North American F-100

Airworthiness Certification

AIR-230 Airworthiness Branch
Federal Aviation Administration
Washington, D.C.
October 15, 2012

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Introduction – F-100 Airworthiness Certification

This document provides information to assist in the airworthiness certification and safe civil operation of a North American F-100 aircraft.

Attachment 1 provides a general overview of this document. Attachment 2 contains background information on the F-100 aircraft. Attachment 3 lists historic airworthiness issues with the F-100 for consideration in the certification, operation, and maintenance of these aircraft. The list is not exhaustive, but includes our current understanding of risks that should be assessed during in the certification, operation, and maintenance of these aircraft. Concerns regarding particular issues may be mitigated in various ways. Some may be mitigated via the aircraft maintenance manual(s) or the aircraft inspection program. Others may be mitigated via operating procedures i.e., SOPs) and limitations, aircraft flight manual changes, or logbook entries

Not all issues in attachment 3 may apply to a particular aircraft given variations in aircraft configuration, condition, operating environment, or other factors. Similarly, circumstances with an aircraft may raise other issues not addressed by attachment 2 that require mitigation. Attachment 4 includes additional resources and references. Attachment 5 provides some relevant F-100 accident and incident data.

Attachment 1 – Overview of this Document

Purpose

This document is to provide all those involved in the certification, operation, and maintenance of the F-100 aircraft with safety information and guidance to help assess and mitigate safety hazards for the aircraft. The existing certification procedures in FAA Order 8130.2, Airworthiness Certification of Aircraft and Related Products, do not account for many of the known safety concerns and risk factors associated with many high-performance former military aircraft. These safety concerns and risk factors associated with many high performance former military aircraft include—

- Lack of consideration of inherent and known design failures;
- Several single-point failures;
- Lack of consideration for operational experience, including accident data and trends;
- Operations outside the scope of the civil airworthiness certificate;
- Insufficient flight test requirements;
- Unsafe and untested modifications;
- Operations over populated areas (the safety of the non-participating public has not been properly addressed in many cases);
- Operations from unsuitable airports (i.e., short runways, Part 139 (commercial) airports);
- High-risk passenger carrying activities taking place;
- Ejection seat safety and operations not adequately addressed;
- Weak maintenance practices to address low reliability of aircraft systems and engines;
- Insufficient inspection schedules and procedures;
- Limited pilot qualifications, proficiency, and currency;
- Weapon-capable aircraft not being properly demilitarized, resulting in unsafe conditions;
- Accidents and serious incidents not being reported; and
- Inadequate accident investigation data.

Research of F-100 Safety Data

The aircraft, relevant processes, and safety data are thoroughly researched and assessed. This includes—

- Aviation Safety (AVS) Safety Management System (SMS) policy and guidance;
- Historical military accident/incident data and operational history;
- Civil accident data;
- Safety risk factors;
- Interested parties and stakeholders (participating public, non-participating public, associations, service providers, air show performers, flying museums, government service providers, airport owners and operators, many FAA lines of business, and other U.S. Government entities);
- Manufacturing and maintenance implications; and
- Design features of the aircraft.

This Document

The document is a compilation of known safety issues and risk factors identified from the above research that are relevant to civil operations. This document is organized into four major sections:

- General airworthiness issues (grey section),
- Maintenance (yellow section),
- Operations (green section), and
- Standard operating procedures and best practices (blue section).

This document also provides background information on the aircraft and an extensive listing of resources and references.

How to Use the Document

This document was originally drafted as job aids intended to assist FAA field office personnel and operators in the airworthiness certification of these aircraft. As such, some of the phrasing implies guidance to FAA certification personnel. The job aids were intended to be used during the airworthiness certification process to help identify any issues that may hinder the safe certification, maintenance, or operation of the aircraft. The person performing the certification and the applicant would to discuss the items in the job aid, inspect documents/records/aircraft, and mitigate any issues. This information would be used to draft appropriate operating limitations, update the aircraft inspection program, and assist in the formulation of adequate operating procedures. There are also references to requesting information from, or providing information to the person applying for an airworthiness certificate. We are releasing this document as drafted, with no further updates and revisions, for the sole purpose of communicating safety information to those involved in the certification, operation, and maintenance of these aircraft. The identified safety issues and recommended mitigation strategies are clear and can be considered as part of the certification, operation, and maintenance of the air aircraft.

Attachment 2—Background Information on the F-100 Aircraft

The 45 degree swept-wing North American F-100 became the first U.S. supersonic fighter when it flew May 25, 1953. It served with the United States Air Force (USAF) from 1954 to 1971 and with the Air National Guard (ANG) until November 1979 when the last ANG F-100 was retired to the Military Aircraft Storage and Disposition Center in Arizona by Indiana's 113th Tactical Fighter Squadron. The last F-100s were retired form operational service with the Turkish Air Force in 1987 and Taiwan's Air Force in 1988. The last QF-100 target drone (Full Scale Aerial Target (FSAT) - 325 F-100s were modified) was expended by the USAF in 1992 and the last USAF F-100 operation took place in August 1994. Civilian contractor (BAE Systems) F-100 operations ended N-registered F-100 operations in Germany in 2001.

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Today (2012), there are nine F-100s in the Federal Aviation Administration (FAA) registry. Two F-100Fs, N2011Vs and N26AZs, are known to be currently flying. Another, F-100D and N2011U, may also be operational. Four more aircraft (an F-100C and an F-100A) are in storage, but may be able to be restored.

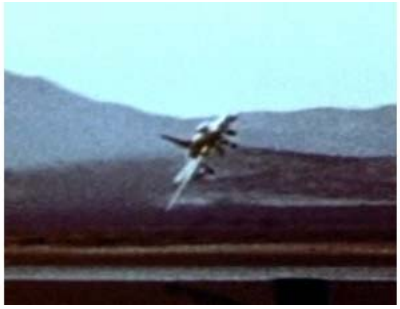
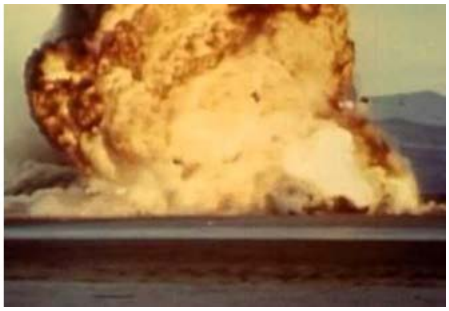
The first of the Century Series collection of USAF jet fighters, the F-100, was the first USAF fighter capable of supersonic speed in level flight. The F-100 flew over 360,000 combat missions in Southeast Asia between 1964 and 1971. It flew as a fighter-bomber engaged in close air support, as the first Wild Weasels (surface-to-air missile suppression), and as Fast Forward Air Controllers or forward air controllers.

In addition to extensive USAF service in Vietnam (242 were lost in combat and 54 in accidents), the F-100 was used as a frontline fighter bomber by many friendly nations including Denmark, France, Turkey, and Taiwan. Several variants of the F-100 exist, including the F-100A; F-100C; F-100D; and the two-seaters, F-100F and TF-100F. F-100 configurations vary in other ways, including J-57 engine variants, ejection seat systems, flaps, gross weight, afterburner nozzle type, oxygen systems [gaseous vs. liquid oxygen (LOX)], refueling probe, and wing (stall) fences.

F-100 Production Numbers

North American Designator(s)	Version	Number	Totals
NA-180	YF-100A	2	
NA-192	F-100A	203	**Total: 205**
NA-214/-217/-222	F-100C	476	
NA-223/-224/-235/-245	F-100D	1,274	**Total: 1,750**
NA-243/-255/-261/-262	F-100F	339	**Total: 339**
Total: 2,294 Aircraft			

The F-100 is one the most unforgiving jet fighters ever built. Out of 2,294 total aircraft (refer to F-100 Production Numbers, above), over the lifetime of their USAF service, 889 F-100 aircraft were destroyed in 1,161 Class A mishaps, including 500 F-100Ds, and 85 F-100Fs. The fatal accident rate was a high 43 percent, fleet wide. In fact, the aircraft had a Class A mishap rate of 21.2 mishaps per 100,000 hours (other sources state the rate is higher at 27.6 mishaps per 100,000 hours) and in combination with the J-57, the second worst record for single-engine fighters in the USAF after the F-104. In the first 100,000 hours of USAF service, 95 F-100s were lost in accidents. In 1958 alone, there were 116 F-100 accidents, which killed 47 pilots.

Source: USAF.

In North Atlantic Treaty Organization (NATO) service, the mishap rate was high as well. The Royal Danish Air Force lost 38 of its 72 F-100s in accidents in 175,000 hours of flight operations. This equates to an accident rate of 21.7 accidents per 100,000 hours, mostly because of engine failures, and a fleet attrition rate of 48 percent. The fatal accident rate was 40 percent. Further brake down of this data shows 8 of the first 10 Danish F-100F trainers crashed, as did 27 of the first 48 F-100Ds received by that NATO country.

In French Air Force service, the F-100 accident rate was slightly better at 17.9 accidents per 100,000 hours (45 aircraft destroyed and 251,273 hours between 1958 and 1978) along with a fleet attrition rate of 46 percent. The Turkish Air Force lost 90 of its 270 F-100s in accidents (fleet attrition rate of 33 percent). Taiwan's Air Force lost 49 out of a fleet of 118 F-100A aircraft (fleet attrition rate 41 percent), which is in line with the fact that 80 of the 203 F-100As built were lost in accidents. This is reflected by the safety record of the F-100, which even when properly operated and maintained, was alarming when compared to a modern fighter. The Class A mishap rate of the F-15 in USAF service today is 2.4 mishaps per 100,000 hours.

Photos: USAF.

F-100 HISTORY									
	CLASS A		CLASS B		DESTROYED		FATAL		
YEAR	#	RATE	#	RATE	A/C	RATE	PILOT	ALL	HOURS
CY53	0	0.00	0	0.00	0	0.00	0	0	53
CY54	4	312.26	0	0.00	2	156	1	1	1281
CY55	22	120.55	0	0.00	10	54.80	2	2	18249
CY56	70	74.86	2	2.14	32	34.22	3	3	93514
CY57	160	61.94	11	4.26	93	36.00	28	38	258298
CY58	168	37.57	12	2.68	116	25.94	47	55	447209
CY59	128	30.23	15	3.54	92	21.73	27	51	423407
CY60	94	23.16	14	3.45	67	16.51	26	26	405838
CY61	82	21.00	7	1.79	68	17.41	26	34	390473
CY62	65	19.48	20	5.99	62	18.58	22	23	333659
CY63	52	15.69	9	2.71	46	13.88	28	29	331502
CY64	47	14.58	8	2.48	45	13.96	18	19	322312
CY65	44	14.35	5	1.63	41	13.37	18	21	306696
CY66	43	14.47	16	5.38	40	13.46	14	14	297242
CY67	33	10.21	14	4.33	32	9.90	16	21	323091
CY68	35	10.02	5	1.43	30	8.59	12	14	349245
CY69	31	11.10	7	2.51	31	11.10	10	13	279280
CY70	27	13.40	6	2.98	26	12.90	8	8	201554
CY71	13	10.17	3	2.35	14	10.95	3	3	127864
CY72	6	6.79	0	0.00	6	6.79	1	1	88340
CY73	6	6.43	0	0.00	4	4.29	0	0	93321
CY74	9	10.29	0	0.00	9	10.29	3	4	87475
CY75	6	6.88	2	2.29	6	6.88	4	4	87164
CY76	3	3.78	1	1.26	3	3.78	0	0	79305
CY77	5	7.94	5	7.94	5	7.94	3	3	62952
CY78	5	10.51	3	6.30	5	10.51	2	2	47594
CY79	2	14.87	0	0.00	3	22.31	2	2	13448
CY80	0	0.00	0	0.00	0	0.00	0	0	10
CY81	0	0.00	0	0.00	0	0.00	0	0	5
CY82	0	0.00	0	0.00	0	0.00	0	0	78
CY83	0	0.00	0	0.00	0	0.00	0	0	40
CY84	0	0.00	0	0.00	0	0.00	0	0	61
CY85	1	1724.1	0	0.00	1	1724	0	0	58
CY86	0	0.00	0	0.00	0	0.00	0	0	51
TY87	0	0.00	0	0.00	0	0.00	0	0	88
FY88	0	0.00	0	0.00	0	0.00	0	0	132
FY89	0	0.00	0	0.00	0	0.00	0	0	111
FY90	0	0.00	0	0.00	0	0.00	0	0	47
LIFETIME	1161	21.22	165	3.02	889	16.25	324	391	5471047

Source: USAF Safety Center.

To illustrate the aircraft's dismal safety record, in 1966 at the height of its operational use, USAF F-100 aircraft were involved in 608 accidents and incidents. Of these, 43 were major accidents, and 40 aircraft destroyed. Maintenance and materiel failures accounted for 23 of these accidents, with the majority (17 accidents) being engine related. As stated by the USAF Safety center, "failures of the J-57 engine have remained the greatest single cause factor in F-100 major accidents" and "the engine also has experienced a proportionately high rate of minor accidents and incidents." The J-57 was the first production aircraft engine to be officially rated in the 10,000 lb thrust class.

Maintenance problems with the F-100 were chronic and could easily overwhelm seasoned operational units. Maintenance was extremely difficult and it was not uncommon for squadrons transitioning to the F-100 to only attain a low 10 percent in-service rate for a few months. In fact, several NATO countries refused to be equipped with F-100s because of the aircraft-intense maintenance requirements.

Source: Del Laughery. Copyright © 2010. Used with permission. www.airliners.net.

While several ANG F-100 units achieved high serviceability rates and lost very few aircraft because of exceptional maintenance in terms of personnel and expertise, others lost aircraft late in their operational service because of the same "typical" F-100 fashion. This included engine, hydraulic, flight controls, and the all-common drag chute failures. The operational and accident data from several air forces operating the aircraft (USAF, Danish Air Force, Turkish Air Force) in its twilight years not only reflects this recurrent pattern, but also illustrates other F-100 accident causes including the well-known loss of control at low and high-speed known as "Sabre Dance." In other words, many of the F-100's safety hazards were never eliminated throughout the aircraft's operational life. Against this background, the complex and demanding aspects of safely operating civilian F-100 aircraft cannot be underestimated.

This demands a high level of airworthiness scrutiny even when compared to other former military combat jets now operating as civil aircraft in the United States. In summary, and as stated by Mr. Bob Hoover when discussing the F-100, operators and pilots have to be "knowledgeable enough" about the aircraft "to challenge inappropriate high risks." Certainly, this applies to the F-100 and suggests a review of the information in this document should be taken into account as part of the airworthiness certification process.

Source: USAF.

