

Armament Directorate

Integrity - Service - Excellence



USAF Mishap Investigation Support Team (MIST) Briefing

Investigator: Richard B. Shimer

13 Aug 2024



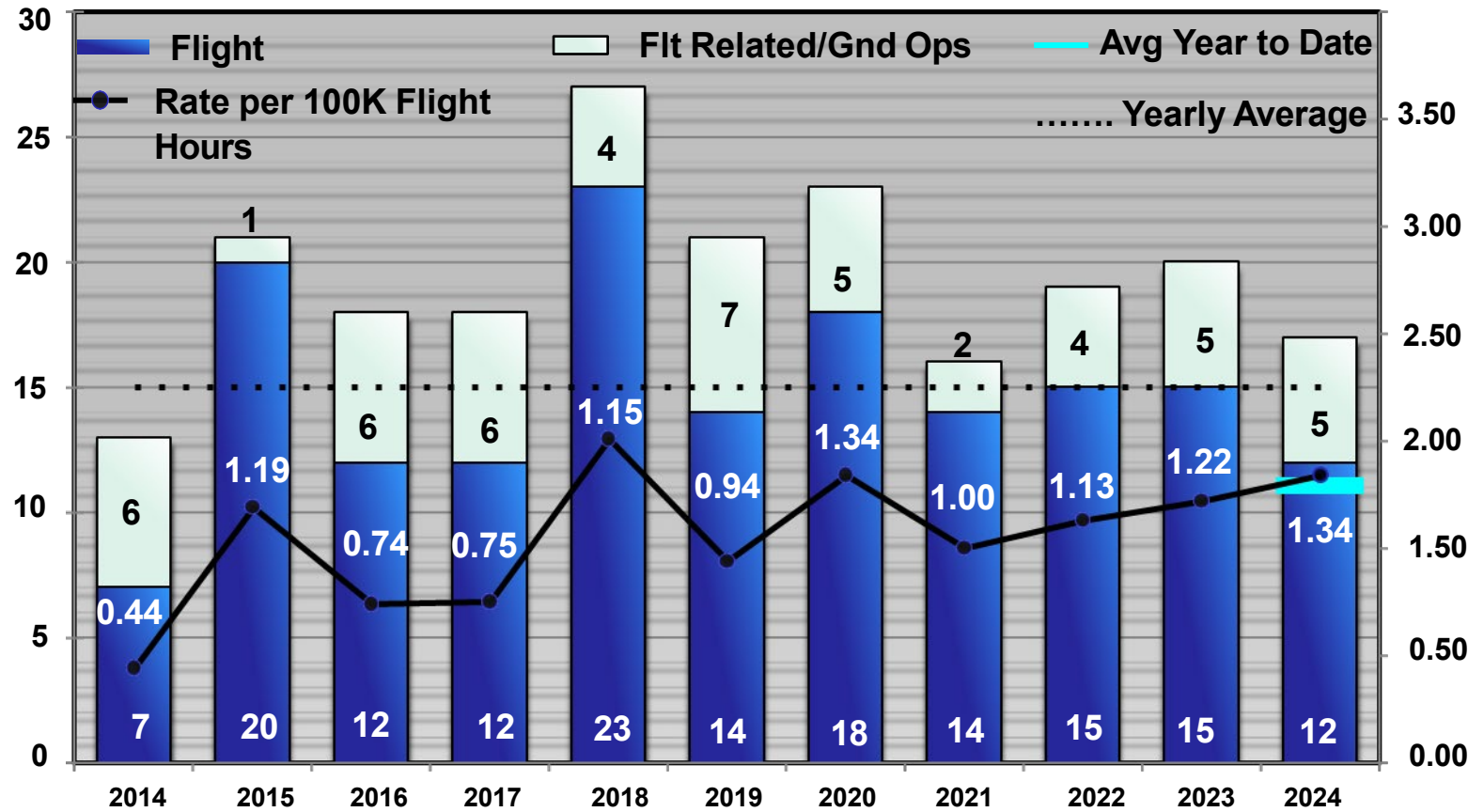
- **USAF Aircraft Mishap Statistics**

- **USAF Ejections Statistics**

- **FY23 and FY24 Ejection**



Class A Manned Mishaps FY24



Source: Air Force Safety Center
<https://www.safety.af.mil/Divisions/Aviation-Safety-Division/Aviation-Statistics/>

