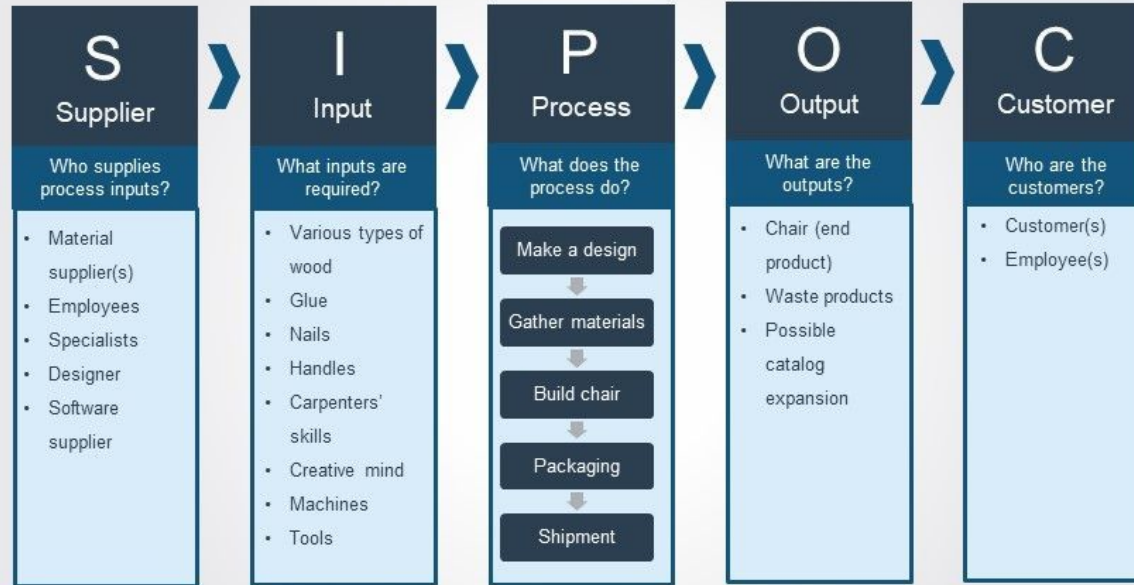
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SIPOC model example

SIPOC is this tool to determine the tasks for each process to determine the hazards for each process.



FMEA (Failure Modes Effects Analysis) is used to determine the failure mode of each process steps, the effect of the failures, causes of the failure, risk rating, can the failure be detected, what is the current process control.

Process Step	POTENTIAL FAILURE MODE	POTENTIAL FAILURE EFFECT	SEVERITY	POTENTIAL CAUSES	OCC	CURRENT PROCESS CONTROL	DET	RPN	ACTION RECOMMENDED
① PERSONNEL	INCOMPETENT	INJURIES	10	LACK OF TRG.	2	TRG. FREQ. (EVERY 3 YRS)	9 4	80	- TRG. FREQ. (EVERY 2 YEARS)
② MANUAL	OUTDATED	ILL. CERT.	6	LACK OF REVIEW	4	REVIEW FREQ. (6 MONTHS)	2	48	- REVIEW FREQ. (MONTHLY)
③ EQUIPMENT	DUE CALIB.	A/C DAMAGE	8	CALIB. MONITORING	5	MONITORING CONTROL.	2	80	- SUBSCRIBE WITH NOTIFICATIONS.
④ WORK AREA	SUITABILITY	DIFFICULTIES	5	SOFT GROUND/ UNEVEN SURFACE	3	WORK AREA ASSESSMENT SET UP SOP	2	9 17 30	- AUTOMATED MONITORING. DESIGNATED AREA ONLY.

PREPARATION FOR
MAINT. ACTIVITIES

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Aircraft Operation

<u>PS</u>	<u>PFM</u>	<u>PFE</u>	<u>SEV</u>	<u>PC</u>	<u>OCC</u>	<u>CPC</u>	<u>DET</u>	<u>RPN</u>	<u>AR</u>
Task Order	- No task Ord. - Incomplete TO	- Ops. Fail - Financial - Time	8	- No Lat Long	5	- Classes - Briefing - Comm.	1	40	
Pre Flight Cx.	- A/c Vs - A/c No go.		9	- A/c not properly maintained. - Eq. Failure.	2	- SB - mm - DI - EGR	5	90	
Clearance	- FP not Cleared - No Fuel Cons. - Ease.	- Flight Delay - Fuel Cons. - Ease.	7	- Traffic congested - Radio Failure	3	- Frequent Cx with Twn - Cx NOTAM	1	21	

Process (a)	Potential FMEA (b)	Potential FE (c)	(1-10) SEV (d)	Potential Causes (e)	(1-10) OCC (f)	Process Control (g)	(1-10) DET (h)	$d \times f \times h$ RPN (dfh)	ACTION
1) Inspection	overlook faulty item	Fail to Service	10	<ul style="list-style-type: none"> - Complacency - without proper reference - improper tools - tools n/a 	8 3 5 3	- second checker - easy access to (work station) - Tools control - purchase tool	2 2 2 2	160 60 100 48 72	- Training & Assessment - IQA - loan tools -
2) Removal	improper parts tools	part defect	8	<ul style="list-style-type: none"> - tools n/a 	3	- purchase tool	2	48 72	-
3) Installation	overtorque	part damage	9	<ul style="list-style-type: none"> - uncompetent 	2	- training Recheck	8	144	- Training - enforcement

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