

T _T Function ID	T _T Function Loss Description	Function Loss Phase	Corresponding Hazard (s) in FHA	T _T Assigned Classification	Verification Method	👤 Reviewer	🔄 Status	📅 Date	T _T Comments
1.1	Flight contols, Total Loss	Start	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
1.1	Flight contols, Partial Loss	Start	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
1.1	Flight contols, Total Loss	Search	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
1.1	Flight contols, Partial Loss	Search	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
1.1	Flight contols, Total Loss	Subject Found	One agent lost, No effect unless subject underneath		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
1.1	Flight contols, Partial Loss	Subject Found	Agent buffer zone increased		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
1.1	Flight contols, Total Loss	Return	One agent lost		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
1.1	Flight contols, Partial Loss	Return	Agent buffer zone increased		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.1	Communicate correct healthstatus, Total Loss	Start	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.1	Communicate correct healthstatus, Partial Loss	Start	Delayed task distribution, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.1	Communicate correct healthstatus, Total Loss	Search	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.1	Communicate correct healthstatus, Partial Loss	Search	Delayed task distribution, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.1	Communicate correct healthstatus, Total Loss	Subject Found	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.1	Communicate correct healthstatus, Partial Loss	Subject Found	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.1	Communicate correct healthstatus, Total Loss	Return	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.1	Communicate correct healthstatus, Partial Loss	Return	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.2	Communicate correct position, Total Loss	Start	Degraded search capacity, one agent lost, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.2	Communicate correct position, Partial Loss	Start	Agent buffer zone increased, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments

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2.2	Communicate correct position, Total Loss	Search	Degraded search capacity, one agent lost, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.2	Communicate correct position, Partial Loss	Search	Agent buffer zone increased, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.2	Communicate correct position, Total Loss	Subject Found	Decreased search area, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.2	Communicate correct position, Partial Loss	Subject Found	Delayed subject position, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.2	Communicate correct position, Total Loss	Return	One agent lost		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.2	Communicate correct position, Partial Loss	Return	Agent buffer zone increased		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.3	Communicate correctly with agents in area, Total Loss	Start	Degraded search capacity, one agent lost, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.3	Communicate correctly with agents in area, Partial Loss	Start	Delayed task distribution, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.3	Communicate correctly with agents in area, Total Loss	Search	Degraded search capacity, one agent lost, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.3	Communicate correctly with agents in area, Partial Loss	Search	Delayed task distribution, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.3	Communicate correctly with agents in area, Total Loss	Subject Found	Degraded search capacity, one agent lost, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.3	Communicate correctly with agents in area, Partial Loss	Subject Found	Delayed subject position, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.3	Communicate correctly with agents in area, Total Loss	Return	One agent lost		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.3	Communicate correctly with agents in area, Partial Loss	Return	Agent buffer zone increased		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.4	Communicate correct search status, Total Loss	Start	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments

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2.4	Communicate correct search status, Partial Loss	Start	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.4	Communicate correct search status, Total Loss	Search	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.4	Communicate correct search status, Partial Loss	Search	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.4	Communicate correct search status, Total Loss	Subject Found	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.4	Communicate correct search status, Partial Loss	Subject Found	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.4	Communicate correct search status, Total Loss	Return	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.4	Communicate correct search status, Partial Loss	Return	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.5	Communicate correct energy status, Total Loss	Start	One agent lost, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.5	Communicate correct energy status, Partial Loss	Start	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.5	Communicate correct energy status, Total Loss	Search	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.5	Communicate correct energy status, Partial Loss	Search	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.5	Communicate correct energy status, Total Loss	Subject Found	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.5	Communicate correct energy status, Partial Loss	Subject Found	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.5	Communicate correct energy status, Total Loss	Return	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
2.5	Communicate correct energy status, Partial Loss	Return	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
3.1	Search using RGB camera, Total Loss	Start	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments