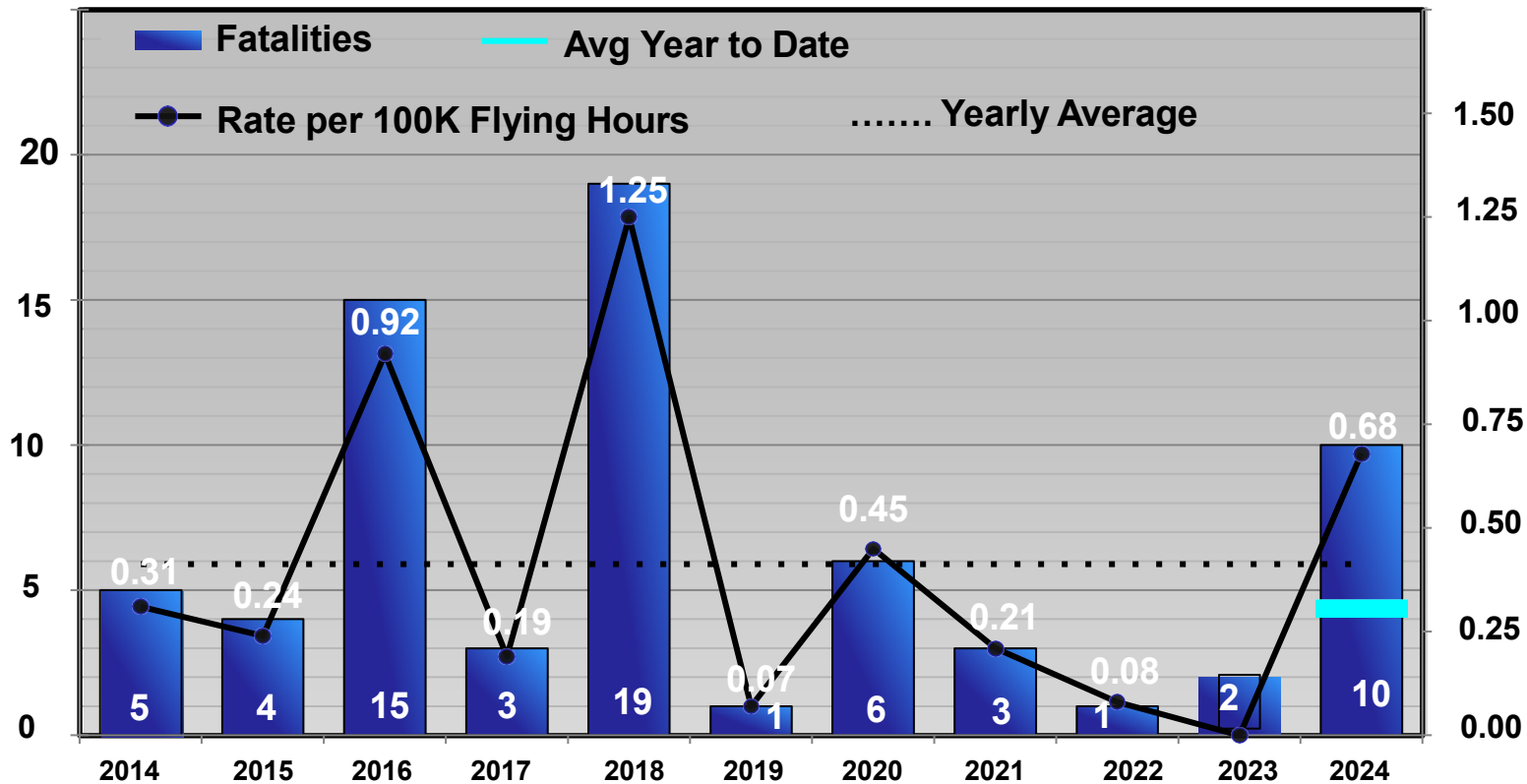
Totals

DISTRIBUTION STATEMENT A (24-130): Approved for public release: distribution is unlimited.