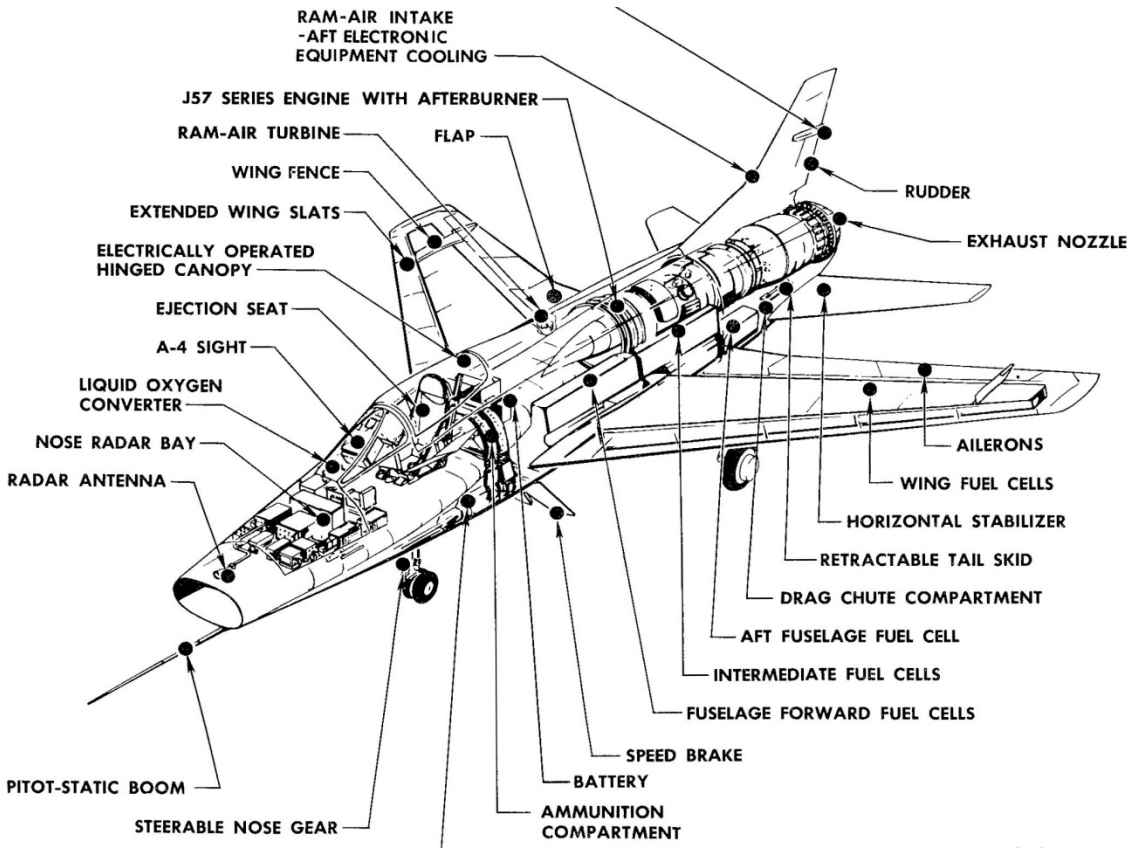
Specifications (F-100D)

General Characteristics

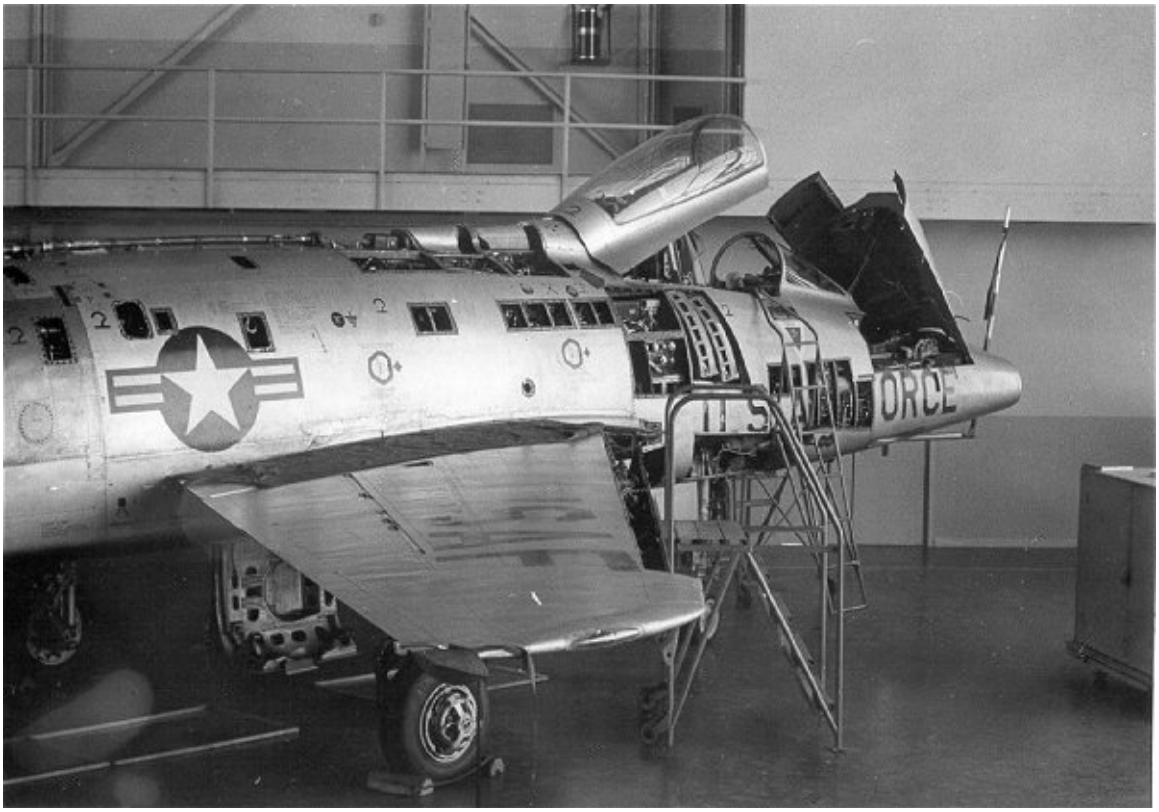
- Length: 50 ft
- Wingspan: 38 ft 9 in
- Height: 16 ft 2¾ in
- Wing area: 400 ft²
- Empty weight: 21,000 lb
- Loaded weight: 28,847 lb
- Max takeoff weight: 34,832 lb
- Powerplant: 1× Pratt and Whitney J57-P-21/21A. Dry thrust: 10,200 lb, afterburner: 16,000 lb
- Zero-lift drag coefficient: 0.0130
- Drag area: 5.0 ft²
- Aspect ratio: 3.76

Performance

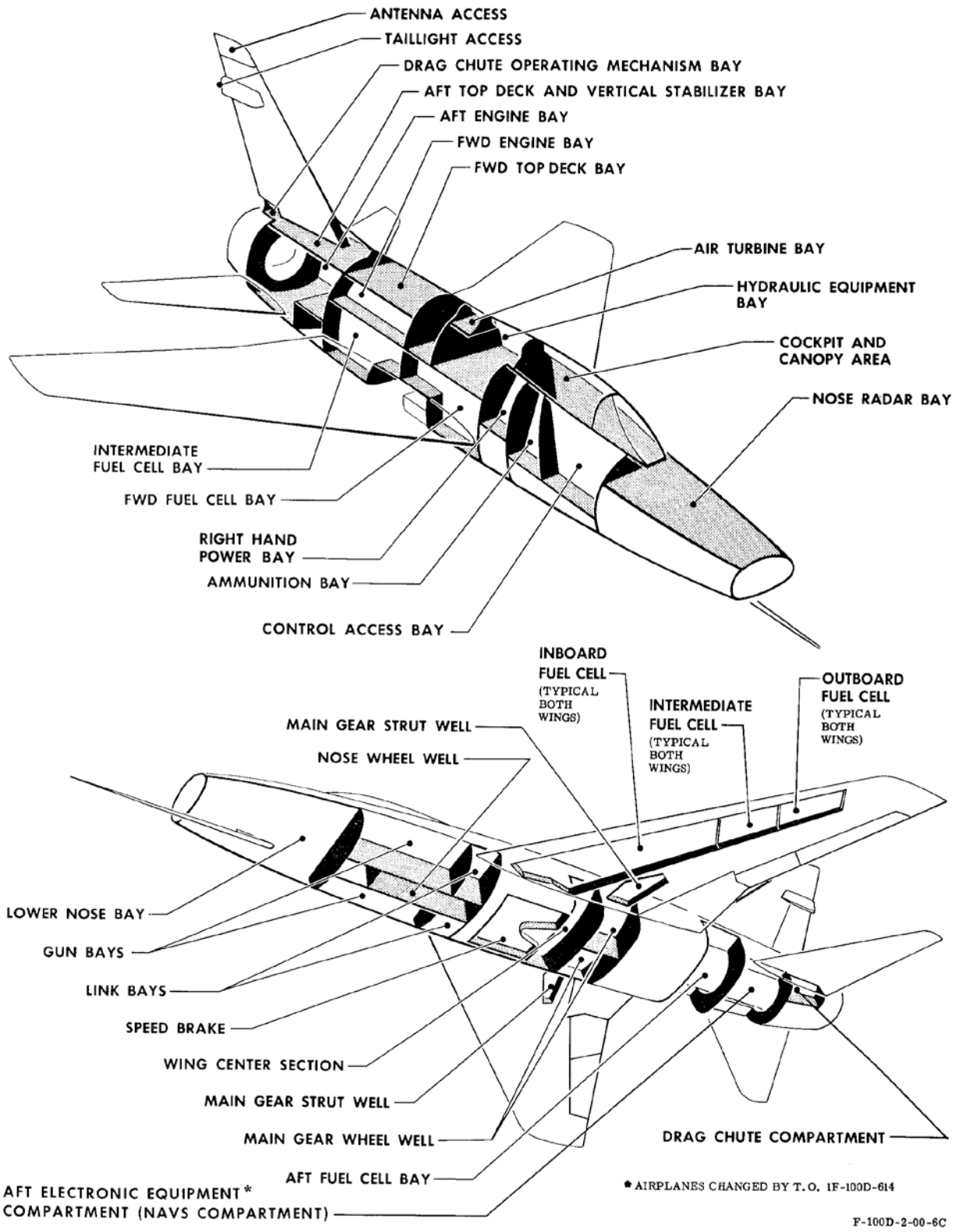
- Maximum speed: 750 knots
- Range: 1,733 nm
- Service ceiling: 50,000 ft
- Wing loading: 72.1 lb/ft²
- Thrust/weight: 0.55
- Lift-to-drag ratio: 13.9



Source: USAF, TO 1F-100D-2-1.

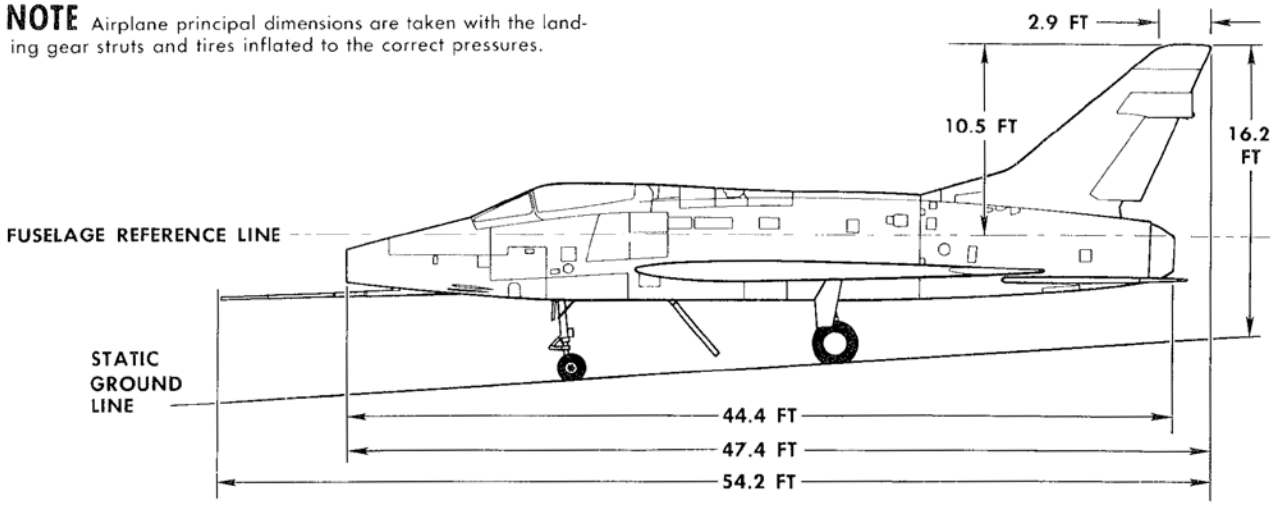


Source: USAF.



Source: USAF, TO 1F-100D-2-1.

NOTE Airplane principal dimensions are taken with the landing gear struts and tires inflated to the correct pressures.



AREAS

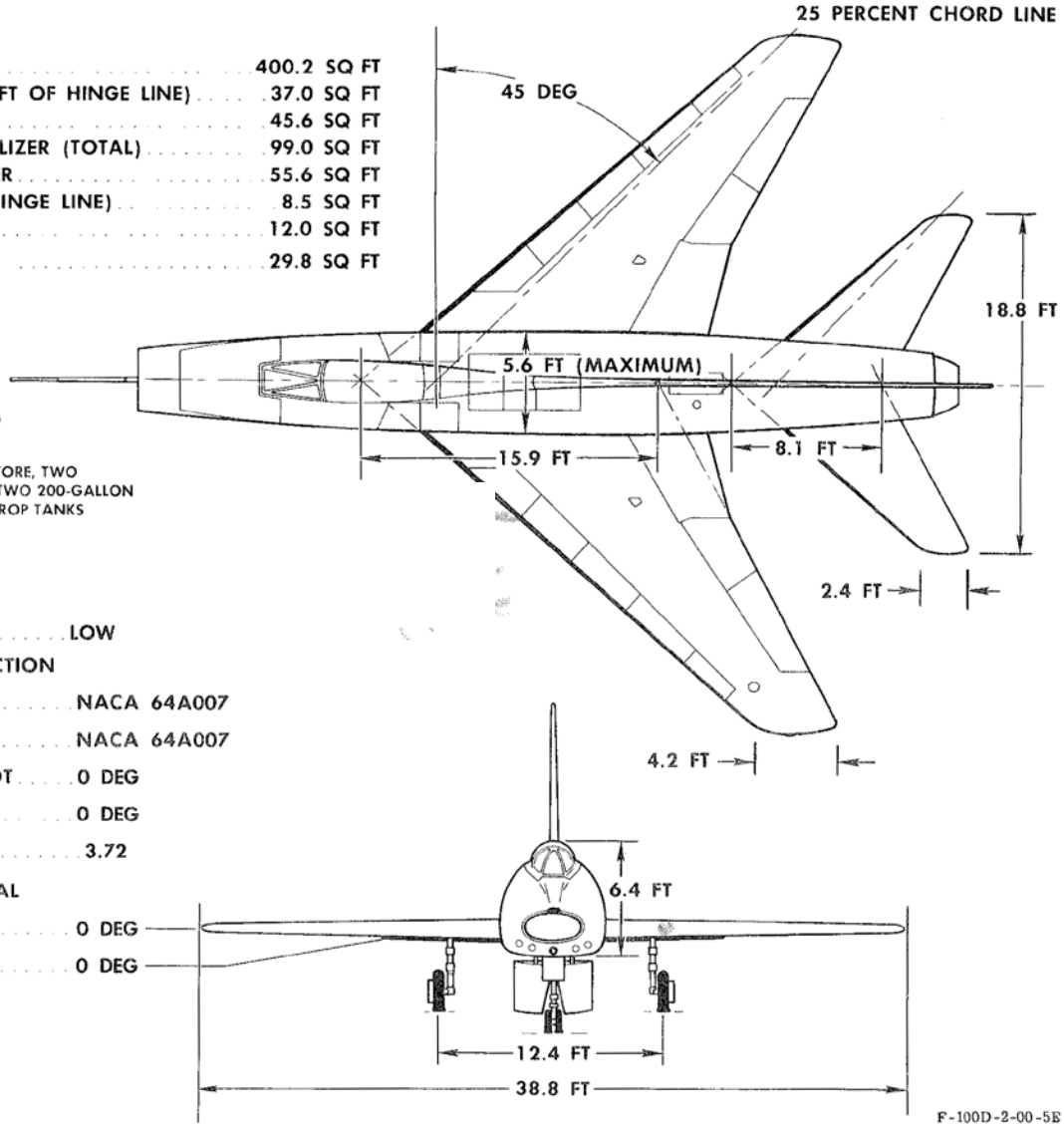
WING (TOTAL)	400.2 SQ FT
AILERON (TOTAL AFT OF HINGE LINE)	37.0 SQ FT
WING SLATS	45.6 SQ FT
HORIZONTAL STABILIZER (TOTAL)	99.0 SQ FT
VERTICAL STABILIZER	55.6 SQ FT
RUDDER (AFT OF HINGE LINE)	8.5 SQ FT
SPEED BRAKE	12.0 SQ FT
WING FLAPS	29.8 SQ FT

WEIGHT

AIRPLANE TAKE-OFF GROSS WEIGHT

NO EXTERNAL LOAD
30,400 LB

WITH CENTERLINE STORE, TWO 275-GALLON, AND TWO 200-GALLON UNDERWING FUEL DROP TANKS
39,750 LB



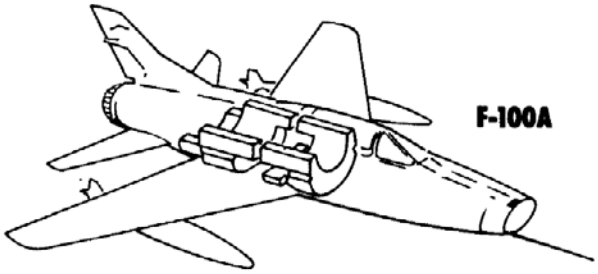
WING

TYPE	LOW
AIRFOIL SECTION	
ROOT	NACA 64A007
TIP	NACA 64A007
INCIDENCE AT ROOT	0 DEG
INCIDENCE AT TIP	0 DEG
ASPECT RATIO	3.72
DIHEDRAL	
WING	0 DEG
STABILIZER	0 DEG

Source: USAF, TO 1F-100D-2-1.