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3.1	Search using RGB camera, Partial Loss	Start	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Camera considered a total loss – partial failures not applicable.
3.1	Search using RGB camera, Total Loss	Search	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
3.1	Search using RGB camera, Partial Loss	Search	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Camera considered a total loss – partial failures not applicable.
3.1	Search using RGB camera, Total Loss	Subject Found	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
3.1	Search using RGB camera, Partial Loss	Subject Found	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Camera considered a total loss – partial failures not applicable.
3.1	Search using RGB camera, Total Loss	Return	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
3.1	Search using RGB camera, Partial Loss	Return	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Camera considered a total loss – partial failures not applicable.
3.2	Search using Infrared (IR), Total Loss	Start	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
3.2	Search using Infrared (IR), Partial Loss	Start	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	IR considered a total loss – partial failures not applicable.
3.2	Search using Infrared (IR), Total Loss	Search	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
3.2	Search using Infrared (IR), Partial Loss	Search	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	IR considered a total loss – partial failures not applicable.
3.2	Search using Infrared (IR), Total Loss	Subject Found	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
3.2	Search using Infrared (IR), Partial Loss	Subject Found	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	IR considered a total loss – partial failures not applicable.
3.2	Search using Infrared (IR), Total Loss	Return	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments

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3.2	Search using Infrared (IR), Partial Loss	Return	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	IR considered a total loss – partial failures not applicable.
3.3	Search using Ultrasonic (US), Total Loss	Start	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
3.3	Search using Ultrasonic (US), Partial Loss	Start	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	US considered a total loss – partial failures not applicable.
3.3	Search using Ultrasonic (US), Total Loss	Search	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
3.3	Search using Ultrasonic (US), Partial Loss	Search	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	US considered a total loss – partial failures not applicable.
3.3	Search using Ultrasonic (US), Total Loss	Subject Found	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
3.3	Search using Ultrasonic (US), Partial Loss	Subject Found	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	US considered a total loss – partial failures not applicable.
3.3	Search using Ultrasonic (US), Total Loss	Return	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
3.3	Search using Ultrasonic (US), Partial Loss	Return	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	US considered a total loss – partial failures not applicable.
3.4	Search using Lidar, Total Loss	Start	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
3.4	Search using Lidar, Partial Loss	Start	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Lidar considered a total loss – partial failures not applicable.
3.4	Search using Lidar, Total Loss	Search	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
3.4	Search using Lidar, Partial Loss	Search	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Lidar considered a total loss – partial failures not applicable.
3.4	Search using Lidar, Total Loss	Subject Found	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
3.4	Search using Lidar, Partial Loss	Subject Found	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Lidar considered a total loss – partial failures not applicable.

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3.4	Search using Lidar, Total Loss	Return	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
3.4	Search using Lidar, Partial Loss	Return	-	☒	Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Lidar considered a total loss – partial failures not applicable.
4.1	Search area distribution, Total Loss	Start	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
4.1	Search area distribution, Partial Loss	Start	Delayed task distribution, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
4.1	Search area distribution, Total Loss	Search	Degraded search capacity, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
4.1	Search area distribution, Partial Loss	Search	Delayed task distribution, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
4.1	Search area distribution, Total Loss	Subject Found	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
4.1	Search area distribution, Partial Loss	Subject Found	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
4.1	Search area distribution, Total Loss	Return	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
4.1	Search area distribution, Partial Loss	Return	No effect		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
4.2	Task allocation, Total Loss	Start	Degraded search capacity, one agent lost, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
4.2	Task allocation, Partial Loss	Start	Delayed task distribution, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
4.2	Task allocation, Total Loss	Search	Degraded search capacity, one agent lost, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
4.2	Task allocation, Partial Loss	Search	Delayed task distribution, Delayed rescue		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
4.2	Task allocation, Total Loss	Subject Found	One agent lost		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
4.2	Task allocation, Partial Loss	Subject Found	Delayed task distribution		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
4.2	Task allocation, Total Loss	Return	One agent lost, agent buffer zone increased		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments
4.2	Task allocation, Partial Loss	Return	Delayed task distribution		Traceability analysis Function Loss → FHA Table	Emily Zainali	Completed	10/17/2025	Comments