Totals
By 100K
Flt Hours



Class A Manned Mishaps FY24



Source: Air Force Safety Center
<https://www.safety.af.mil/Divisions/Aviation-Safety-Division/Aviation-Statistics/>

Totals

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USAF EJECTIONS FY 15 –FY 24

Aircraft	Ejections	Success %	Fatalities	%
F-16	15	93.8	1	6.3
F-15	3	100.0	0	0.0
F-22	1	100.0	0	0.0
F-35	2	100.0	0	0.0
A-10	2	100.0	0	0.0
A-29	2	66.7	1	33.3
T-6	5	83.3	1	16.7
T-38	9	90.0	1	10.0
U-2	1	50.0	1	50.0
B-1	9	100.0	0	0.0
B-2	0		0	
B-52	0		0	
Totals	40	88.4	5	11.6

Data shows number of ejections from FY15 thru 3rd QTR FY24



Recent Ejections FY23

MDS:	F-35A
One Liner:	F-35A Landing Rollout; One pilots ejected; Aircraft departed runway; Aircraft and crew recovered
Occupant:	Pilot, Male,
Parameters:	Below 800 feet AGL, 160-250 KIAS, Mode 2
Equipment Issues:	No Equipment Issues
Injuries:	None



Recent Ejections FY23

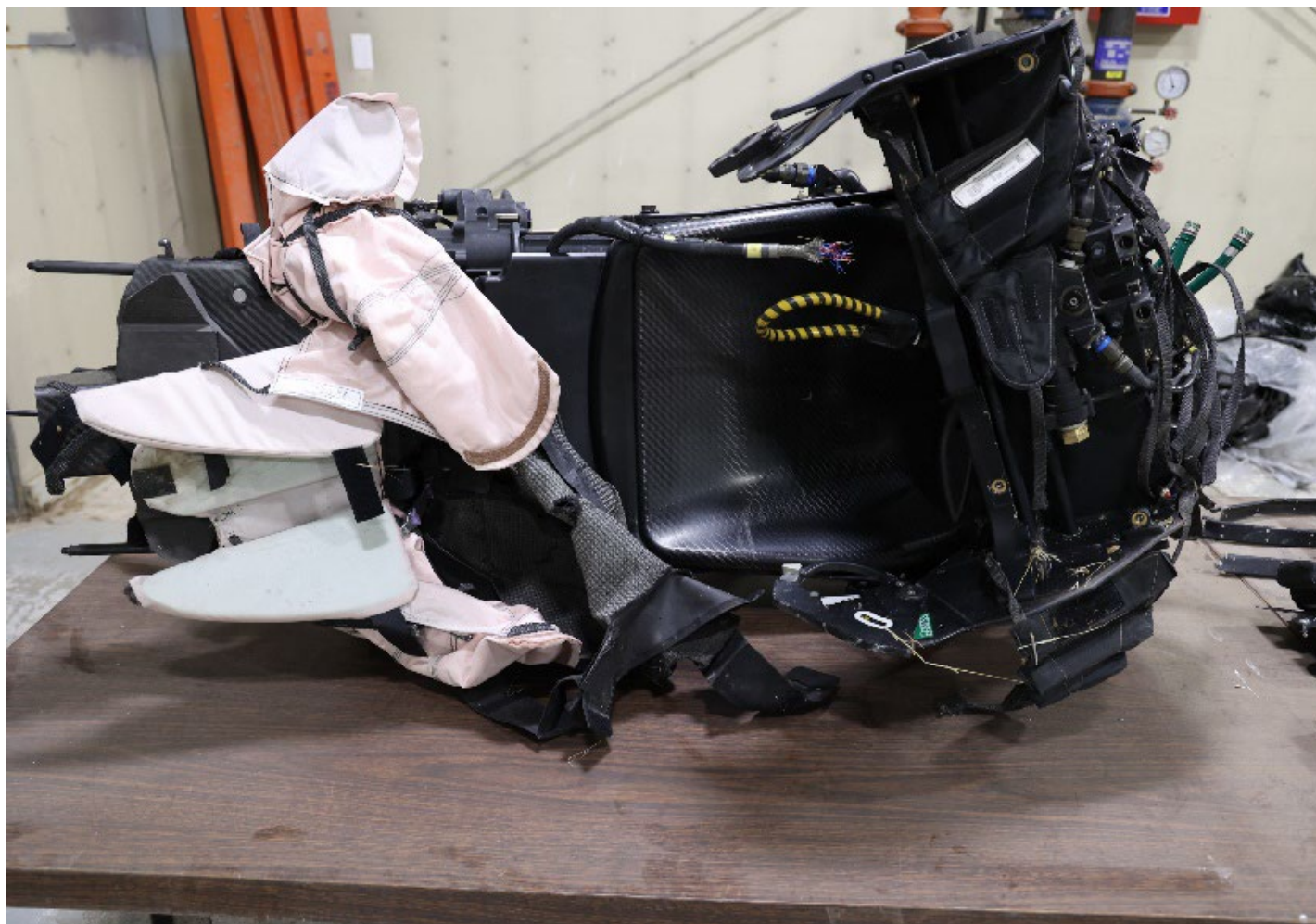


Photo Credits: CAD/PAD USAF AFLCMC



Recent Ejections FY23

MDS:	F-16C
One Liner:	F-16C ACFT TRAINING SORTIE; ACFT MALFUNCTIONED SHORTLY AFTER TAKEOFF; PILOT EJECTED SUCCESSFULLY
Occupant:	Pilot, Male
Parameters:	720 feet AGL, 316 KIAS, Mode 1
Equipment Issues:	1. Equipped with MASS 2. Quick Disconnect - Ripped hose instead of released from QD
Injuries:	Minor scrapes and cuts



Recent Ejections FY23

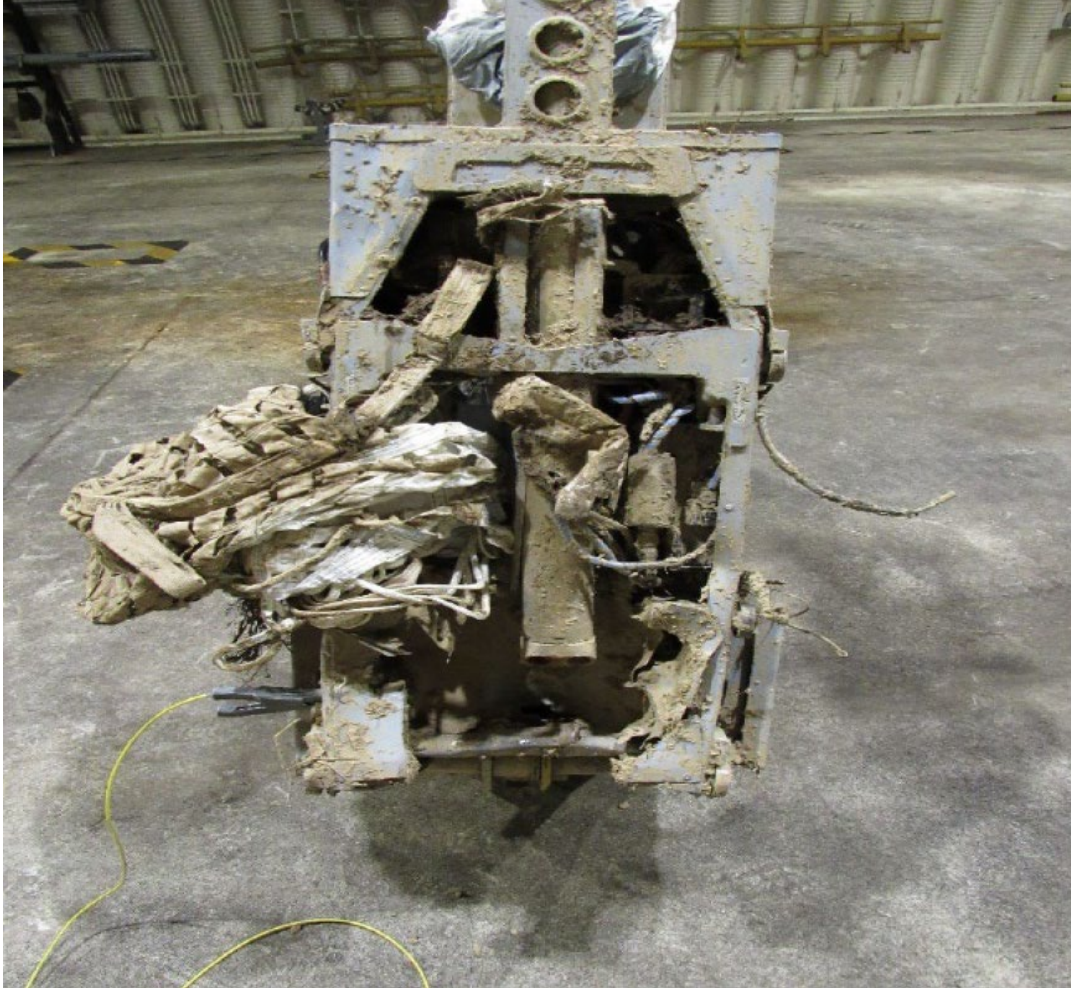


Photo Credits: CAD/PAD USAF AFLCMC



Recent Ejections FY23

MDS:	T-38C
One Liner:	T-38C ACFT TRAINING SORTIE, ACFT STRUCK SEVERAL BIRDS WITH COMPLETE ENGINE FAILURE, SINGLE PILOT EJECTED SUCCESSFULLY
Occupant:	Pilot, Male
Parameters:	UNK AGL, UNK KIAS,
Equipment Issues:	1. MOR handle pulled 2. Aft Seat disposed by EOD without MIST on-site Inspection
Injuries:	Minor Injuries