MAIN DIFFERENCES TABLE

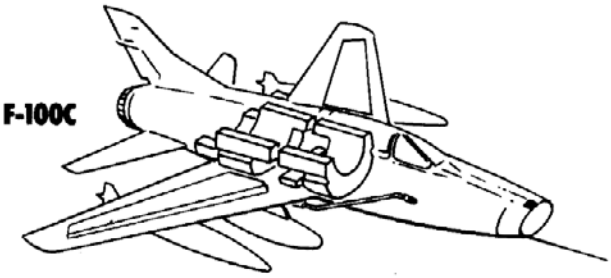
F-100 SERIES



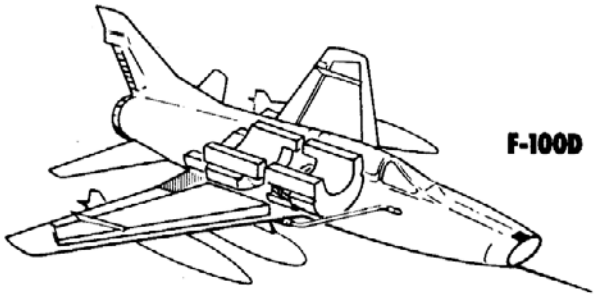
F-100A

ENGINE	J57 -21 OR -21A WITH AFTERBURNER
AC ELECTRICAL POWER SOURCE	THREE INVERTERS
ARMAMENT	FOUR GUNS AND MISSILES
STARTER	PNEUMATIC
DROP TANKS	TWO 275-GALLON
INTERNAL FUEL	FUSELAGE
REFUELING PROVISIONS	GRAVITY TANK FILLING
FLAPS	NO
OXYGEN SYSTEM	GASEOUS, WITH D-2 REGULATOR

F-100C



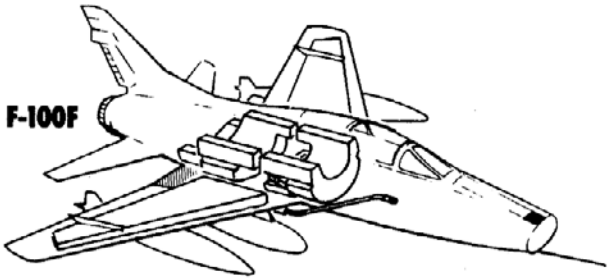
ENGINE	J57 -21 OR -21A WITH AFTERBURNER
AC ELECTRICAL POWER SOURCE	THREE INVERTERS
ARMAMENT	FOUR GUNS AND VARIOUS COMBINATIONS OF EXTERNAL LOADS INCLUDING BOMBS, ROCKETS AND MISSILES MOUNTED ON REMOVABLE PYLONS.
STARTER	PNEUMATIC
DROP TANKS	TWO 275-GALLON AND/OR COMBINATION OF 200-GALLON (TWO 335-GALLON ON SOME AIRPLANES)
INTERNAL FUEL	FUSELAGE AND WING
REFUELING PROVISIONS	PRESSURE TYPE (SINGLE-POINT AND AIR REFUELING)
FLAPS	NO
OXYGEN SYSTEM	LIQUID, WITH D-2A REGULATOR



F-100D

ENGINE	J57-21 OR -21A WITH AFTERBURNER
AC ELECTRICAL POWER SOURCE	ONE ENGINE-DRIVEN AC GENERATOR WITH ONE STAND-BY INVERTER
ARMAMENT	FOUR GUNS AND VARIOUS COMBINATIONS OF EXTERNAL LOADS INCLUDING BOMBS, ROCKETS, AND MISSILES MOUNTED ON FORCE EJECTION PYLONS.
STARTER	CARTRIDGE - PNEUMATIC
DROP TANKS	TWO 275-GALLON, TWO 450-GALLON OR TWO 335-GALLON AND/OR COMBINATION OF 200-GALLON.
INTERNAL FUEL	FUSELAGE AND WING
REFUELING PROVISIONS	PRESSURE-TYPE (SINGLE-POINT AND AIR REFUELING)
FLAPS	YES
OXYGEN SYSTEM	LIQUID WITH MD-1 REGULATOR

F-100F



ENGINE	J57 -21 OR -21A WITH AFTERBURNER
AC ELECTRICAL POWER SOURCE	ONE ENGINE-DRIVEN AC GENERATOR WITH ONE STAND-BY INVERTER
ARMAMENT	TWO GUNS AND VARIOUS COMBINATIONS OF EXTERNAL LOADS INCLUDING BOMBS, ROCKETS, AND MISSILES MOUNTED ON FORCE EJECTION PYLONS
STARTER	CARTRIDGE - PNEUMATIC
DROP TANKS	TWO 275-GALLON TWO 450-GALLON OR TWO 335-GALLON AND/OR COMBINATION OF 200-GALLON.
INTERNAL FUEL	FUSELAGE AND WING
REFUELING PROVISIONS	PRESSURE-TYPE (SINGLE-POINT AND AIR REFUELING)
FLAPS	YES
OXYGEN SYSTEM	LIQUID WITH MD-1 REGULATOR

Source: USAF, TO 1F-100-2-1.

Issue #	Issue(s)	Recommended Review, Action(s), and Coordination with Applicant	Notes, Action(s) Taken, and Disposition
F-100 Preliminary and General Airworthiness Inspection Issues			
1.	AVS SMS Guidance	The AVS SMS supplements the existing Code of Federal Regulations and should be used as part of the airworthiness certification process. Together, they must be the basis for, but not limited to (1) identifying hazards and making or modifying safety risk controls, which are promulgated in the form of regulations, standards, orders, directives, and policies, and (2) issuing certificates. *FAA Order VS8000.367, May 14, 2008.* SMS is used to assess, verify and controls risks, and safety risk management is integrated into applicable processes. Appropriate risk controls or other risk management responses are developed and are employed operationally. Safety risk management provides for initial and continuing identification of hazards and the analysis and assessment of risk. FAA provides risk controls through activities such as the promulgation of regulations, standards, orders, directives, advisory circulars, and policies. Such as safety risk management process (1) describes the system of interest, (2) identifies the hazards, (3) analyzes the risk, (4) assesses the risk, and (5) controls the risk. *FAA Order VS8000.369, September 30, 2008.*	
2.	Aircraft Familiarization	Become familiar with the aircraft before initiating the certification process. One of the first steps in any aircraft certification is to become familiar with the aircraft in question, in this case the F-100. Such knowledge, including technical details, is essential to establish a baseline as the certification process moves forward.	
3.	Preliminary Assessment	Conduct a preliminary assessment of the aircraft to determine condition and general airworthiness.	
4.	Condition for Safe Operation	This is an initial determination by an FAA inspector or authorized Representative of the Administrator that the overall condition of an aircraft is conducive to safe operations. This refers to the condition of the aircraft relative to wear and deterioration. The FAA inspector will make an initial determination as to the overall condition of the aircraft. The aircraft items evaluated depend on information such as aircraft make, model, age, type, completeness of maintenance records of the aircraft, and the overall condition of the aircraft.	
5.	Potential Reversion Back to Phase I	Notify the applicant that certain modifications to the aircraft will invalidate Phase II. These include: (a) structural modifications, (b) aerodynamic modifications, including externally mounted equipment except as permitted in the limitations issued, and (c) change of engine make, model, or power rating (thrust or horse power). The owner/operator may return the aircraft to Phase I in order to flight test specific items as required. However, major modifications such as those listed above may require new operating limitations.	
6.	Identify F-100 Version and Sub-Variants	Identify the specific F-100 version to be certificated. There are major differences between F-100 aircraft, not just in terms of engines but major systems and design features. Note: It is important to understand the specifics of the F-100 being evaluated for airworthiness. In addition to the different versions of the aircraft, that is, the F-100A (NA-192), C (NA-214), D (NA-223) and F (NA-243) models, there are significant differences between aircraft in the version. These differences included: wing extensions (385 sq/ft on the F-100D v. 376 sq/ft on the F-100A), larger vertical stabilizers and rudders on the F-100D and F models compared to the A and C models, stall fences, wing fuel, boosted control surfaces, afterburner nozzle type, wing tip RWR (Radar Warning Receiver) pods, gaseous vs. LOX oxygen system, refueling probe, MB-3 auto pilot, wing (stall) fences, no flaps in some models (A and C), modification to and different ejection seat systems, and changes in the antenna configuration. Wing and vertical stabilizer size and structure were also differences between F-100A and other models. In addition, determining the sub-variant is also important. This is because the F-100s (particularly the D models) were subjected to so many in-service modifications and no two F-100s were identical. This made for a maintenance and spare parts nightmare. Beginning in 1962, about 700 F-100Ds and Fs were subjected to a series of modifications known as "Project High Wire," a major standardization and upgrading program. Adding one to their production block numbers distinguished aircraft so modified—for example; the F-100D-25-NA became F-100D-26-NA after modification. These modifications were completed in 1965. Note: Figure 1-4 of the AFM is a good reference to identity the major differences between F-100 versions and variants. Note: There are other variants of the F-100, including the TF-100 (two-seat variant for the Danish Air Force) and the QF-100, the USAF drone designation for the F-100s modified as drones.	

Issue #	Issue(s)	Recommended Review, Action(s), and Coordination with Applicant	Notes, Action(s) Taken, and Disposition
7.	Identify F-100 Block Number	Identify the specific F-100 block number for the aircraft being certificated. Block numbers are essential to identify the aircraft in accordance with the aircraft production changes. F-100s within a given block number were usually identical with respect to production changes. The block number and USAF serial numbers assigned to F-100s were listed in the applicable-1 or AFM.	
8.	Major Structural Components	Ask the applicant to identify and document the origin, condition, and traceability of major structural components.	
9.	Airframe and Engine Data	Applicants should provide the following: Airframe: import country, N-Number, manufacture year and serial number, airframe time, and airframe cycles. Engine: manufacture date and serial number, overhaul data and location, serial number, and engine time, cycles, and date(s).	
10.	Aircraft Discrepancies	Ask the applicant to provide all available aircraft discrepancies records. Review those records for (1) issues listed/identified, and (2) corrective action. Such a review will assist in assessing the aircraft's condition, and past operators and practices.	
11.	Aircraft Records	Request and review the applicable military and civil aircraft records, including aircraft and engine logbooks. If no records are provided or if these records are insufficient, a re-evaluation of the baseline for certification may be necessary in terms of inspections.	
12.	FAA Records Review	Review the existing FAA airworthiness and registration files (EDRS) and search Program Tracking and Reporting Subsystem (PTRS) for safety issue(s) and incidents.	
13.	FAA Form 8100-1	Use FAA Form 8100-1 to document the airworthiness inspection. Using this form facilitates the listing of relevant items to be considered, those items' nomenclature, any reference (that is, NAVAIR manual, FAA Order 8130.2, Airworthiness Certification of Aircraft and Related Products, regulations) revision, satisfactory and unsatisfactory notes, and comments. Items to be listed include but are not limited to— 1. FAA Form 8130-6; 2. § 21.193 of Title 14 of the Code of Federal Regulations (14 CFR); 3. FAA Form 8050-1; 4. 14 CFR § 45.11(a); 5. FAA Order 8130.2, paragraphs 4002a(7) and (10), 4002b(5), 4002b(6), 4002b(8), 4111c, and 4112a(2); 6. 14 CFR § 91.205; 7. § 91.417(a)(2)(i), airframe records and total time, overhaul; and 8. § 91.411/91.413, altimeter, transponder, altitude reporting, static system test.	
14.	Functionality Check	Ask the applicant to prepare the aircraft for flight, including all preflight tasks, start-up, run-up, and taxi.	
15.	Adequacy of Applicable Military Manuals	For the purpose of experimental airworthiness certification, U.S. military manuals (USAF, U.S. Army, USN) and NATO standard manuals (aircraft, engine, and appliances) are acceptable to the FAA as a baseline. For example, the set of USAF J-57-P-21 manuals are acceptable in that they meet the intent and scope (not implied compliance) of 14 CFR § 33.5 for example. This regulation covers the instruction manual for installing and operating the engine. Similarly, the USAF F-100-1 or AFM is also acceptable because its layout, scope, and data is very similar (in some cases superior) to that found in traditional part 23 or part 25 aircraft. At the same time, lack of the applicable military documentation may have an impact in the issuance of the airworthiness certificate and could result in additional operating limitations to achieve a level of safety that otherwise would have been possible. This may also be applied in cases involving foreign manuals or un-translated U.S manuals. For example, a training F-100 AFM in Turkish would not be acceptable, while the official English NATO AFM would. Additionally, the FAA can restrict parts or sections of the military manuals and add requirements to ensure an acceptable level of safety for civilian operations.	

