2 AREA/ OPERATION/ EQUIPMENT: Request one-off maintenance app 3. HAZARD / THREAT [H/T]: Line maintenace facility to carry of 4. UNSAFE EVENT [UE]: Difficulties while performing aircr	oroval at JBPM maintenance facility, Miri Sarawak. out AW139 600 FH Inspection (Base Maintenace). aft maintenance activities may caused damage to aircraft and aircraft component.		GalaxyAerospace
5. ULTIMATE CONSEQUENCE [UC]: Not comply to the CAAM standar Date Conducted 4-Oct-21	d and requirement may impact to the aircraft safety during maintenance operation. Conducted by Safety and AMO Department	Approved by Mohammad Nizam Jaafar (Safety Manag	ger) HAZARD IDENTIFICATION AND
Revision 0	Received by Safety Department	Document No. GAM/SMS/HRC-003-01/21	RISK MANAGEMENT (HIRM) FORM
B         Image: Second state of the second state of t	12       13       14       15       16       17       18       19       20       21       22       23       24         Mitigation (as applicable) >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	25         26         27         28         29         30         31         32         33         34         35         33           >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	36       37       38       39       40       41       42       43       44       45       46       47         gation (as applicable) >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Existing Preventive Controls [E-PC]	New Preventive Controls [N-PC]     RI & T	Existing Recovery Measures [E-RM]	New Recovery Measures [N-RM] RI & T
Taken         1. Backup/         1. Backup/         standby system         standby system         2. Regulation/         Requirement         3. Std Operating         Procedure         3. Std Operating         Procedure         6. Training         7. Others         7. Others         Fecalation Factor         [EF]         Existing Risk Inde	Tolerability         1. Backup/         standby system         standby system         2. Regulation/         Requirement         3. Std Operating         Procedure         3. Std Operating         Procedure         7. Others         7. Others         8. Training         8. Training         8. Training         9. Std Operating         10. Dotification         11. Dotification         12. Others         13. Std Operating         14. Inspn/ Maint         15. GM/ Advisory/         Notification         16. Training         17. Others         16. Training         16. Training     <	1. Backup/         1. Backup/         standby system         2. Regulation/         Requirement         3. Std Operating         Procedure         3. Std Operating         Procedure         7. Others         7. Others         Feralation Factor         Escalation Contro         [EF]         Existing Risk Inde         Existing Risk Inde         1. Backup/	<ul> <li>Standby system</li> <li>2. Regulation/ Requirement</li> <li>3. Std Operating</li> <li>3. Std Operating</li> <li>3. Std Operating</li> <li>3. Std Operating</li> <li>4. Inspn/ Maint</li> <li>4. Inspn/ Maint</li> <li>6. Training</li> <li>6. Training</li> <li>7. Others</li> <li>6. Training</li> <li>7. Others</li> <li>7. Others</li> <li>8. Std Operating</li> <li>9. Std Operating</li> <li>6. Training</li> <li>7. Others</li> <li>7. Others</li> <li>8. Training</li> <li>9. Training</li> <li>9. Training</li> <li>9. Training</li> <li>9. Tolerability</li> <li>9. Ultimate Const</li> </ul>
.         E-PC1         EF>E-         EC>EF>E-	N-PC1 PC1 PC1 PC1 PC1 PC1 PC1 PC1 PC1 PC1	E-RM1	N-RM1 N-RM1 N-RM1
E-PC2       PC2       PC2         E-PC3       Image: Constraint of the second s	re Risk erforming aircreated dar may caused dar	E-RM2	AAM standard ct to the aircraft
The ction of the c	Modera Modera ulties while p to activities land aircr		mply to the O the
	Difficient airce a		Not co requireme
C Description of Existing Preventive Controls [E-PC]	Description of New Preventive Controls [N-PC]	Description of Existing Recovery Measures [E-RM]	Description of New Recovery Measures [N-RM]
-PC1: MOC raised by respective department for perform risk assessment to dentify risk as safety measures for a safe operation.	N-PC1: Existing manpower will be utilized from GAM Miri ops 1 LAE B1, 1 LAE B2 and 2 techician.	E-RM1: Verification audit has been carried out by GAM AMO and QA personnel to ensure the compliance as per CAAM requirement.	N-RM1: To perform periodically surveillance audit by GAM Safety & Quality at GAN Miri ops.
F>E-PC1:	EF>N-PC1: Inadequate manpower for 600 FH maintenance activities.	EF>E-RM1:	EF>N-RM1:
C>EF>E-PC1:	EC>EF>N-PC1: To review manpower allocation as per AMP requirement.	EC>EF>E-RM1:	EC>EF>N-RM1:
-PC2: Manpower required for the operation as manpower list.	N-PC2: Additional special tools required for 600 FH maintenance (Borescope equipment) for Baffle retaining ring inspection borrow from PWC	E-RM2: Appropriate training of used of new equipment (Borescope equipment) has been carried out by GAM personnel by PWC.	N-RM2: Safety briefing and tool box meeting will be carry out prior to perform 600 FH inspection by Miri ops PIC to dedicated staff.