Recent Ejections FY23



Photo Credits: CAD/PAD USAF AFLCMC



Recent Ejections FY24

MDS:	F-16C
One Liner:	F-16C ACFT TRAINING SORTIE; ACFT MALFUNCTIONED DURING FLIGHT; PILOT EJECTED SUCCESSFULLY
Occupant:	Pilot, Male, Weight 170 lbs, Height 5'11"
Parameters:	Mode 1 Ejection
Equipment Issues:	<ol style="list-style-type: none">1. Drogue gun was found to have fired when seat was inspected2. When recover sequencer was downloaded it was discovered the drogue gun did not fire during mode 1 ejection. It was determined that because the seat was submerged in ocean water that drogue gun fired.
Injuries:	<ol style="list-style-type: none">1. Minor injuries



Recent Ejections FY23

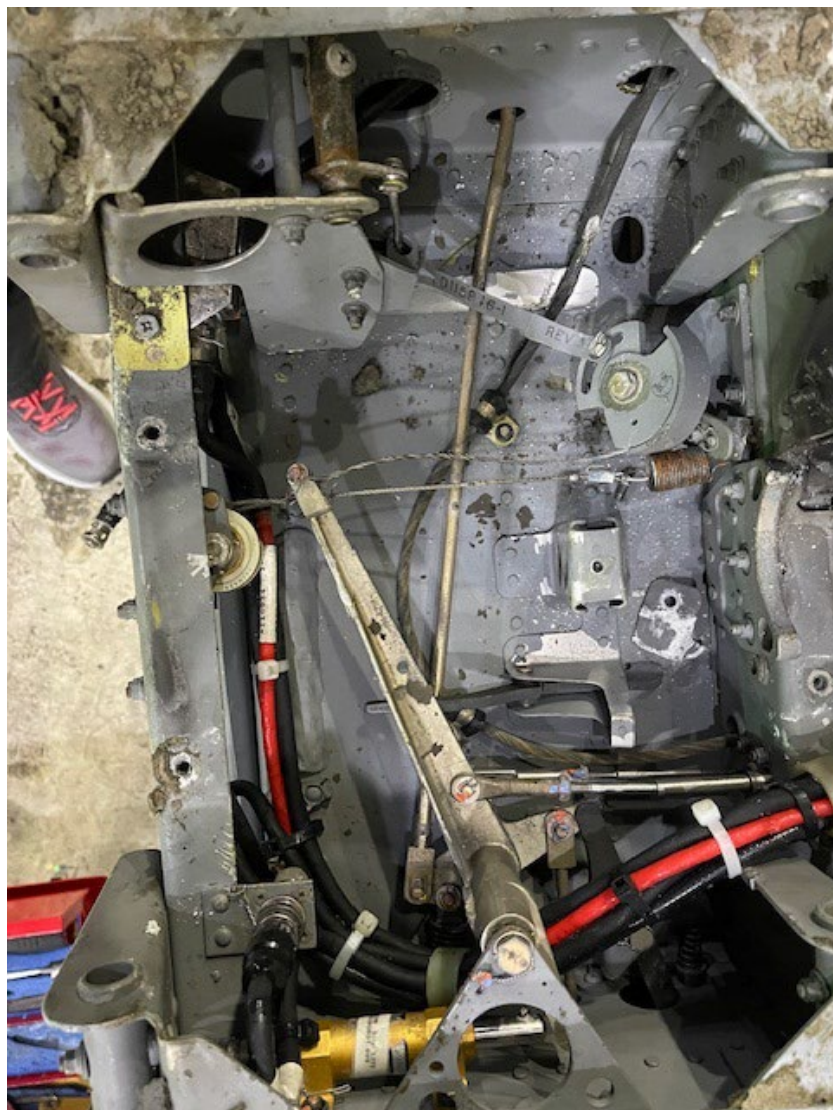
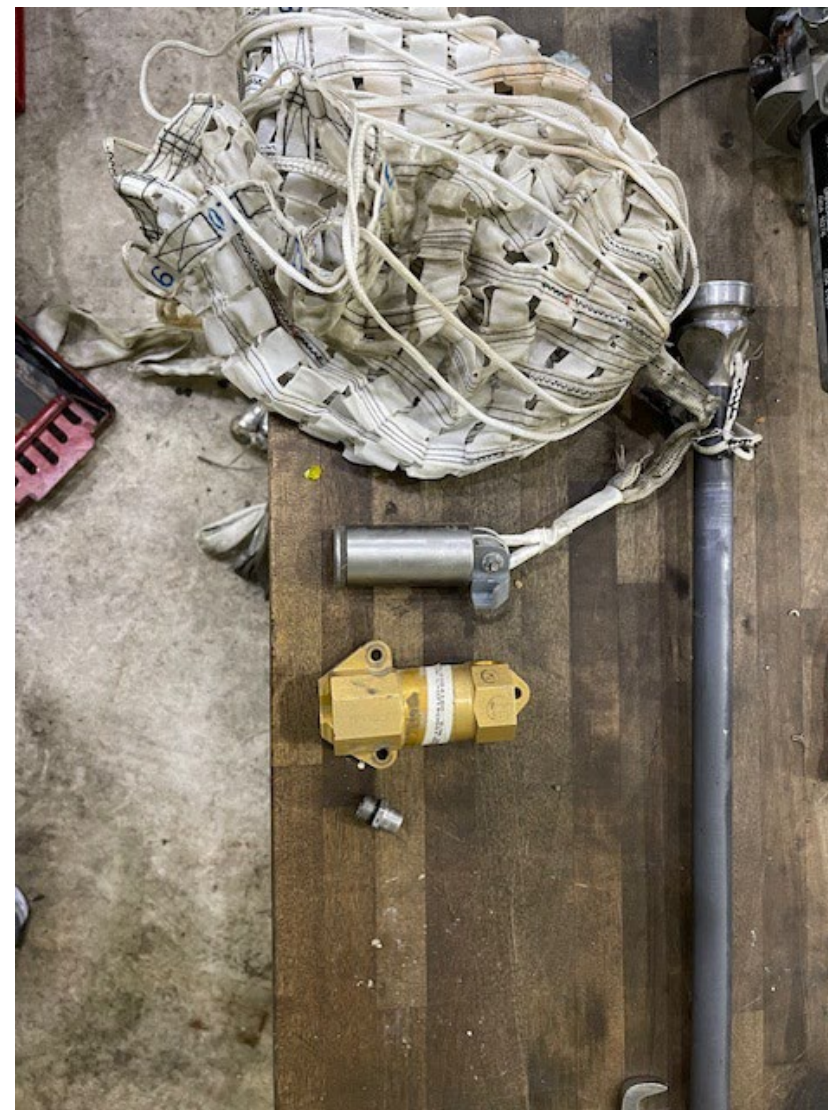