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16.	Adequate F-100 and J-57 Manuals and Related Documentation	Ensure the existence of a complete set of the applicable F-100 manuals such as flight manuals, inspections and maintenance references, including J-57 engine references. The owner/operator is responsible for having complete list of all F-100 manuals (technical orders, maintenance manuals, parts catalogues, engine manuals, inspection schedules, flight manual(s), and checklists) with revisions if available, and verify they are added and properly referenced in any inspection program and operating guidance. The manuals should be USAF or a NATO member (i.e., Danish Air Force). The following are examples of the manuals necessary for the F-100/J-57: • TO 1F-100C(I)-1-1, USAF Flight Manual for the F-100C; • TO 1F-100C(I)-2-1CL-1, USAF Taxi and Run Up Checklist; • TO 1F-100C(I)-2-1CL-3, USAF Ground Handling Checklist; • TO 1F-100C(I)-2-1CL-4, USAF Flight Line Maintenance – SVS Liquid Oxygen; • TO 1F-100C(I)-2-1CL-5, USAF Cold Weather Maintenance Procedures; • TO 1F-100C(I)-2-1CL-6, USAF Power Loss/Flame Out Occurrences; • TO 1F-100C(I)-2-2CL-1, USAF Drag Chute Flight Line Maintenance Check List; • TO 1F-100C(I)-2-2CL-2, USAF Refuel/Defuel Check List; • TO 1F-100C(I)-2-5CL-1, USAF Original Maintenance Inst. – Flight Control Rigging Check List; • TO 1F-100C(I)-2-5CL-2, USAF Abbreviated Check List Pitch and Yaw Damper; • TO 1F-100D-1CL-1, USAF Abbreviated Check List Pitch and Yaw Damper; • TO 1F-100D-6WC-1PE, 200 Hour Periodic Inspection Work Cards; • TO 1F-100-10, Power Package Build-up and Operational Instructions with IPS; • TO 1F-100D-1, USAF Flight Manual for the F-100D and F-100F; • TO 1F-100D(I)-1 Flight Manual USAF Series F-100D (I) F-100F Aircraft, Change 5, 15 September 1978; • TO 1F-100A-1-1, USAF Flight Manual Performance Data for the F-100 A, C, D, F Aircraft; • TO 1F-100D-3-6, North American Aviation F-100 Aircraft Organizational Maintenance Manual-Electrical Systems; • TO 1F-100D-2-1, North American Aviation F-100 Aircraft Organizational Maintenance-General Airplane-Manual; • TO 1F-100F-0-1, Numerical Index and Requirement Table; • TO 1F-100F-1-1-300, Functional Check Flights and Maintenance Operational Checks; • TO 1F-100F-1-1B-40, Weight and Balance Data; • TO 1F-100F-1-1B-50, Basic Technical Order for USAF Aircraft Weight and Balance; • TO 1F-100-36, Non-Destructive Inspection Procedures; • TO 1F-100C(I)-1, Load F-100 Series; • TO 1F-100C(I)-6, Inspection Requirements F-100 Series; • TO 1F-100C(I)-6 CIE-1, Controlled Interval Extension (CIE) Program; • TO 1F-100D-1, Flight Manual – F100D/F; • TO 1F-100D-3, Structural Repair Instructions; • TO 1F-100F-1-1, Supplement Flight Manual F-100F-20; • TO 1F-100F-1-(I)-1, Supplement Flight Manual QF-100D/F; • TO 1F-100F-2-1,C,E,F, Org. Maintenance General Aircraft; • TO 1F-100F-2-10, Org. Maintenance Wiring Data; • TO 1F-100F-2-11, Org. Maintenance Bombing and Automatic Flight Control System; • TO 1F-100F-2-2,C, Org. Maintenance Fuel and Utility System & TO 1F-100F-2-3,C, Org. Maintenance Engine and Accessories; • TO 1F-100F-2-4, Org. Maintenance Hydraulic Operation & TO 1F-100F-2-5, Org. Maintenance Flight Control System;	

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		• TO 1F-100F-2-6, Org. Maintenance Electrical System; • TO 1F-100F-2-7, Org. Maintenance Instruments; • TO 1F-100F-2-8, Org. Maintenance Radio and Radar; • TO 1F-100F-2-9, Org. Maintenance Gunnery Missile and Escape System; • TO 1F-100F-21,C, Aircraft Inventory Record Master Guide; • TO 1F-100F-4, IPB; • TO 1F-100F-5, Basic Weight Check List and Loading Data; • TO 2-1-1B, Max Operational Hours for Removal of Aircraft Engines; • TO 2J-J1-10,D, General Block Test Instructions – Turbo Set Aircraft Engines; • TO 2J-J57-23,A,C,D, Overhaul Instruments; • TO 2J-J57-24,C, IPB Engines & TO 2J-J57-26,C thru R, Field Maintenance Instr.; • TO 2J-J57-548,B, Modification of J57 Engines; • TO 2J-J57-672, Removal of Compressor Rotor Tie-Rod Nuts & TO 2J-J57-745-C, Replace Compressor Rear Bearing Oil Scavage • TO 1F-100F-2-2, North American Aviation F-100 Aircraft Organizational Maintenance-Fuel and Utility Systems; • TO 1F-100F-2-3, North American Aviation F-100 Aircraft Organizational Maintenance-Engine and Accessories; • TO 1F-100F-3-4, North American Aviation F-100 Aircraft Organizational Maintenance Manual-Hydraulic Operated Systems; • TO 1F-100F-2-5, North American Aviation F-100 Aircraft Organizational Maintenance-Flight Control Systems; • TO 1F-100F-2-6, North American Aviation F-100 Aircraft Organizational Maintenance-Electrical Systems; • TO 1F-100F-2-7, North American Aviation F-100 Aircraft Organizational Maintenance-Instruments; • TO 1F-100F-2-10, North American Aviation F-100 Aircraft Organizational Maintenance-Wiring Data; • TO 1F-100F-6WC-3, North American Aviation F-100 Aircraft Organizational Maintenance-Aircraft Inspection Work Cards; • TO 1F-100F-36, North American Aviation F-100 Aircraft Organizational Maintenance-Non-Destructive Inspection Procedures; • North American Aviation F-100 Aircraft Organizational Maintenance-Gunnery and Escape Systems; • North American Aviation F-100 Aircraft List of Applicable Publication Manual; • TO 1F-100D-3, North American Aviation F-100 D/F Aircraft Structural Repair Manual; • TO 1F-100D(I)-4, North American Aviation F-100 D Aircraft Illustrated Parts Breakdowns Manual; • North American Aviation F-100 D Aircraft Operating Procedures Manual-1958; • North American Aviation F-100 D Aircraft Loading Manual; • TO 1F-100C-34-1-1, North American F-100 C (I), -D (I), and-F (I) Weapons Delivery Manual; • Urgent Action TCTOs, for example: 1F-100-840, Brakes and Wheels, 1F-100D-882, Modifications to the Speed Brake, and 1F-100D-905, Modifications to the Landing Gear Warning System; • TO 14D1-1-1, Styles of Parachutes to be Used; • TO 14D1-1-2, Cleaning of Parachute Assemblies; • Work Specification for IRAN and Modification F-100D, February 28, 1963; • Work Specification for IRAN and Modification F-100F, May 13, 1963; • Pratt and Whitney Models J-57-P Handbook Service Instructions; • Pratt and Whitney Models J-57-P Overhaul Instruction Manual; and • Pratt and Whitney J-57-P- Aircraft Engine Illustrated Parts Breakdown Manual. Note: Included in the maintenance documentation are job cards for the base maintenance. It is incorrect to assume all F-100 manuals are interchangeable. Although the aircraft are similar in design, from a systems standpoint, and even from a flight characteristics perspective, there may be differences that must be properly addressed	

17.	Type of Ejection Seat System	Identify the type of ejection seat fitted to the aircraft, that is, the North American/Rockwell WA-1.1 seat or the Martin-Baker DB-5A ejection seat, installed in later Danish Air Force F-100s. The differences between the types of seats are significant and have operations and maintenance implications.	
18.	Availability of Documents listed in North American F-100 Aircraft List of Applicable Publication Manual	Review the Aircraft Inspection Program (AIP) for adherence with applicable version of TO 0F-100A-01, North American F-100 Aircraft List of Applicable Publication Manual. This document contains the applicable F-100 TOs. It is important to ensure not only that the applicant has the most current version of that document, but also, as stated above, the actual documents that are listed therein. Note: In this case, Danish Air Force/NATO TOs may be available.	
19.	Applicant/Operator Restoration, Repairs or Maintenance Capabilities	Review the applicant's/operator's capabilities, general condition of working/storage areas, the availability of spare parts, and equipment. It is important to be familiar with the scope of the restoration, as well as repairs and maintenance conducted by or for the applicant. Past operational history is also important.	
20.	Operational Risk Management (ORM)	Recommend the F-100 owner/operator implement an ORM-like approach. ORM employs a five-step process: (1) Identify hazards, (2) Assess hazards, (3) Make risk decisions, (4) Implement controls, and (5) Supervise. The ORM process is used on three levels based on time and assets available. U.S. Department of Defense (DOD) guidance on this can be used.	
21.	Limiting Duration of Certificate	Refer to § 21.181 and FAA Order 8130.2 regarding the duration of certificates, which may be limited. An example would be to permit operations for a period of time to allow the implementation of a corrective action or changes in limitations. In addition, an ASI may limit the duration if there is evidence that additional operational requirements may be needed at a later date.	
22.	Multiple Certificates and Public Aircraft Operations, That Is, DOD contracts. Also Refer To *Military Operations* Below	In those cases involving multiple airworthiness certificates, ensure the applicant submits information describing how the aircraft configuration is changed from one to the other. This is important because, for example, some research and development (R&D) activities may involve equipment that must be removed to revert back to the Exhibition configuration. Moreover, the procedures should provide for any additional requirement(s), such as additional inspections, to address situations such as high-G maneuvering that could have an impact on the aircraft and/or its operating limitations. Similarly, removing equipment that could be considered part of a weapon system may be required (refer to *Demilitarization* below). When applicable, all applications for an R&D certificate must adhere to FAA Order 8130.29 Issuance of a Special Airworthiness Certificate for Show Compliance and/or Research and Development Flight Testing. A similar process should be identified to revert back from public aircraft operations.	
23.	Compliance With § 91.319(a)(1)	Inform the operator operations of the aircraft are limited under this regulation. The aircraft cannot be operated for any purpose other than the purpose for which the certificate was issued. For example, in the case of an experimental exhibition certificate, the certificate can be used for air show demonstrations, proficiency flights and flights to and from locations where the maintenance can be performed. Such a certificate is NOT IN EFFECT for flights related to providing military services (that is, air-to-air gunnery, target towing, ECM simulation, cruise missile simulation, air refueling). Also refer to *Military/Public Aircraft Operations* below.	
24.	Federally Obligated Airport Access	Inform the operator F-100 operations may be restricted by airports because of safety considerations. As provided by Title 49 of the United States Code (U.S.C.) § 47107(a), a federally obligated airport may prohibit or limit any given type, kind or class of aeronautical use of the airport if such action is necessary for the safe operation of the airport or necessary to serve the civil aviation needs of the public. As a reference, refer to FAA Order 5190.6, FAA Airport Compliance Manual.	
25.	Environmental Impact (Noise)	Inform the operator F-100 operations may be restricted by airport noise access restrictions and noise abatement procedures in accordance with 49 U.S.C. § 47107. As a reference, refer to FAA Order 5190.6. Note: The noise levels generated by the F-100 are amongst the highest levels of any aircraft currently in U.S. registry.	
26.	Other Federal Requirements	Ensure owners/operators familiarize themselves with directives from various government agencies. FAA regulations primarily have to do with aircraft certification and airworthiness standards pertaining to safe operation in U.S. airspace. While other agencies such as DOD, Department of Alcohol Tobacco, and Firearms (ATF), and Department of Homeland Security (DHS) have jurisdiction over import requirements, illegal substances, protection and other matters of national defense. As circumstances dictate constant vigilance and regulatory changes, it is the owner/operator's responsibility for compliance.	

27.	Operations Overseas	Inform the applicant/operator that F-100 operations may be restricted and permission must be granted by foreign civil aviation authorities (CAA) within the scope of ICAO's Article 40. The applicable CAA may impose any addition limitation as it deems necessary, and may expand upon the restrictions imposed by the FAA on the aircraft. In line with existing protocols, the FAA will provide the foreign aviation authority with any information, including safety information for consideration in evaluating whether to permit the operation of the aircraft in their country, and if so, under what conditions and/or restrictions. It is also noted that any operator offering to use a U.S. civil aircraft with an experimental certificate to conduct operations such as air-to-air combat simulations, electronic counter measures, target towing for aerial gunnery, and/or dropping simulated ordinances pursuant to a contract or other agreement with a foreign government or other foreign entity would not be doing so in accordance with any authority granted by the FAA as the State of Registry or State of the Operator.	

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F-100 Maintenance Manual(s), Aircraft Inspection Program (AIP), and Servicing			
28.	Changes to Aircraft Inspection Program (AIP)	Consider whether the FAA-accepted AIP is subject to revisions to address safety concerns, alterations, or modifications to the aircraft. Section 91.415, Changes to Aircraft Inspection Programs, requires that "whenever the Administrator finds that revisions to an approved aircraft inspection program under § 91.409(f)(4) or 91.1109 are necessary for the continued adequacy of the program, the owner or operator must, after notification by the Administrator, make any changes in the program found to be necessary by the Administrator."	
29.	Maintenance Practices	In addition to any USAF/NATO guidance, including TO 1-1A-1 Engineering Handbook Series for Aircraft Repair, General Manual for Structural Repair, November 15, 2006, consider Advisory Circular (AC) 43.13-2B, Acceptable Methods, Techniques, and Practices-Aircraft Alterations, and AC 43.13-1, Acceptable Methods, Techniques, and Practices-Aircraft Inspection and Repair, to verify safe maintenance practices. Note: Where applicable, all work must be performed with properly calibrated tools and a calibration system.	
30.	Qualifications for Inspections	Ensure only FAA-certificated repair stations and FAA-certificated mechanics with appropriate ratings as authorized by 14 CFR § 43.3 perform inspections on the F-100.	
31.	Danish Air Force, NATO and Flight Systems, Inc. Maintenance and Upgrades	Ask the applicant to document any variations and modifications made to the aircraft. Maintenance data and records concerning the aircraft while operated by Flight Systems, Inc., will also be relevant.	
32.	Flight Systems, Tracor, or BAE Systems Inspection Program(s)	If the F-100 aircraft in question was operated by Flight Systems, Tracor, or BAE Systems, ask the applicant whether the inspection programs and/or procedures used by those companies are being used as part of their current AIP and to what extent. This might aid in bridging the original USAF/NATO standards with an acceptable civil application because of the extensive experience these companies had not only with contractor services, but also with drone operations and possibly incorporating the latest maintenance and inspections action ending in 2001 (BAE Systems).	
33.	Modifications	Per § 21.93, verify major changes do not create an unsafe condition and to determine whether new operating limitations will be required. The information contained in appendix A to part 43 can be used as an aid. Note: It should not be assumed that a missing TCTO item or an USAF modification not performed is acceptable because the aircraft is "experimental." Non-compliance with a TCTO or other USAF requirement can be a serious safety issue, contrary to other experimental aircraft where a modification is truly part of the purpose for the certificate.	
34.	Appendix G to 14 CFR Part 23	Recommend a review of appendix G to part 23 because it can assist in the review of the applicant's proposed AIP and associated procedures and sets a good baseline for any review. The USAF/NATO's guidance should also contain instructions for the continued airworthiness of the F-100.	
35.	Adequate Maintenance Schedule	Follow USAF/NATO/Danish Air Force requirements, as appropriate, concerning inspections schedules. A 100-hour, 12- month inspection program under appendix D to part 43 is generally not adequate for sophisticated aircraft like the F-100. Refer to *F-100 Inspection Program(s) (General)* below.	
36.	F-100 Inspection Program(s) (General)	Review AIP for adherence with the applicable USAF/NATO/Danish Air Force inspection/replacement programs and requirements based on the applicable TO 1F100-6-1. This is important when developing an inspection program under § 91.409. The inspection program must adhere to both hourly (that is, an inspection at 75 hours) and calendar (14 days, 6 months) inspections schedules. The only modifications to the military AIP should be related to the removal of military equipment and weapons. Deletions should be properly documented and justified. The AIP should not simply be a check list of what has to be done, but go into some level of details so all tasks make reference to the applicable reference standard, and applicable document/TO. There are many documented cases where poor maintenance documentation is an issue and actual aircraft inspection programs are simple checklists. In many cases, actual log book entries say little of what was actually accomplished and to what standard.	