F>E-PC2: Insufficient Qualified personnel for 600 FH maintenance activity	EF>N-PC2: Borosscope equipment not meet the requirement eg. due for	EF>E-RM2:	EF>N-RM2:
C>EF>E-PC2: To review manpower list for 600 FH maintenance.	EC>EF>N-PC2: Acceptance for the borescope equipment have to carry out by GAM personnel as per GAM procedure.	EC>EF>E-RM2:	EC>EF>N-RM2:
-PC3: GAM Maintenance data, facilities, standaed tool, special tools and test quipment as per required.	N-PC3:	E-RM3:	N-RM3:
F>E-PC3: Not meet the 600 FH maintenance standard and requirement.	EF>N-PC3:	EF>E-RM3:	EF>N-RM3:
C>EF>E-PC3: Compliance audit / Desktop audit as per MOE 3.1	EC>EF>N-PC3:	EC>EF>E-RM3:	EC>EF>N-RM3:
-PC4:	N-PC4:	E-RM4:	N-RM4:
F>E-PC4:	EF>N-PC4:	EF>E-RM4:	EF>N-RM4:
C>EF>E-PC4:	EC>EF>N-PC4:	EC>EF>E-RM4	EC>EF>N-RM4:
-PC5:	N-PC5:	E-RM5:	N-RM5:
F>E-PC5:	EF>N-PC5:	EF>E-RM5:	EF>N-RM5:
C>EF>E-PC5:	EC>EF>N-PC5:	EC>EF>E-RM5:	EC>EF>N-RM5:
D •1. Existing Risk Index [Hazard > Unsafe-Event]	5-2. Resultant Risk Index [Hazard > Unsafe-Event]	5-3. Existing Risk Index [Unsafe-Event > Consequence]	5-4. Resultant Risk Index [Unsafe-Event > Consequence]
Assessed Existing Severity level of the UE [Wsht 5]:CTherefore, UE's Optimum No of Barriers (ONB) [Wsht 4A, Table3]:4Applicable CBSV-Likelihood Table for this severity level [Table 3]:4 (iii)	AAssessed Existing Severity level of the UE [Wsht 5]:CBTherefore, UE's Optimum No of Barriers (ONB) [Table3]:4CApplicable CBSV-Likelihood Table for this severity level [Table 3]:4 (iii)	AAssessed Existing Severity level of the UC [Wsht 5]:CBTherefore, UC's Optimum No of Barriers (ONB) [Table3]:4CApplicable CBSV-Likelihood Table for this severity level [Table 3]:4 (iii)	AAssessed Existing Severity level of the UC [Wsht 5]:CBTherefore, UC's Optimum No of Barriers (ONB) [Table3]:4CApplicable CBSV-Likelihood Table for this severity level [Table 3]:4 (iii)
Assessed BSV of individual Existing PCs [Table 1]: E-PC1 3 E-PC2 3 E-PC3 4 E-PC3 0 E-PC5 0 E-PC5 0 E-PC6 0 E-PC7 0 E-PC8 0	D       Assessed BSV of individual Existing PCs & New PCs [Table 1]:         E-PC1       3       N-PC1       5         E-PC2       3       N-PC2       5         E-PC3       0       N-PC3       0         E-PC4       0       N-PC4       0         E-PC5       0       N-PC6       0         E-PC7       0       N-PC7       0         E-PC8       0       N-PC8       0	D       Assessed BSV of individual Existing RMs [Table 1]:         E-RM1       4         E-RM2       4         E-RM3       0         E-RM4       0         E-RM5       0         E-RM6       0         E-RM7       0         E-RM8       0	D       Assessed BSV of individual Existing RMs & New RMs [Table 1]:         E-RM1       4       N-RM1       4         E-RM2       4       N-RM2       5         E-RM3       0       N-RM3       0         E-RM4       0       N-RM4       0         E-RM5       0       N-RM6       0         E-RM6       0       N-RM7       0         E-RM8       0       N-RM8       0
Therefore, CBSV (SUM) of all E-PCs:     10       Assess CBSV of ONB (Applicable if E-PCs are more than ONBs):     10	E       Therefore total (SUM) BSV of all E-PCs plus N-PCs:       16         F       Assess total BSV of ONB (Applicable if E-PCs + N-PCs is more than ONBs):       16	E Therefore, CBSV (SUM) of all E-RMs:	E       Therefore total (SUM) BSV of all E-RMs plus N-RMs:       17         F       Assess total BSV of ONB (Applicable if E-RMs + N-RMs is more than ONBs):       17
(Choose barriers with highest BSVs for this ONB-CBSV calculation)	(Choose barriers with highest BSVs for this ONB-CBSV calculation)	(Choose barriers with highest BSVs for this ONB-CBSV calculation)	(Choose barriers with highest BSVs for this ONB-CBSV calculation)
Existing CBSV of UE (item E or F, whichever is applicable):	G Resultant CBSV of UE (item E or F, whichever is applicable):	G Existing CBSV of UC (item E or F, whichever is applicable):	G Resultant CBSV of UC (item E or F, whichever is applicable):
Existing Likelihood of the UE (CBSV-Likelihood Table of item 3): 3 Existing Risk Index of the UE [Sht8, RI & Tolerability]: 3C	H       Resultant Likelihood of UE (CBSV-Likelihood Table of item 3):       1         I       Resultant Risk Index of the UE [Sht8, RI & Tolerability]:       1	H       Existing Likelihood of the UC (CBSV-Likelihood Table of item 3):       3         I       Existing Risk Index of the UC [Sht8, RI & Tolerability]:       3C	H       Resultant Likelihood of UC (CBSV-Likelihood Table of item 3):       1         I       Resultant Risk Index of the UC [Sht8, RI & Tolerability]:       1
Existing Tolerability of the UE: Moderate Risk	J Resultant Tolerability of the UE:	J Existing Tolerability of the UC: Moderate Risk	J Resultant Tolerability of the UC:

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