

HIRM REFERENCE NUMBER:		GAM/SMS/H-19 (24)	
1. AREA / OPERATION / EQUIPMENT:		MIAT/GAM AMO/9M-LKE (SN:8297)	
2. HAZARD / THREAT [H/T]:		AIRCRAFT INDUCTION INTO GAM AMO	
3. TOP-EVENT [TE]:		UNABLE TO PERFORM REQUIRED TASK	
4. CONSEQUENCE [C]:		AIRCRAFT UNSERVICABLE	
Date Conducted	28-May-2024	Conducted by	Amir (DCAMM), Jasmalizam (EC), Arzat (QAE), Susanna (Safety Protégé), Ain (SE)
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Approved by	Wan Izahan Zameree b. Ishak (SM)	Document Control Number	GAM/SMS/HRC-003-01/21R2



HAZARD IDENTIFICATION AND RISK MITIGATION (HIRM) FORM

Top Event Mitigation													Ultimate Consequence Mitigation																																						
Existing Preventive Controls [E-PC]													New Preventive Controls [N-PC]													Existing Recovery Measures [E-RM]													New Recovery Measures [N-RM]												
AIRCRAFT INDUCTION INTO GAM AMO													AIRCRAFT UNSERVICABLE													AIRCRAFT UNSERVICABLE													AIRCRAFT UNSERVICABLE												
E-PC1													N-PC1													E-RM1													N-RM1												
E-PC2													N-PC2													E-RM2													N-RM2												
E-PC3													N-PC3													E-RM3													N-RM3												
E-PC4													N-PC4													E-RM4													N-RM4												
E-PC5													N-PC5													E-RM5													N-RM5												
E-PC6													N-PC6													E-RM6													N-RM6												
E-PC7													N-PC7													E-RM7													N-RM7												
E-PC8													N-PC8													E-RM8													N-RM8												

Description of Existing Preventive Controls [E-PC]	BSV
E-PC1: Raised Management of Change (MOC). App 01: GAM/MOC/24/0036 EF/UC>E-PC1: EC>EF/UC>E-PC1:	5
E-PC2: Evaluate and review manpower resources. EF/UC>E-PC2: EC>EF/UC>E-PC2:	5
E-PC3: Training for qualified personnel. EF/UC>E-PC3: EC>EF/UC>E-PC3:	5
E-PC4: Monitor supply chain for this type of aircraft. EF/UC>E-PC4: EC>EF/UC>E-PC4:	5
E-PC5: Hangarage for maintenance. EF/UC>E-PC5: EC>EF/UC>E-PC5:	5
E-PC6: EF/UC>E-PC6: EC>EF/UC>E-PC6:	0
E-PC7: EF/UC>E-PC7: EC>EF/UC>E-PC7:	0
E-PC8: EF/UC>E-PC8: EC>EF/UC>E-PC8:	0

Description of New Preventive Controls [N-PC]	BSV
N-PC1: Purchase or rental special tools if required to perform maintenance. EF/UC>N-PC1: EC>EF/UC>N-PC1:	5
N-PC2: EF/UC>N-PC2: EC>EF/UC>N-PC2:	0
N-PC3: EF/UC>N-PC3: EC>EF/UC>N-PC3:	0
N-PC4: EF/UC>N-PC4: EC>EF/UC>N-PC4:	0
N-PC5: EF/UC>N-PC5: EC>EF/UC>N-PC5:	0
N-PC6: EF/UC>N-PC6: EC>EF/UC>N-PC6:	0
N-PC7: EF/UC>N-PC7: EC>EF/UC>N-PC7:	0
N-PC8: EF/UC>N-PC8: EC>EF/UC>N-PC8:	0

Description of Existing Recovery Measures [E-RM]	BSV
E-RM1: Coordinate maintenance of the aircraft with regards to aircraft downtime, manpower, tooling and spares. EF/UC>E-RM1: EC>EF/UC>E-RM1:	5
E-RM2: Sub contract to supply qualified personnel. EF/UC>E-RM2: EC>EF/UC>E-RM2:	4
E-RM3: EF/UC>E-RM3: EC>EF/UC>E-RM3:	0
E-RM4: EF/UC>E-RM4: EC>EF/UC>E-RM4:	0
E-RM5: EF/UC>E-RM5: EC>EF/UC>E-RM5:	0
E-RM6: EF/UC>E-RM6: EC>EF/UC>E-RM6:	0
E-RM7: EF/UC>E-RM7: EC>EF/UC>E-RM7:	0
E-RM8: EF/UC>E-RM8: EC>EF/UC>E-RM8:	0