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37.	Periodic Maintenance: 8 Phases, 75-Hour Checks, 100-Hour Inspection, and 600-700 Time Change Schedule	Ensure the use of an inspection program based on the periodic maintenance plan (PMP) for the F-100. For example, the plan includes a 100-hour inspection, the 8 phases, 75-hour checks, and the 600-700 hours routine time change schedules. Note: The French Air Force included inspection schedules at 25 and 50 hours as well. These periodic maintenance and phased checks and inspections are not equivalent to an appendix D to part 43 inspections. For example, the 100-hour periodic inspection comprised 143 work cards and required extensive work, including removing the engine, and all of the panels. It averaged 300 man-hours, and typically included 170 hours on airframe inspections, and 50 hours on the engine. In the USAF, this inspection took about 5 days. Historically, this number did not include any additional work due to failures and deficiencies found during the inspections or after flight tests, which could easily extend the number of man-hours to over 800 hours.	
38.	Works Cards TO 1F-100F-6WC-3	Verify the AIP incorporates the actual works cards provided in the most current version of TO 1F-100F-6WC-3, North American Aviation F-100 Aircraft Organizational Maintenance-Aircraft Inspection Work Cards.	
39.	Prioritize Maintenance Actions	Recommend adopting a risk management system that reprioritizes high-risks maintenance actions in terms of (a) immediate action, (b) urgent action, and (c) routine action. Also refer to *Recordkeeping, Tracking Discrepancies and Corrective Action* below.	
40.	Recordkeeping, Tracking Discrepancies, and Corrective Action	Check applicant recordkeeping. The scope and content of §§ 43.9, 43.11, and 91.417 are acceptable. The USAF Form 781 process or the U.S. Navy's Maintenance Action Form (MAF) process will assist with recordkeeping and help verify acceptable levels of continued operational safety (COS) for this type of aircraft. Three types of maintenance write-ups can be found inside the USAF Form 781: (1) an informational, that is, a general remark about a problem that does not require mitigation; (2) a red slash for a potentially serious problem; and (3) a red "X" highlighting either a safety of flight issue that could result in an unsuccessful flight and/or loss of aircraft—no one should fly the aircraft until the issue is fixed. For more information on recordkeeping, refer to AC 43.9 Maintenance Records.	
41.	Maintenance Records and Use of Tech Data	As required by FAA Order 8130.2, conduct a detailed inspection of maintenance records. Verify maintenance records reflect inspections, overhauls, repairs, time-in-service on articles, and engines. Ensure all records are current and appropriate technical data is referenced. This should not be a cursory review. Maintenance records are commonly poor or incomplete for imported aircraft. Refer *to Adequate Manuals and Related Documentation* above.	
42.	Qualifications of Maintenance Personnel	Check for appropriate qualifications, licensing, and type-specific training of personnel engaged in managing, supervising, and performing aircraft maintenance functions and tasks. The USAF blamed many F-100 accidents to "sub-standard maintenance." The NTSB has found the use of non-certificated mechanics with this type of aircraft has been a contributing factor to accidents. Recommend only FAA-certificated mechanics with appropriate ratings as authorized by § 43.3 perform maintenance on this aircraft.	
43.	Ground Support, Servicing, and Maintenance Personnel Recurrent Training	Recommend regular refresher training is provided to ground support, servicing, and maintenance personnel concerning the main safety issues surrounding servicing and flight line maintenance of the F-100. Such a process should include a recurrent and regular review of the warnings, cautions, and notes listed in TO 1F-100-2-1, Technical Manual General Airplane.	
44.	Parts Storage and Management and Traceability	Recommend establishing a parts storage program that includes traceability of parts. Note: In USAF service, the F-100 supply chain maintained over 14,000 parts and components in inventory.	
45.	"On Condition" Inspections	If "on condition" inspections are considered, adhere to the military/manufacturer program and/or provide adequate data to justify that practice for the applicable part or component. On condition is a preventive primary maintenance process. It requires that an appliance or part be periodically inspected or checked against some appropriate physical standard/parameters to determine whether it can continue in service. The purpose of the standard is to remove the unit from service before (not after) failure during normal operation occurs. "On condition" must reference an applicable standard (that is, inspect the fuel pump to an acceptable reference standard, not just "it has been working so far"). Each "on condition" inspection must state acceptable parameters. For example, on the F-100, certain components must be replaced at a certain interval (that is, 600 hours) and if an "on condition" alternative is to be considered, the applicant must provide the technical documentation substantiating that alternative as an equivalent level of safety. "On condition" inspections are not appropriate for all parts and components.	

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46.	Airframe, Engine and Component, and Appliances) Replacement Intervals (Life-Limits)	Verify compliance with required replacement intervals (that is, life-limits and fatigue life, time-expired) as outlined in appropriate inspection guidance such as TO 1F-100-6-1, North American F-100 Aircraft Handbook Inspection Requirements Manual, and related engine documentation concerning the J-57 engine. It is essential to follow USAF/NATO approved life limits and fatigue-life requirements and track accordingly.	
47.	Aircraft and Airframe Life Limit (1,500-5,500 hours)	Ensure USAF upgrades and inspection requirements in all cases expanding any of the airframe life-limits are followed. The F-100 was originally designed to have an airframe life of 1,500 hours, and over time, and under a controlled environment of upgrades and inspections, the USAF cleared the aircraft to exceed this limit and attain operational airframes times up to 3,000 hours followed by extensions to 4,000 and later 5,500 hours. Note: Although some aircraft (probably late block numbers) may have operated on airframe extensions to 7,000 hours, data and documentation is required in such cases. Note: Due to concerns over the integrity of the wing structures, the French Air Force limits their life to 4,000 hours.	
48.	Inspect and Repair as Necessary (IRAN)	If IRAN is proposed, verify it is detailed and uses adequate technical data (that is, include references to acceptable technical data) and adequate sequence for its completion. F-100 IRANs were accomplished using specific guidance such as (1) Work Specification for IRAN and Modification F-100D, February 28, 1963 and (2) Work Specification for IRAN and Modification F-100F, May 13, 1963 An IRAN must have a basis and acceptable standards. It is not analogous to an "on condition" inspection. It must have an established level of reliability and life extension. An IRAN is not a homemade inspection program. The typical F-100 IRAN required about 5,000 man-hours usually over about 120 days. Note: Repeated F-100 IRANs may eventually lead to several sections of the aircraft NOT being inspected at all. Therefore, some form of additional inspection process should be used in addition to the IRAN. Note: Additional IRAN related guidance can be found in TO 00.25.4, March 1, 1958.	
49.	Combining Inspection Intervals Into One	Set time limits for overrun (flex) of inspection intervals in accordance with applicable USAF guidance, that is, TO 1F-100-6-1, North American F-100 Aircraft Handbook Inspection Requirements Manual) may be acceptable.	
50.	Aircraft Storage and Returning the Aircraft to Service After Inactivity	Verify the applicant has a program to address aircraft inactivity and specifies specific maintenance actions for return to service per the applicable F-100 inspection schedule (for example, after 31 days). The aircraft should be housed in a hangar during maintenance. When the aircraft is parked in the open, it is to be protected from the elements, that is, full blanking kit and periodic anti-deterioration checks are to be carried out as weather dictates.	
51.	Specialized Tooling for F-100 Maintenance	Verify that adequate tooling, jigs, and instrumentation are used for the required periodic inspections and maintenance per the F-100 maintenance manuals.	
52.	Technical Orders Issued While in Service	Verify the AIP references and addresses the applicable USAF TOs issued to the F-100 while in service to address airworthiness and safety issues, maintenance, modifications, updates to service instructions, and operations of the aircraft. The AIP should list these documents.	
53.	Time Critical Technical Orders (TCTOs)	Verify the AIP specifically accounts for, addresses and documents the applicable TCTOs that were issued to the F-100 while in service. Compliance with the TCTOs is essential for safe operations. Note: TCTOs may have been issued as late as 1994 with the last operation of a USAF aircraft. If the AIP only makes reference to a few TCTOs issued in 1958, for example, it would not be adequate.	
54.	Corrosion Due to Age and Inadequate Storage	Evaluate adequacy of corrosion control procedures. Age, condition, and types of materials used in the F-100 may require some form of corrosion inspection control. Ask whether a corrosion control program is in place. If not, ask for steps taken or how it is addressed in the AIP. Recommend the use of TO 1-1-691, Corrosion Prevention and Control Manual.	
55.	Titanium Components	Verify the AIP incorporates detailed inspection of the aircraft's titanium components. The F-100 has an unusually high number of titanium components. It was the first limited structural use of titanium. Its heat resistance made it a particularly favored choice for the aft fuselage, adjacent to the engine. Titanium is about 40 percent lighter than stainless steel which has the same heat-resistant characteristics. Each F-100 used 650 lb of titanium. Although titanium is strongly corrosion resistant, electrical insulation between titanium and other metals is necessary to prevent galvanic corrosion of the other metal. Frequent inspection of such areas is required to verify that insulation failure has not allowed corrosion to begin. In addition, F-100 inspections discovered cracks and other defects requiring, in some cases, a significant level (75-90 percent) of component replacements in some aft fuselage areas. Moreover, under certain conditions, chlorides and some chlorinated solvents may induce stress corrosion cracking of certain titanium alloys.	

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56.	J-57 Maintenance Procedures	Verify the AIP adheres to the USAF/Danish Air Force/NATO maintenance procedures requirements for the version of the engine in question. That is, P-21, P-21A, and P-7 and P-39 in early F-100Cs. The J-57-F-21 was a version of the engine built by Ford, not Pratt and Whitney, but otherwise identical. Note: Some early J-57-P-7 engines may be available and their installation in a particular F-100 would have significant impact on the operation of the aircraft since it was an earlier and less powerful version with limited support and documentation available.	
57.	Cycles and Adjustment J-57 Engine Replacement Intervals	Ask if engine cycles and hours are tracked. With an engine type like the J-57, cycles can supplement hours and this is highly recommended.	
58.	Engine Manufacturer's and/or USAF/NATO Modifications	Verify the AIP addresses the incorporation of the manufacturer's and USAF/NATO modifications to the J-57 engine installed. The NTSB and some foreign civil aviation authorities (CAA) have determined a casual factor in accidents is the failure of the various post military surplus operators to incorporate the manufacturer's recommended modifications to prevent engine failures.	
59.	J-57 Engine Inspections and Time Between Overhaul (TBO) and Hourly Engine Inspection	Verify the applicant has established the proper inspection intervals, TBO/replacement interval for the J-57 engine type (such as 200 hours on some J-57-P-21As or 1,000 hour engine TBO on later variants in USAF service), version and serial number, and adhere to those limitations and replacement intervals for related components. It cannot be assumed that a 1,000 TBO can be applied to all J-57s. Adherence to the 200 TBO limit is highly recommended due to its operational history of failures and the fact that there is USAF data indicating that a 200 hour limit is excessive. This is important when the USAF average "life" for a J-57-P-21 was 428 hours. Also, adhere to the 100-hour and 200-hour engine inspection processes. Although the 100-hours inspections could be classified primarily as a service inspection, the 200-hour inspection required the removal of the engine for a thorough shop inspection. Note: To address continuous problems with the J-57, the French Air Force instituted 50-hour inspections of the J-57. Justification and FAA concurrence is required for an inspection and TBO above those set in the appropriate F-100/J-57 engine inspection guidance. Clear data on TBO/time remaining on the engine at time of certification is critical as is documenting those throughout the aircraft life cycle. An "on condition" inspection at the time of certification does not equate to a TBO or a "zero time" engine. Also refer to *J-57 Failures After Maintenance Periodic Inspection vs. Overhaul* below.	
60.	J-57 Version	Verify the version of J-57 installed. Although the engine may be a J-57-P21, it could be an "A" or "B" variant. Some F-100 in ANG service may have had the J-57-P-23 engine installed, which was essentially the F-102 engine and nozzle system. The -23 burner did not have the problems the -21 had. Note: The J-57 was a two-spool axial flow-flow engine, with the inner low-pressure spool and outer high-pressure spool combining to provide a pressure ratio of 12.5. The engine was complex with 1,500 compressor blades, 8 combustion chambers and 48 dual pressure nozzles.	

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61.	J-57 Failures	Verify the AIP addresses and focuses on known engine failure modes and causes. These include— • Failure to inspect after engine installation in accordance with TO 1F-100-6. • Failure of compressor stage vanes and shroud assemblies. • Accessory drive gear and shaft failures. • Failure of the circumferential weld attaching the rear end of the oil scavenge internal transfer tube to the inner wall of the No. 5 bearing support. • Bearing leaks (that is, Number 6.5 bearing, bad bearing seals). • Main bearing (that is, No. 6 main bearing) seizing and causing pieces of the main shaft to be ripped out and blown through the side of the engine and fuselage. • Main engine seal failure due to over-filling of oil. • Bearing support failure (that is, Number 4 ½ bearing support) and can allow it to ride on the high speed shaft at the oil holes and to eventually to wear the shaft in two. • Turbine wheel disintegration (causing catastrophic failures of everything aft of it). • Casing weld failure on combustion chamber casings. • Cracked welds in the nozzle clusters (allowing) hot air to stream out under the fuel-oil cooler (initiating a fire and releasing fuel into the lower engine compartment). • Fuel nozzle and nozzle diaphragm failures. • Fuel manifold failures (severed). • Burner can failures. • Fretting corrosion of stage blades. • Incorrect assembly of the compressor intermediate bearing oil seal nozzle assembly. • Failure of 7th-stage compressor disc. • Improper installation of the Adel clamps (leading to chafing of the CSD oil tank drain, oil leaking and igniting). • Fuel control failure due to failure of the bleed-valve governor. • Fatigue failures of stage compressor blades. • Malfunction of the main fuel shutoff valve, which could partially close. Possible cause could be failure of the diaphragm seal assembly in the engine driven fuel pump. • Failure of the engine driven fuel pump and failure of fuel control unit. • Improperly installing marmon clamps connecting the flexanics heat and vent duct to the engine air extraction manifold assembly.	
62.	J-57 Failures After Maintenance Periodic Inspection vs. Overhaul	Ask the applicant to consider mitigation measures (that is, additional inspections, earlier overhaul, operating limitations, and restrictions) to address the fact that between 1963 and 1973, 75 percent of J-57 engines installed in F-100 that failed in USAF service (45 failures) occurred before reaching 100 hours of operation, with a peak failure of 25 percent within the first 10 hours. This data is telling because the expected failure rate for the first ten hours was 8 percent. The data also shows all the failures within the first 10 hours involved engines that had gone through periodic inspections (that is, 200 hours), not depot-level overhaul. Aircraft in-commission rate suffered (70 percent) and the issue is further aggravated by the fact that in 1966, up to 80 percent of the J-57s supplied to F-100 squadrons deployed in South Vietnam were rejected and not installed in the aircraft. In other words, two issues are raised: (1) inspections of J-57s do not provide an equivalent level of safety when compared to a deport-level overhaul, and (2) additional mitigation and steps maybe necessary before accepting a J-57 for use. These issues are particularly relevant today because the USAF infrastructure and expertise that supported J-57 depot-level overhauls is no longer available, nor is the field expertise, like the maintenance expertise that existed with the ANG F-100 units (safest USAF units). Note: Overhaul refers to the process of disassembling, cleaning, inspecting, repairing as necessary, reassembling, and testing for approval for return-to-service within the specifications of the manufacturer's overhaul data.	