Photo Credits: CAD/PAD USAF AFLCMC





Recent Ejections FY24

MDS:	B-1B
One Liner:	B-1B ACFT TRAINING SORTIE; ACFT MALFUNCTIONED DURING LANDING; PILOT EJECTED SUCCESSFULLY
Occupant:	Pilot, Male
Parameters:	Mode 1 Ejection, 0 AGL. 164 Knots
Equipment Issues:	1. Ejection Initiators B-nut loose.
Injuries:	1. Minor Burn injuries



Recent Ejections FY24



Photo Credits: CAD/PAD USAF AFLCMC



Recent Ejections FY24



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Recent Ejections FY24

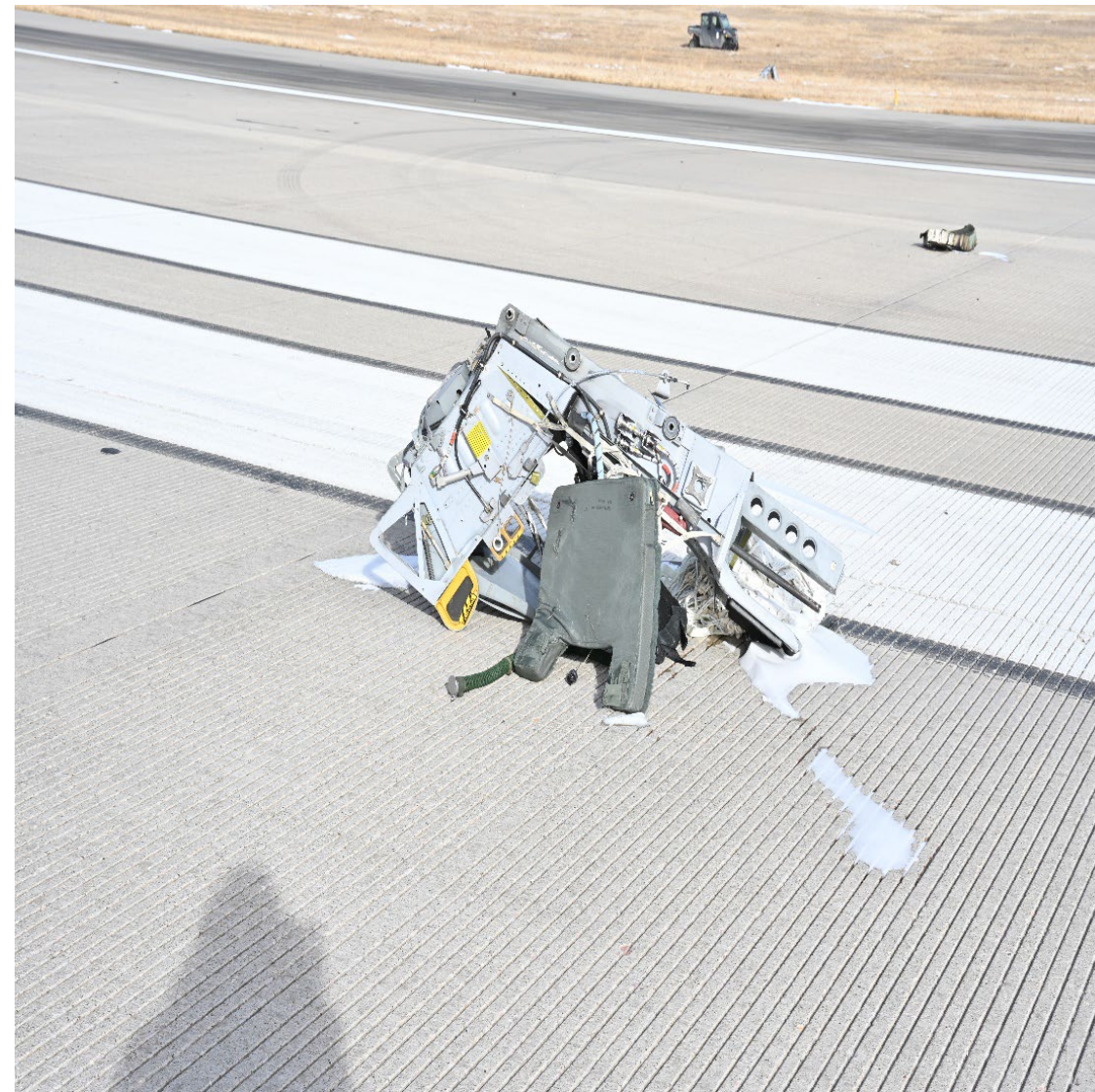
MDS:	B-1B
One Liner:	B-1B ACFT TRAINING SORTIE; ACFT MALFUNCTIONED DURING LANDING; CO-PILOT EJECTED SUCCESSFULLY
Occupant:	Co-Pilot-Male
Parameters:	Mode 1 Ejection, 0 AGL, 164 Knots
Equipment Issues:	1. Interia Reel straps retracted unevenly
Injuries:	1. Major injuries- Spine and neck, broken leg and multiple burns



Recent Ejections FY24



Photo Credits: CAD/PAD USAF AFLCMC





Recent Ejections FY24

MDS:	B-1B
One Liner:	B-1B ACFT TRAINING SORTIE; ACFT MALFUNCTIONED DURING LANDING; DEFENSE SYSTEM OFFICER (DSO) EJECTED SUCCESSFULLY
Occupant:	Defense Systems Officer-Male
Parameters:	Mode 1 Ejection, 0 AGL, 164 Knots
Equipment Issues:	1. None
Injuries:	1. Minor Burn injuries



Recent Ejections FY24



Photo Credits: CAD/PAD USAF AFLCMC





Recent Ejections FY24

MDS:	B-1B
One Liner:	B-1B ACFT TRAINING SORTIE; ACFT MALFUNCTIONED DURING LANDING; OFFENSIVE SYSTEM OFFICER (OSO) EJECTED SUCCESSFULLY
Occupant:	Offensive Systems Officer-Male
Parameters:	Mode 1 Ejection, 0 AGL, 164 Knots
Equipment Issues:	1. None
Injuries:	1. Minor injuries