Description of New Recovery Measures [N-RM]	BSV
N-RM1: Employ additional qualified personnel. EF/UC>N-RM1: EC>EF/UC>N-RM1:	5
N-RM2: EF/UC>N-RM2: EC>EF/UC>N-RM2:	0
N-RM3: EF/UC>N-RM3: EC>EF/UC>N-RM3:	0
N-RM4: EF/UC>N-RM4: EC>EF/UC>N-RM4:	0
N-RM5: EF/UC>N-RM5: EC>EF/UC>N-RM5:	0
N-RM6: EF/UC>N-RM6: EC>EF/UC>N-RM6:	0
N-RM7: EF/UC>N-RM7: EC>EF/UC>N-RM7:	0
N-RM8: EF/UC>N-RM8: EC>EF/UC>N-RM8:	0

<<< Unhide additional PC/ RM rows here where applicable.

<<< Unhide SC Rows here where applicable.

Description of Existing Severity Controls [SC] to mitigate C	Description of New Severity Controls [SC] to mitigate C
E-SC1:	N-SC1:
E-SC2:	N-SC2:

5-1. Existing Risk Index [Hazard > Consequence]

- Severity level of Consequence [Sht 4C] >> **0**
- Consequence's Optimum No of Barriers (ONB) [Sht 4A, Table3] >> **3**
- Applicable CBSV-Likelihood Table [Sht 4A, Table 3] >> **4 (H)**
- BSV of E-PCs and Existing-RMs [Sht 4B]:

	BSV	BSV
E-PC1	5	5
E-PC2	5	4
E-PC3	5	0
E-PC4	5	0
E-PC5	5	0
E-PC6	0	0
E-PC7	0	0
E-PC8	0	0

- CBSV (SUM) of E-PCs and E-RMs >> **34**
- CBSV of ONB (Applicable if No of E-PCs and E-RMs is > ONB) >> (SUM of best BSVs up to ONB) **15**
- CBSV of Consequence (CBSV in Step 5 or 6, whichever is applicable) >> **15**
- Existing Likelihood of Consequence (Table of Item 3) >> **1**
- Existing Risk Index of Consequence [Pairing of Step 1 + 8] >> **10**
- Existing Tolerability of Consequence [Sht 8] >> **Acceptable**

5-2. Resultant Risk Index [Hazard > Consequence]

- Severity level of Consequence [Sht 4C] >> **0**
- Consequence's Optimum No of Barriers (ONB) [Sht 4A, Table3] >> **3**
- Applicable CBSV-Likelihood Table [Sht 4A, Table 3] >> **4 (H)**
- BSV of E-PCs, N-PCs, E-RMs, and N-RMs [Sht 4B]:

	BSV	BSV	BSV	BSV
E-PC1	5	N-PC1 5	E-RM1 5	N-RM1 5
E-PC2	5	N-PC2 0	E-RM2 4	N-RM2 0
E-PC3	5	N-PC3 0	E-RM3 0	N-RM3 0
E-PC4	5	N-PC4 0	E-RM4 0	N-RM4 0
E-PC5	5	N-PC5 0	E-RM5 0	N-RM5 0
E-PC6	0	N-PC6 0	E-RM6 0	N-RM6 0
E-PC7	0	N-PC7 0	E-RM7 0	N-RM7 0
E-PC8	0	N-PC8 0	E-RM8 0	N-RM8 0

- CBSV (SUM) of E-PCs, N-PCs, E-RMs and N-RMs [Note comment flag] >> **44**
- CBSV of ONB (Applicable if No of PCs and RMs is > ONB) >> (SUM of best BSVs up to ONB) **15**
- CBSV of Consequence (CBSV in Step 5 or 6, whichever is applicable) >> **15**
- Resultant Likelihood of Consequence (Table of Item 3) >> **1**
- Resultant Risk Index of Consequence [Pairing of Step 1 + 8] >> **10**
- Resultant Tolerability of Consequence [Sht 8] >> **Acceptable**