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63.	J-57 Compressor and Turbine Blades/Sections Replacement Times	Ensure replacement times for both compressor and turbine blades and section of the J-57 are not ignored or superseded by unsubstantiated "on-condition" inspections. For example, in 1958-1959, J-57 installed in French Air Force F-100s achieved a mean time between failures (MTBF) of merely 140 to 150 hours, many due to blade failures. This poor reliability cannot be ignored in civilian operations, and supports adherence to established replacement time later in the aircraft's life cycle.	
64.	Engine Flame Holders	Verify the AIP addresses the engine flame holder modification, possibly in the form of a TCTO. This modification should not be assumed as done. In 1985, a QF-100 crashed on takeoff because this modification was not checked as complete when the aircraft was re-activated form MASDC.	
65.	Oil/Fuel Heat Exchanger Cracks	Verify the AIP addresses the inspection of this system. This is important because there have been cases whether cracks in the system allowed fuel (at a higher pressure than oil) to enter the oil system. This can lead to engine malfunctions and the contamination of the air conditioning system as well. Note: Despite the USAF having abandoned the practice, some F-100 operators performed a before takeoff check of the exchanger, which included switching to the emergency system. This practice eventually led to cracks and system failure. Recommend the applicant/operator be asked if they intend to perform this test, and if so, the potentially dangerous consequence should be discussed and the appropriate manuals and updates consulted for the aircraft in question.	
66.	Air Conditioning Oil Contamination	Verify the AIP addresses the inspection and replacement of all critical oil system components that can lead to oil leaking into the air conditioning system and then into the cockpit. The oil used may have toxic characteristics.	
67.	High-Pressure Fuel System Valve(s)	Verify the AIP addresses the inspection and replacement of high-pressure fuel system valves. Note: In 1960, the F-100 fleet was grounded following several failures of these components.	
68.	Afterburner Fuel Lines Failures	Verify the AIP addresses the inspection and replacement of fuel lines including the "pigtails" lines. The F-100 was known for engine and afterburner fires. Some fires were related to fuel line failures. The F-100 burner has 28 "pigtails" that supply the afterburner fuel. These can leak, thus producing a pool of fuel that can ignite. An F-100 pilot described an incident during a max takeoff, where a pig tail on the afterburner broke and fuel collected in the aft section under the AB. He explained that as it heated up an explosion severed both hydraulic leads to the primary and secondary flight control actuators. The pilot did not have pitch control so he broke out at about 1500 ft and started down. An F-100 mechanic recounts a, F-100F accident "Crewed F100F 56-3866 at Luke AFB AZ till it crashes on takeoff because of an over torqued afterburner pigtail spray bar fuel line, blew the aft section up, pilots got out, one had a broken leg."	
69.	Throttle Quadrant Afterburner Microswitch Failures	Verify the AIP addresses the inspection and replacement of the throttle quadrant afterburner microswitch. The malfunction of this microswitch can lead afterburner fuel to flow erratically to the afterburner spray bars. Comply with TCTO 1F-100-0986 on this subject.	
70.	Afterburner Nozzle(s)	Verify the AIP addresses the inspection of the afterburner nozzles, especially the early type where the afterburner eyelids or feathers (overlapping metal slide layout) were fuel pressure operated. This particular system was very prone to failure. One of the common failures was not all of the "feathers" would open at the same time. A later improvement consisted of installing the F-102 exhaust nozzle (aka "-23 nozzle" after the J-57-P-23 engine fitted to that aircraft), a more reliable system. Afterburner failures caused many accidents. Post flight inspection of the afterburner nozzles should also be accomplished, as discussed in *"Keying the Eyelids" Postflight Check* below.	
71.	Afterburner Ground Check	Verify the AIP incorporates safe practices for afterburner checks. F-100s under full afterburner power were known for "jumping the chocks." There should be procedures to securely tie down the aircraft (proper cables with the appropriate tensile strength, not just wheel chocks) and ensure the activity takes place at a remote location on the airport, away from any other aircraft or structures. Proper fire safety should also be provided during these tests.	
72.	Afterburner Cooling Ducts	Verify the AIP incorporates the inspection of the afterburner cooling ducts. High temperature, high pressure air escaping from improperly joined duct connections caused many in-flight fires.	
73.	Borescope Engine	Recommend the AIP incorporates borescope inspections of the engine at 50 hours.	

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74.	Engine Thrust	Verify the AIP addresses measuring actual thrust of the engine and tracking engine operating temperatures. There are three thrust readings: maximum thrust (includes afterburner), military power, and maximum continuous thrust.	
75.	Engine Ground Run Data	Verify the engine goes through a ground run and check for leaks after engine re-assembly. Confirm it achieves the required revolutions per minute for a given exhaust gas temperature (EGT), outside air temperature, and field elevation.	
76.	EGT Check	Verify the AIP includes routine EGT checks. These require entering the exhaust nozzle and placing heater probes over the thermocouples. In operational use, some USAF F-100 units accomplished this task daily.	
77.	Use of Different Fuels (That Is, JP-4, Jet A)	Verify the AIP addresses the use of different fuels may require changes or additions to the J-57 inspection and maintenance program.	
78.	Spool Down Time	Verify that the AIP incorporates action(s) following a change in the spool down time of the J-57 engine after shutdown. This is critical as it could be an indicator of an upcoming problem with the engine.	
79.	Fire Detection/Suppression System(s)	Verify the serviceability of the fire detection/suppression system(s).	
80.	Fuel System Failures	Verify the AIP addresses and focuses on known fuel system failure modes and causes. These include: failure of the TEE fitting of the aft fuel vent drain, leakage of fuel from the "B" nut at the TEE fitting, and improper aft fuel dive vent shroud sealing. Fuel seepage can pool, vaporize, and cause explosions. Another fuel system issue is the "O" ring seals on the line assembly fuel vent and the aft fuselage tank pulls away balance. It should be checked for deterioration or cutting. Inspect the heat and vent ducting between the engine takeoff point and the heat exchanger for possible signs of hot spots, bulging of the ducting jacket, and proper fitting of all crush washers at joining points of this duct.	
81.	Servicing, Engine Fire Servicing Personnel Unfamiliar With the F-100 Create Hazardous Situations	Verify the operator warns servicing personnel via training and markings of the fire hazard of overfilling oil, hydraulic, and fuel tanks. Lack of experience with F-100 servicing is a safety concern. For example, overfilling the oil system could also lead to mid engine seal failure. Require supervision of servicing operations and fire safety procedures.	
82.	Fire Guard	Verify maintenance, servicing, preflight, and post flight activities include fire guard precautions.	
83.	Engine Start and Starter Systems	Verify the AIP includes procedures for documenting all unsuccessful starts. Failure to take into account engine start deficiencies (including not following the applicable TOs) has been the cause of many F-100 engine failures. Note: There were two start systems for the J-57, a cartridge system (black powder canisters), and a cart starting unit system (MD-3) pneumatic External Power Unit (EPU) generating 1,200 to 1,600 RPMs. Note: Some references also refer to a MA-2 (Ma-Deuce) EPU. In addition to providing compressed air for startup (110 lb/min at 50 psi), the MA-2 Multi-Purpose Aircraft Ground Service Unit also provided electrical power (DC 28V, 500 A/H, and AC 115-200, 400 Hertz, 30 Kva). As such, it was a critical piece of equipment for safe F-100 operations.	
84.	Tail/Engine Separation	Verify adequate tail/engine separation by using proper support equipment (that is, a dolly) to prevent structural and serious engine damage.	
85.	Engine Storage	Review J-57 engine storage methods, and determine engine condition after storage, to include actual calendar time since overhaul. Evaluate calendar time since overhaul. For example, the use of an engine with 50 hours since a 1991 overhaul may not be adequate and a new overhaul may be required after a specified time in storage. Note: The FAA's position on experimental exhibition of former military aircraft is that engines that have exceeded storage life limits are susceptible to internal corrosion, deterioration of seals and coatings, and breakdown of engine preservation lubricants.	
86.	Engine Foreign Object Damage (FOD)	Verify adoption of a FOD prevention program (internal engine section, external, and air intake). Use air intake covers designed for the F-100. Note: During intake inspections, caution is required because the ram-air bleed doors can open inside the intake.	

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87.	Engine Condition Monitoring (SOAPs)	Implement an engine Spectrographic Oil Analysis Program (SOAP) at very short intervals as part of the engine maintenance schedule. A sample every 3 hours may be considered, although the USAF did those after each flight. This can be very useful for failure prevention and warn of impending failure. Sampled oil was diluted 10 to 1 with xylene, put through the lab equipment, and checked for iron, silver, chrome, aluminum, copper and magnesium elements. In operational use, J-57 oil samples showed copper and iron elements, with the iron wear problem traced to the main shaft of the oil pump. Other metals covered in a typical J-57 SOAP sample include: copper, nickel, chromium, silver, magnesium, aluminum, lead, titanium, tin, moly, and tan. Note: Many F-100 accidents were caused by oil sample bottles being dropped in the oil tank by servicing crews. Note: Spectrometric Oil Analysis (SOAP) - In the SOAP program samples of used oil containing microscopic metal particles are sent periodically to an oil analysis laboratory. There the oil and its metal particles are burned by an electric or gas flame. The wave length of the light emitted from the burning oil and metal particles is measured to determine the kind and quality of metal in the oil. The identification gives advance warning of excessive wear on particular engine parts, thereby aiding in preventing in-flight engine failures.	
88.	Broken Systems (Fuel, Oil, Hydraulic) Lines	Verify the AIP includes procedures for inspecting and replacing all lines (that is, fuel, oil, hydraulic) according to the applicable USAF/NATO requirements, that is, Mil-DTL-8794 and Mil-DTL-8795 specifications.	
89.	Hydraulic System Problems	Verify the AIP provides for the correct inspection procedures for the hydraulic system and address things like completely flushing the hydraulic system when a pump is replaced. Consider expanding upon the USAF/NATO inspection guidelines for the hydraulic system(s) by adopting more frequent inspection and replacement times. USAF operational experienced shows that cold weather situations needs to be addressed in servicing as hydraulic system seal shrinkage was common, leading to leaks. This can be emphasized in the AIP and in the emergency procedures. The F-100 hydraulic system (contact pressure type 3,000 psi) (1 utility hydraulic system, 2 flight control systems [SYS 1 and SYS 2], and RUD ALT), as with many aircraft of its generation, is prone to failure. This is a critical flight safety item. The F-100 was notorious for hydraulic systems failures. Both normal and emergency hydraulic systems in the F-100 are important safety items. Hydraulic failures were typically associated with flight control issues. For example, a common failure was the failure of rudder emergency system joints, typically leading to loss on control on landing.	
90.	Vickers and Kellogg Hydraulic Pumps	Verify the AIP includes procedures for inspecting and replacing the hydraulic pumps. The F-100 utilized two different pumps, the Vickers and the Kellogg pump. Operational experiment appears to show Vickers pumps did not seem to be able to take as much punishment as the Kellogg's and it appears it was easier to have a utility hydraulic failure with a Vickers pump if the failure was due to wear and tear. Bronze metallic deposits in the filters is an indication of an impending failure of one of the pumps.	
91.	Utility Hydraulic System Engine-Driven Pump (Part No. AA60453-L)	This pump could cavitate upon the loss of one gallon or more of hydraulic fluid from the reservoir, causing pressure loss within the utility hydraulic system. Note: As a result of several failures, the USAF recommended that the pump be modified to prevent cavitation. It is not known if this modification took place.	
92.	Accumulators	Verify the AIP includes procedures for inspecting and replacing the accumulators. On the F-100 these were not very reliable and could wear out quickly. Note: Air compressors were used to charge the accumulators, but there are indications dry nitrogen could be used to make them last longer (this needs to be verified as per the applicable Hydraulic TO). The air had too much moisture in it and could cause the piston inside the accumulator to score the barrel, so the accumulator could leak internally and cause a hydraulic system failure.	
93.	Fuel Quantity Measurement System (Probes) and Indicators	Verify the AIP includes procedures for inspecting the fuel probes for water contamination. The F-100 had a problem with the fuel quantity measurement system, including the indicators. Specifically, if a fuel probe got some water in it, the total fuel quantity gauge would malfunction.	
94.	Fuel Pumps	Verify the AIP includes procedures for inspecting the fuel pumps that follow replacement times.	

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95.	Fuel Tanks Inspections and Related Structures	Verify the AIP includes procedures for inspecting the fuel tanks (and related structures), which depending on the version of the aircraft, could be bladder type (that is, fuselage) or a 'wet wing" configuration (C-F model, that is, 422 gallons in the wings in the F-100C). Deterioration of both the bladders and the sealant can pose a safety problem, especially because of the aircraft's age and storage, as well as the difficult inspection (access) itself. Bladder-type fuel tank safety is not necessarily ensured by only "on-condition" inspections and may require more extensive processes, including replacements. In French Air Force service, all fuel tanks were replaced in 1969-1972 by Superflexit material, effectively demonstrating the life limit of these tanks is approximately 10 years. In addition, in the F-100, the inspection process for the wet wing type needs to address the bolts that fastened the skin to the spars because these were sealed with a high-pressure insertion (7,000 psi) of a special material into a series of holes, and their location enabled the sealant to be channeled through a groove cut in the spar. Note: Mid-fuselage F-100 bladder fuel tanks were removed during inspection (IRAN), while the side tanks did not have to be removed or inspection. Additional issues with the fuel cells included: filler valves, dump valves, and probes. In addition, F-100 inspections, notably in compliance with TO 1F-100-1035 (wing modifications), inadvertently found cracks on the lower wing structure where the fuel tanks are mounted. This should also be incorporated into the AIP.	
96.	Aft 108-Gallon Fuel Tanks	Verify the AIP includes procedures for checking this particular fuel tank because it has a history of leaks and its location present serious hazards. In French Air Force service, fuel tank failures were most notable in the after fuel tank.	
97.	Fuselage Underside Drain Holes	Verify the underside of the fuselage has the drilled seven holes in a line across as provided by the applicable USAF modification. There were cases of F-100C engine explosions on takeoff as the fuel/air flow passed through a null point at about 200 knots causing a build-up of vapor in the rear fuselage.	
98.	Fuel Tank Probes	Verify the AIP includes procedures to inspect the fuel tank probes. There have been several instances of engine flameouts due to the fuel quantity gage indicating a higher fuel level than actually contained in the fuel tanks. In some cases, this failure was due to high resistance caused by the aft probe system resulted in high fuel reading on the fuel quantity gauge. For example, USAF accident investigation data indicates Part No. EA 5202-R3 was dissembled and three strands of the center conductor were found, broken and folded back so a possible intermittent short circuit to ground occurred. This is critical because in the F-100, 600 lb is emergency fuel and at 500 lb, the system is inherently unreliable and a flameout could occur at any time.	
99.	Systems Functionality and Leak Checks	Verify procedures are in place to ensure all major F-100 systems in the aircraft have been checked for serviceability and functionality. Verify the leak checks of all systems are properly accounted for in the AIP per the USAF/Danish Air Force/NATO requirements. The F-100 was known for leaks and the more the aircraft sat idle, the worse the insidious leaks became. Leaks had a tendency to appear near panel 48 (underside) around the gang drain where fluid drains from various systems were grouped for exit from the aircraft.	
100.	Oil, Fuel, and Hydraulic Fluids	Verify procedures are in place to identify and use a list of equivalents of materials for replacing oil, fuel, and hydraulic fluids.	
101.	Electrical System and Batteries	Verify the AIP includes procedures for checking the aircraft's electrical systems. Verify functionality of the generator and compatibility of the aircraft's electrical system with any new battery installation or other system and component installation or modification. Note: As part of inspections of the aircraft's electrical system, which were not a simple affair, a circuit analyzer and an analyzer module assembly were used.	
102.	USAF High Wire Modifications	Ask whether the aircraft was modified under Project High Wire, which included the stripping and replacement of all wiring. This should be addressed in the AIP. Project High Wire was a modernization program for selected F-100Cs, Ds and Fs. It consisted of two modifications: electrical rewiring upgrade, and heavy maintenance and IRAN upgrade. The rewiring upgrade operation consisted of replacing old wiring and harnesses with improved maintainable designs. Heavy maintenance and IRAN (inspect and repair as necessary) included new kits, modifications, standardized configurations, repairs, replacements, and complete refurbishment. This project required all new manuals (TOs) and incremented (that is -85 to -86) block numbers. All later production models, especially the F models, included earlier High Wire modifications. New manuals included colored illustrations. All manuals will have the Roman numeral (I) added after the aircraft number (that is TO 1F-100D(I)-1S-120, January 12, 1970). Note: There was a program similar to High Wire, called Rewiring. Note: In some cases it is possible to determine if the aircraft had the High Wire modification by their Block number. For example, an F-100D-25-NA became an F-100D-26-NA after the modifications.	