Recent Ejections FY24



Photo Credits: CAD/PAD USAF AFLCMC





Recent Ejections FY24

MDS:	F-16C
One Liner:	F-16C ACFT TRAINING SORTIE; ACFT MALFUNCTIONED DURING FLIGHT; PILOT EJECTED SUCCESSFULLY
Occupant:	Pilot-Male
Parameters:	Unknown
Equipment Issues:	1. Seat was not recovered
Injuries:	1. Minor injuries



Recent Ejections FY24

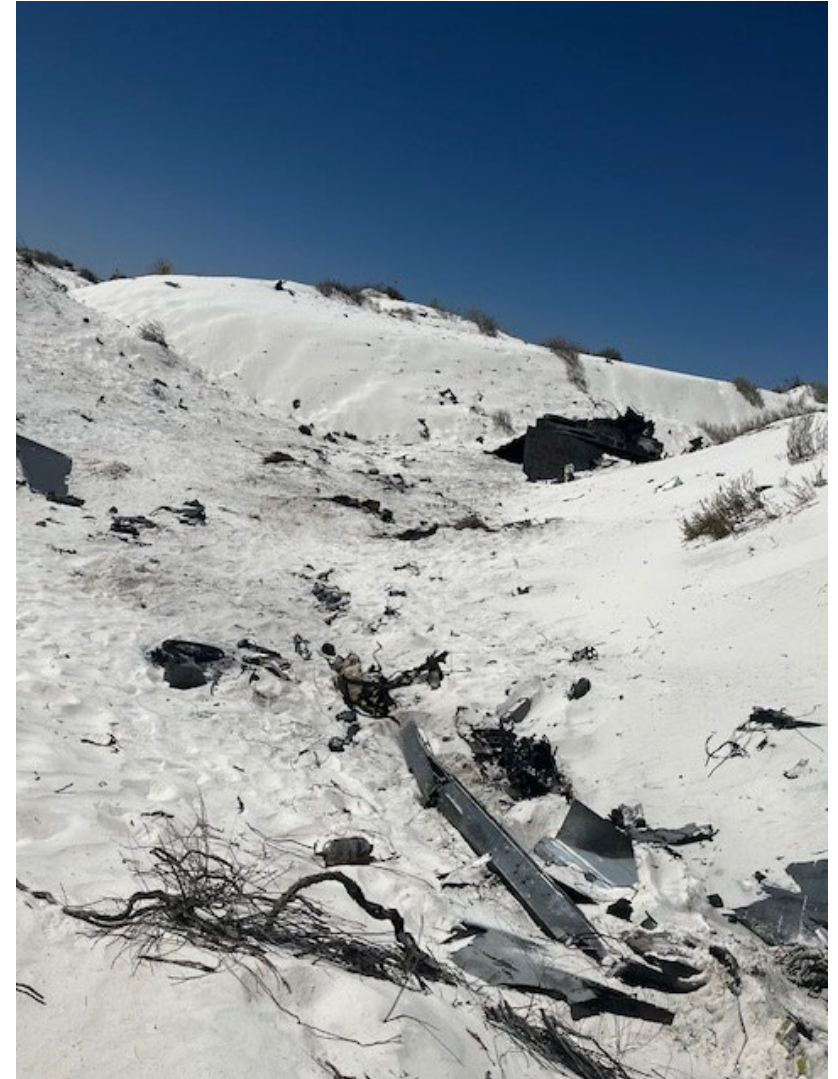
MDS:	F-16C
One Liner:	F-16C ACFT TRAINING SORTIE; ACFT MALFUNCTIONED DURING FLIGHT; PILOT EJECTED SUCCESSFULLY
Occupant:	Pilot-Male
Parameters:	Mode 1 Ejection
Equipment Issues:	<ol style="list-style-type: none">1. R/H gas hose did not disconnect from Quick Disconnect2. STAPAC Gyro wheel Absorption Cylinder did not compress enough for Piston/Rack assembly to lock.
Injuries:	<ol style="list-style-type: none">1. Minor Injuries



Recent Ejections FY24



Photo Credits: CAD/PAD USAF AFLCMC





Conclusion

Success Rate is almost 89 Percent

Each Ejection is different and requires no assumptions

MIST Concerns



QUESTIONS