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103.	Constant Speed Drive (CSD)	Verify the AIP addresses inspection and replacement of the CSD per USAF requirements. Note: The original Sundstrand CSD used the same oil supply as the engine. If the unit failed and dumped oil, the main oil supply to the engine would be drained too. Note: Excessive oil levels in the CSD have been linked to oil contaminating the air conditioning system. The correct CSD oil level is critical. A CSD is a mechanical gear box that takes an input shaft rotating at a wide range of speeds, delivering this power to an output shaft that rotates at a constant speed, despite the varying input. They are used to drive mechanisms, typically electrical generators, which require a constant input speed. Constant speed drives are usually found as part of the accessory drives of gas turbine engines, such as aircraft jet engines.	
104.	Defroster System	Verify procedures are in place to service the defroster system per the inspection and maintenance manual. This is a critical safety of flight issue on aircraft like the F-100. Note: The USAF F-16 overrun at Air Venture 2011 was caused by a defroster failure as part on the aircraft's environmental system.	
105.	Pitot/static, lighting, and avionics and instruments	Verify compliance with all applicable 14 CFR requirements (that is, § 91.411) concerning the pitot/static system, exterior lighting (that is, adequate position and anti-collision lighting), transponder, avionics, and related instruments.	
106.	Airspeed Indicator and Pitot Static System	Verify the AIP addresses the inspection of the system, a pitot-static leak check at short intervals (3-5 flights). The lack of airspeed indication (and the inevitable abort if detected by the pilot) on takeoff was a known failure on the F-100. One of the reasons for this failure was the aluminum tubing from the pitot tube to the cockpit could be damaged by vibrations. On landing, the tube could fail and not to be discovered until it was too late during the following takeoff. Another reason was water contamination into the system. This is one of the reasons the French Air Force did not fold the pitot tube on the ground.	
107.	Oxygen System (General)	Emphasize inspection of the oxygen system and any modifications. Depending on versions, the F-100 could have a gaseous or a LOX system. Compliance with 14 CFR § 91.211, Supplemental Oxygen, is required and adherence to § 23.1441, Oxygen Equipment and Supply, is recommended. Verify safe servicing operations oxygen induced explosions were not uncommon and have caused fatalities and destruction of aircraft.	
108.	Oxygen System (Gaseous O2 Bottles)	Ask whether the aircraft is equipped with a gaseous oxygen (O2) system. If it is, as per FAA Order 8900.1 change 124, chapter 57, Maintenance Requirements for High-Pressure Cylinders Installed in U.S. Registered Aircraft Certificated in Any Category, each high-pressure cylinder installed in a U.S. registered aircraft must be a cylinder that is manufactured and approved under the requirements of 49 CFR, or under a special permit issued by Pipeline and Hazardous Materials Safety Administration (PHMSA) under 49 CFR part 107. There is no provision for the FAA to authorize "on condition" for testing, maintenance or inspection of high-pressure cylinders because the oversight is title 49 PHMSA. The O2 bottles are time sensitive items, usually with 10 years for hydrostatic testing. The issue is when the bottles are removed from the aircraft. It is industry knowledge that non-U.S. bottles may be installed as long as they are within their hydrostatic test dates. A problem arises when removing the bottles for hydrostatic testing. Maintenance programs require these bottles to be hydrostatic tested. Once the non-U.S. bottles are removed from the aircraft, they are not supposed to be hydrostatic tested, recharged, or reinstalled in any aircraft. Moreover, those bottles cannot be serviced (on board) after the testing date has expired.	
109.	Other High-Pressure Cylinders	Emphasize the proper inspection of any other high-pressure cylinders installed in the aircraft, that is, fire bottles and nitrogen gas (N2). As per FAA Order 8900.1 change 124, chapter 57, each high-pressure cylinder installed in a U.S. registered aircraft must be a cylinder that is manufactured and approved under the requirements of 49 CFR, or under a special permit issued by PHMSA under 49 CFR part 107. There is no provision for the FAA to authorize "on condition" for testing, maintenance or inspection of high-pressure cylinders because the oversight is title 49 PHMSA. For example, the fire bottles are time sensitive items, and may have a limit of 5 years for hydrostatic testing for example. The issue is when the bottles are removed from the aircraft. It is industry knowledge that non-U.S. bottles may be installed as long as they are within their hydrostatic test dates. A problem arises when removing the bottles for hydrostatic testing. Maintenance programs require these bottles to be hydrostatic tested. Once the non-U.S. bottles are removed from the aircraft, they are not supposed to be hydrostatic tested, recharged, or reinstalled in any aircraft. Moreover, those bottles cannot be serviced (on board) after the testing date has expired.	

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110.	LOX O2 Quality	Ask whether the aircraft is equipped with a LOX O2 system. If it is, verify the AIP incorporates a quality inspection of the LOX O2 used in the system. This is because there were reported cases of the LOX system malfunction affecting pilot's breathing capabilities. In early 1965, in the French Air Force, and during a 3-day period, there were nine cases involving the LOX system malfunctioning. The actual quality (or lack thereof) of the supplied O2 was partly to blame due to the high number of incidents over such a short period of time. Note: Ask applicant/operator to consider whether converter failure is also a possibility or if, as the French Air Force did, a 100 percent setting is appropriate in certain phases of flight.	
111.	LOX System (Liquid Oxygen System)	Contemplate a gaseous replacement if using of the aircraft LOX system. Not only are LOX systems dangerous and complex (that is, LOX converter), but particularly so in the F-100 since there is no way of measuring quantity being fed other than wait for an overflow. If used, proper precautions are needed and total adherence to USAF safety requirements required.	
112.	Oxygen Relief Valve Failures	Verify the AIP incorporates the proper inspection and replacement of oxygen relief valves. This was an operational issue with the aircraft and it is suspected the valves were tuned too soon. The valve had to be set on building up and left there for a while before resetting to the operating position. It was suspected that excess pressure was blowing valves. Note: In the USAF, the oxygen relief valve inspection and replacement was a depot-level item.	
113.	Anti-G Suit System	If installed, verify its serviceability. Note: This is related to any G limitation.	
114.	Cockpit Instrumentation Markings	Verify all cockpit markings are legible and with proper English terminology. Also, the aircraft must contain the placards and markings, required by 14 CFR §91.9.	
115.	Pressurization Vessel	Inspect the pressurized sections of the aircraft (cockpit), noting pressure-cycles, and any repairs in the area.	
116.	Ram Air Turbine (RAT)	Emphasize dangers of the RAT to ground crew. Bedsides the fact that the RAT requires specific maintenance attention, maintenance crews had to stay alert when working on the F-100.	
117.	Safety Markings and Stenciling	Verify appropriate markings as per the F-100 technical manuals (that is, stenciling and "Remove Before Flight" banners) are in English and applied to those areas of the aircraft that could be dangerous to anyone unfamiliar with the aircraft. These areas include intakes, exhaust(s), air brakes, and ejection seats. In the case of ejections seat systems, and as noted in FAA Order 8130.2, a special airworthiness certificate will not be issued before meeting this requirement.	
118.	Safety Locks and Pins	Verify appropriate F-100-specific ground safety locks and pins are available and used per TO 1F-100-2-1. These devices are essential to ensure the safety of several systems and components, namely landing gear, air brake, pylons, and hook.	
119.	Incorrect Hardware	Verify the AIP incorporates the use of the correct hardware, that is, bolts. This must be emphasized in all civil operations because (1) original hardware may be difficult to acquire and (2) some aircraft may incorporate non-approved items today.	
120.	Cockpit FOD	Verify the AIP addresses thorough inspection and cleaning of the cockpit area before each flight and during all maintenance to preclude inadvertent ejection, flight control interference, pressurization valves clogging, and other problems. This is a standard USAF/U.S. Navy practice.	
121.	Main Landing Gear and Nose Wheel	Emphasize a detailed inspection of the main landing gear and nose-wheel system (including shimmy damper [refer to *Shimmy Damper Unit*, below], correct O rings) and adhere to USAF/Danish Air Force/NATO inspection guidelines and maintenance requirements (that is, retraction tests) and operation requirements (that is, safety pins). Note: The aircraft could yaw during gear operation because of the flow regulator being worn and allowing too much fluid to pass through, thus making one main is much faster to extend than the other gear. This may require changing the flow regulators in pairs, so the gear would be perfectly sequenced in the extend selection. Verify the AIP incorporates proper maintenance and inspection of wheels to include balancing.	
122.	Shimmy Damper Unit	Verify the AIP addresses inspection of the shimmy damper units. Note: In 1970, following several incidents, the French Air Force conducted detailed inspections of the system and determined that assembly errors were to blame.	

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123.	Landing Gear Bearings	Emphasize the inspection of the bearings and their replacement as per USAF/NATO requirements. Also emphasize this in preflight.	
124.	Brake System Coupling Assembly (Part No. 143-5)	Verify the AIP address the inspection of this part. Brake system coupling had a tendency to fail because of its aluminum construction, high air loads, landing impact pressures, vibration, twisting and bending movements applied at various times, and improper installation. Following several incidents, the USAF ordered the inspection of these components in all F-100s, and emphasized the proper installation and alignment of this part. It was also suspected that mismatch of components and parts comprising the wheel and brake assemblies (between right and left), would aggravate this issue.	
125.	Main Landing Gear Legs Inspections and Replacement	Verify the AIP incorporates the detailed inspection of the main landing gear legs for cracks. Recommend the AIP provides for the inspection of the landing gear legs after 12 flights (French Air Force practice). In 1961, the French Air Force grounded all F-100s for inspections of the landing gear legs. In one squadron, in 23 of 28 units, cracks were found, possibly due to vibration related to shimmy, poor runway condition, and hard landings. New units had to be installed. This defect was linked to a rash of landing gear failures throughout that year. Landing gear failures were very common in F-100 operations worldwide.	
126.	Fasteners	Verify the AIP addresses inspection and replacement of airframe/panel fasteners. Fasteners, used widely to secure aircraft panels and parts, were the most-wanted items in line service because they wore out fast and were note easily obtainable.	
127.	Tires Limits and Replacement	Verify proper tires are used (including inner tubes) and adhere to all tire limitations (that is, allowed number of landings), including inflation requirements (231 psi for the main tires and 175 psi for the nose gear tires) for the use of retreaded tires and replacement at either 20 landings or 10 landings with drop tanks. In USAF operational use, 16 landings were the limit before the third cord red line appeared a warning. In some cases, the number of landing could be extended to 24 or so, depending on runway condition and surface(s). Note: The USAF accounted for runway surface type in its tire calculations. Also use the USAF system of tracking "point" on the tires, that is, to log points on the tires for every landing, that is, two points for clean wing and 4 points for landings with drop tanks such as the 275 or 450 and changing the tires when the aircraft accumulated a total of 40 points. Note: because changing a tire in the F-100 requires the disassembly of the anti-skid and taking off the brake (brake re-assembly was a difficult task form maintainers, that is, the brake had to be 1 degree off center for re-assembly or it will not go back together), operators may revert to extend tire limitations. Similarly, a tire changes requires an anti-skid system inspection. Cutting corners in terms of tire and brakes in the F-100 is a dangerous practice.	
128.	Drag Chute	Verify the AIP incorporates proper maintenance, component replacements(s), and packing of the drag chute. This system must be treated as a critical safety of flight item with a very negative operational history. It is not a simple system to be merely looked at "on condition." The drag chute system on the F-100 was unreliable and caused a very high number of accidents and incidents. In fact, drag chute failures are the most frequent cause of both accidents and incidents. Failures were very common leading to overruns, many times with fatal results. Failure types include: (1) inadvertent deployment on the ramp, on takeoff and in-flight, (2) failure to properly deploy (streaming), and (3) separation after deployment. For example, between summer 1958 and April 1960, no less than 45 cases of drag chute failures were recorded in French Air Force operations with less than 50 aircraft in service at any given time. The maintenance and the packing of the drag chute, which is a critical safety issue with the F-100, requires special training. For example, the 40-ft heavy steel cable, bell cranks, and turnbuckles required proper tensioning. Many drag chute failures were due to age, notably broken hangers, necessitating replacements. In other cases, electrical shorts, notably in the battery bus, and broken suspension lines were to blame. Other issues associated with the failure of this system include excessive wear of components (that is, joints, excessive play) and cables, as well as excessive repairs (beyond tolerances) to the system's doors. Note: The French firm Aérospatiale, which was charged with work on the drag chute systems noted in 1972, "all components of the drag chute system must be replaced, to include supports, Teleflex tubing, 'control' boxes, and springs."	
129.	Pitot Boom	Verify the AIP incorporates proper maintenance and inspection of the pitot boom for damage. Also, emphasize in preflight.	

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130.	Arresting Hook	Verify the AIP incorporates proper maintenance of the spring steel hook. The maintenance of the hook is a critical safety issue with the F-100. The system was operated by a solenoid and had a history of inadvertently activating and releasing the hook, injuring surrounding personnel. Note: Not all F-100s had the hook installed. It was installed later in its operational life to mitigate the high propensity for overruns. Note: This hook was never intended for carrier-based operations, but was intended to engage arresting gear at the end of runways to prevent running off the runway during some emergency landing procedures.	
131.	Explosives and Propellants	Check for compliance with applicable federal, state, and local requirements for explosives and propellants, that is, ownership, storage and disposal, in addition to the prescribed USAF/NATO requirements.	
132.	Canopy Seals	Test canopy seals for leaks (that is, use ground test connection).	
133.	Emergency Canopy Jettison Mechanism	Verify the external emergency canopy jettison mechanism is functional and properly inspected as per the applicable technical guidance.	
134.	F-100 Brake System	Emphasize a detailed short-interval inspection of the brake assemblies. Adhere to the USAF/NATO's maintenance and inspection guidelines (in TO 1F-100-840), as well as replacement times and consider more conservative inspections. Many brake assemblies have time limits of 20-30 landings. In a manner similar to the USAF, recommend brake inspection at 20-30 landings. In addition, the ant-skid system must be operational.	
135.	External Drop Tanks(General)	Verify that the type, condition, installation, and removal of drop tanks are acceptable as per USAF/NATO requirements. Verify drop tanks are cleared for use in the aircraft. Early on, the F-100 could carry a pair of 275 U.S. gal (1,040 l) (aka "banana tanks') and a pair of 200 U.S. gal (770 l) drops tanks. However, the combination caused loss of directional stability at high speeds and the four tanks were replaced by a pair of 450 U.S. gal (1,730 l) drop tanks. The 450 U.S. gal tanks proved scarce and expensive and were often replaced by smaller Mk. 3 335 U.S. gal (1,290 l) tanks. The only modification allowed to the drop tanks is to prevent jettisoning. Accidental jettisoning of the tanks is a known F-100 defect and electrical means of releasing the tanks should be serviceable. Both attach point failures and short circuits have been linked to accidental drop tank separations.	
136.	Drop Tank Maintenance	The AIP should include the inspection and maintenance of the drop tanks as integral aircraft systems. Operationally, the drop tanks were notorious for leaking and bad filler valves. In-flight drop tank separations were also linked to attach point failures. Drop tank explosions were linked to failure of the pressure regulator in the tanks.	
137.	Drop Tank Explosion on the Ground	Prohibit all drop tanks from being equipped with firing cartridges (F-100D/F). Their inadvertent firing caused accidents and destroyed aircraft both on the ramp and during takeoff.	
138.	Hoses and Cables	Verify the inspection and replacement of hoses and cables per USAF guidance.	
139.	Grounding	Verify adequate procedures are in place for grounding the aircraft.	
140.	Antennae	Verify any original antennas are compatible with all installed electronics, especially modern equipment.	
141.	UHF Antenna Radome and Cable Failures	Verify the AIP provides for the inspection of the UHF antennae/radome in the vertical fin. There were several cases where the UHF antenna radome failed in flight. Note: In the French Air Force, the problem was traced to the rubber sealant. If the aircraft is still equipped with an UHF system, the AIP should address the other problem related to the UHF antennae, which was the poor condition of the cables themselves.	
142.	TO 1F-100-931	Verify whether the aircraft had the UHF system (if installed) relocated to the front section of the fuselage rather than the top of the vertical stabilizer. If so, the appropriate reference is TO 1F-100-931.	
143.	In-Flight Canopy Separation	Ensure the AIP addresses the proper maintenance of canopy locks, and related systems. In-flight canopy separations were very common, especially in F-100F (two-seater) models. In several cases, the reason was found to be problems with the system's electrical connections.	

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144.	Transparencies Problems	Ensure the AIP addresses the proper maintenance of the canopy and transparencies. Proper transparencies maintenance is required for safe operations. Monitoring and inspection of the canopy for crazing should be conducted every 10 hours of flight. Canopy failures, de-laminations, and Plexiglas deterioration were common in F-100s. Monitor/inspect canopy for crazing and cracks every 10 hours of flight. Cracked cockpit canopies were not uncommon leading to in-flight canopy disintegration. In addition, because of the distortions caused by the windshield, its fidelity (condition) is extremely important in preventing pilots from misjudging approach angles during landing. Procedures should address this in the AIP and as part of post flight procedures. Refer to *Windshield Side Panels Cracks and Failures* below.	
145.	Windshield Side Panels Cracks and Failures	Verify the AIP incorporates the inspection of the windshield side panels. Operationally, these panels developed cracks and some failed in-flight. The suddenness of the failure mode appears to suggest visual inspection alone may not be sufficient. Therefore, it is recommended that replacement panels be secured and a replacement schedule be implemented. To illustrate the seriousness of this issue, it is noted between June 1964 and September 1965, no less than six cases of cracked/failed windshield side panels were reported in F-100s operated by the French Air force. Upon inspection, 60 percent of the panels were found to be deficient. Deterioration due to age was found to be the likely cause.	
146.	Hard Landings and Over G Situations	Verify hard landing and over-G inspection programs are adopted. This is especially important when acrobatics are performed or when the aircraft is involved in military support missions outside of the scope of its experimental certificate (that is, public aircraft operations). In some cases, following a hard landing, inspections consistent with TO 1F-100-1053 were necessary. Note: The F-100 difficult landing characteristics resulted in many hard landings and thus this type of inspection is critical for safety.	
147.	Tail Skid and Tail Pipe Inspection	Verify the applicant/operator has procedures in place to inspect (maintenance, preflight and post flight) the tail skid and tail pipe area per the applicable USAF/NATO procedures. This is important because a hard landing, which was not uncommon, could push the tail skid through the aspirator in the tail pipe. In USAF service, this requires an automatic engine change.	
148.	Parts Fabrication	Verify engineering (that is, Designated Engineering Representative (DER)) data supports any part fabrication by maintenance personnel and the AIP provides for such fabrications in terms of recordkeeping and data safeguarding, so such modifications will be permanently linked to the aircraft. This is an issue because it is a common practice in former military aircraft restorations. Unfortunately, many of these modifications have been made without adequate technical and validation data. AC 43.18, Fabrication of Aircraft parts by Maintenance Personnel, may be used for guidance.	
149.	Wing and Tail Bolts and Bushings	Ask about inspections and magnafluxing of wing and tail bolts. Recommend the AIP incorporate other commonly used, industry accepted practices involving non-destructive inspection (NDI) if not addressed in the USAF's maintenance and inspection procedures provided in TO 1F-100F-36, North American Aviation F-100 Aircraft Organizational Maintenance—Non-Destructive Inspection Procedures.	
150.	Main Spar (Structural Failure) and Mod/F-100/320 Modification	Verify whether the aircraft has had the main spar modification (re-enforcement, aka "new wing repair box"). This modification was known as Mod/F-100/320. As a result of several in-flight break-ups due to fatigue, the F-100 main spar(s) were modified (reinforced). It is critical to determine if this modification was made. If not, the aircraft is not in a condition for safe operation.	
151.	1973 North American Structural Strengthening Program	Ask the applicant whether the F-100 in question was modified under the 1973 North American Structural Strengthening Program. This program was well documented in French Air Force service, and strengthened the wing box, skins, and main fuselage longerons. This included TO 1F100-1022 (re-enforcement under wing panels), TO 1F-100-1028 (wing box), TO 1F-100-1035 (under wing panels), and TO 1F-100-1053 (upper fuselage longerons).	
152.	TO 1F100D/F-3 Aircraft Structural Repair Manual "Audit"	Verify the AIP incorporates a reference to this TO and reviews all the structural modifications to date. In other words, an audit for compliance with the most recent version of this TO (that is, 1978-1979) is recommended. Note: In the French Air Force, and under the guidance of North American/Rockwell, this activity was deemed necessary to minimize structural defects.	
153.	Ex-Taiwan Air Force F-100A Vertical Stabilizer and Fuselage Strengthening Modification	If applicable, ask the applicant whether the F-100 in question received the new and extended vertical stabilizer found in later F-100Ds. This is critical to minimize the aircraft inherent stability problems. In addition, because flapless F-100As were very susceptible to hard landings, ask whether the fuselage strengthening modifications were accomplished.	

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154.	Access Panels and Doors	Verify the AIP incorporates the inspection of all access panels and doors. There was a history of deficient panels and doors including looseness, and cracks. Note: During IRANs, heat damage was noticed on several upper fuselage doors.	
155.	Flight Controls Honeycomb Structures	Verify the AIP incorporates the inspection of the honeycomb structures on all flight controls. Inspections showed degradation of the coverings in these areas.	
156.	Rivets on Load Areas	Verify the AIP incorporates the inspection of all rivets in critical load areas such as trailing edges where inspections regularly noted loose rivets.	
157.	Tail/Engine Fuselage Hot Sections	Verify the AIP incorporates the inspection of the aft areas of the fuselage that are affected by engine heat. During inspections of this area, cracks have been found in several of the aft area due to excessive heat and heating/cooling damage, requiring either repairs or replacements. Note: These areas are readily identified not only by the technical guidance on the aircraft (that is, panel locations), but also visually due to paint and metal damage.	
158.	Leading Edge Slats	Verify proper slat condition and functionally (that is, lubrication, freedom of movement of the rollers, re-alignment), depending on the version of the aircraft. The wing slats may stick and create asymmetric lift during maneuvering. The slats had a habit of developing sticky rollers, causing one wing to have extended slats and the other to have the slats retracted. This usually happened at slow speed, when pulling high Gs or when flying with a high angle-of-attack, the F-100 snap rolling in the direction of the retracted slat.	
159.	Wing Spar Failure and Inspection and Wing Attach Point Cracks	Verify the AIP includes a detailed and thorough inspection of the wings (especially the spars and wing attach point) per the applicable USAF/Danish Air Force/NATO requirements (TOs) including those addressing changes, fixes, and other operational issues.	
160.	Horizontal Stabilizer Inspection	Verify the AIP includes a horizontal stabilizer inspection. Horizontal stabilizer failures have caused several F-100 accidents. Comprehensive X-Ray inspections documented cracks in the horizontal stabilizer, requiring the replacement of the unit. This was accomplished by requiring 27 X-ray inspections at set intervals. Some of the internal beams required three different angle shots to get adequate coverage. To illustrate this, in the twilight of its USAF ANG operational service in 1979, a squadron of 24 F-100s required over 650 X-rays inspections over a five-week period. The Horizontal Stabilizer rigging was, by far, the most complex and troublesome. Aside from rigging the stabilizer actuator itself, plus the control valve linkage, plus the trim linkage, and the artificial feel bungee, it was very easy to accidentally preload one or the other if you did not follow each step very carefully. But aside from following each step, the inspector had to realize what affect adjusting one part would have on another part. If the inspector was not very careful, whatever setting he had just adjusted into a piece of linkage, he might have changed that setting, by allowing another piece of linkage to bottom out or stop before full travel on another was reached. Note: Several accidents were traced to bolts that retained the stabilizer control valve working loose after fibre lock nut replacement with a castellated type. Note: Also, as a result of inspections, the magnesium trailing edges of the horizontal stabilizers are found to have loose rivets.	
161.	Flight Control Balancing and Deflection	Verify flight controls were balanced per the maintenance manual(s) after materials replacement, repairs, and painting. Verify proper rigging and deflection. In several former military aircraft, damage to flight controls has been noticed when inadequate repairs have been performed. If there are no adequate records of the balancing of the flight controls, the airworthiness certificate should not be issued. Note: Related issues include evidence of over-travel of ailerons, preexisting fatigue cracks, or evidence of aileron flutter. The aircraft's internally ribbed rudder is critical to prevent flutter. Note: Lubrication of these components is critical in that the exact lube called out in the tech order is required. If lubricants are substituted, caution is required because of moisture freezing at altitude.	
162.	Horizontal Stabilizers Attach Points (Flutter)	Verify the AIP incorporates detailed inspection of these components. On the F-100, the horizontal stabilizer was connected to a curved pipe at a flange on each end by three bolts, aft, center and forward. Inspections noted in some cases, two of the bolts could shear from heavy flutter, especially the front and aft bolt. In other words, the aircraft could be operating unsafely with only one of the bolts in place. For additional information, refer to Flutter Prevention Handbook: A Preliminary Collection, Flight Dynamics Directorate, Wright Laboratory, Air Force Materiel Command, WPAFB, March 1997.	

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163.	Horizontal Stabilizers Attach Tubes and Forward Control Rod Corrosion	Verify the AIP incorporates detailed inspection of these components.	
164.	Vertical Stabilizers Deformation (Flutter)	Verify the AIP incorporates a detailed inspection of this component. On the F-100, flutter affected the vertical stabilizer to such an extent as to bend the dorsal in front of the vertical stabilizer.	
165.	Vertical Stabilizers Attach Points Corrosion	Verify the AIP incorporates a detailed inspection of these components. F-100 inspections have noted serious corrosion of the attach points despite brushing and treatment.	
166.	Vertical Stabilizers Corrosion	Verify the AIP incorporates a detailed inspection of (1) the vertical stabilizer leading edge juncture with the main side panels, and (2) the areas of the fuel system venting system within the stabilizer itself. F-100 inspections have noted serious corrosion of these two areas.	
167.	Rudder Leading Edge Structural Failure	Verify the AIP incorporates a detailed inspection of these components. There have been cases where structural failure of elements in the leading edge of the rudder caused not only a misalignment form its vertical axis, but resulted in extreme air loads to the vertical tail.	
168.	Flight Control System Failure	Verify the AIP addresses the inspection of the flight control system, components, and modifications (check TCTOs). Many F-100s were lost due to flight control failures unrelated to hydraulics, and in some cases due to improper installation of permitted modifications. The following account illustrates this: "I remembered and related in the debriefing that I felt 2 or 3 slight pitch transients during the supersonic period. After the intercept we proceeded to recover as we had really used the fuel. Descending through about 12,000 at 300 KIAS…I experienced an un-commanded pitch up which I could not stop with forward stick and trim. (Since I had stick feel and trim, the board determined very closely the point of disconnect.) My wingman confirmed the stabilizer was full nose down. Using power and roll I made a series of what I called lazy eights. I related to the ground control everything that I observed. I had pitch trim, and pitch trim authority, the stick would move, the hydraulics were showing full flow over 3000 psi. It was obvious that I could not land, and the squadron agreed. The prompting from the squadron over the radio what to check was outstanding, and I ejected at a comfortable 300 knots…A mod had been performed on the aircraft, which replaced the fiber locknuts in the flight control system with a castellated nut, which requires a cotter pin be inserted through the nut and bolt to secure the assembly. It was assumed that the pin was either not installed or improperly installed, the nut backed off and a bolt came out. The pitch oscillations I felt during the supersonic run were probably the bolt coming out." www.supersabresociety.com/herrick.htm	
169.	Rudder Rig and Takeoff Light (TOT) Light	Verify the TOT light is functional because it means the controls are trimmed at neutral for takeoff. The AIP must emphasize this item. A reported F-100 flight control discrepancy was the aircraft rolling on takeoff. At low speed, the F-100 would roll due to the rudder being out of rig. The rudder will actually roll the aircraft. Although it is important to check the ailerons with rig boards, the rudder must be properly rigged.	
170.	Artificial Feel Bungees	Verify the AIP incorporates detailed inspection and rigging of the artificial feel bungees. These were dual spring cartridge looking affair, and the dual springs for push and pull or compression, and extension gave the pilot the feel necessary to control the aircraft.	
171.	Aileron Deformation and Failure	Ensure the AIP must cover the careful inspection of the aileron before and after each flight. High speed and air loads can result in aileron deformation and structural failure.	
172.	Air Brake	Verify proper condition, deflection, cylinder condition, and warning signage. The F-100 could yaw when the speed brake extended. This is because of the design of the speed brake (two hydraulic cylinders or actuators), the opposite cylinder could leak internally and not be as strong as the other cylinder. It may be necessary to either reseal the piston on the weak cylinder, or change the cylinder. The AIP should address this. The dangers the air brake poses to ground personnel are lethal and should also be addressed.	
173.	Flap Boundary Layer Control (BLC)	If installed, the AIP must address the BLC and its inspection. Some F-100Fs featured modified flaps with a span-wise duct built into the leading edge, which directed air from the lower surface of the wing over the upper surface of the flap. This flap-blowing system increased efficiency and reduced buffeting during landing. The modified flaps were limited to a full deflection angle of 40º instead of the 45º.	

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174.	Accurate Weight and Balance (W&B)	Review original W&B paperwork and adherence to USAF/Danish Air Force/NATO guidance, as well as FAA-H-8083-1 if documentation provided by the applicant is unclear.	
175.	"Experimental" Markings	Verify the word "EXPERIMENTAL" is located immediately next to the canopy railing, on both sides, as provided by 14 CFR §45.23(b). No subdued "historical" markings.	
176.	Ejection Seat System Maintenance	Address ejection seat maintenance in the AIP. Maintenance and inspection of the ejection seat and other survival equipment must be performed in accordance with USAF/NATO procedures and applicable technical guidance (TOs) and by trained personnel. Although the manufacturer of the original F-100 seat no longer supports the equipment, Martin-Baker, the manufacturer of the Mk. 5 seat (DB-5A) fitted in some F-100s, still provides support for its ejection seats. Therefore, maintenance by Martin-Baker is also acceptable (and actually preferred) as an alternative. Regardless, no "on condition" determinations on rocket charges, propellants, and initiators are acceptable. Include specific inspections and recordkeeping for pyrotechnic devices (explosives and propellants). Make the distinction between replacement times, "shelf life" vs. "installed life limit." For example, a 9-year replacement requirement is not analogous to a 2-year installed limit. If such maintenance documentations and requirements are not available, the seat must be de-activated. If such maintenance documentations and requirements are not available, the seat must be de-activated. Note: There is evidence that many companies that "specialize" in ejection seats are not maintaining the seats adequately. Some of the issues are: (1) wrong setting on timers, (2) wrong break-away wires, (3) poor recordkeeping, and (4) expired pyrotechnics. Note: Self life is the total period of time (beginning with the date of manufacture/cure/assembly) that an item may remain in the combined wholesale (including manufacture) and retail storage system and still remain suitable for issue to and use by the end user. Shelf life is not to be confused with service life, which is a measurement of anticipated total in-use time.	
177.	Ejection Seat System Maintainers Training	Require adequate ejection seat training for maintenance crews. The manufacturer of some of the ejection seats on the F-100F (i.e., Martin baker Mk. 5) still provides training (i.e., Type 5 Martin Baker Ejection Seat Course) and support for its seats. Lack of training can cause accidents. In May 9, 2012, an improperly trained mechanic accidentally jettisoned the canopy of a former military aircraft while performing maintenance, seriously injuring himself. Case in point, in 1973, during maintenance, a maintainer "was standing on the Hunter ejector seat he was servicing when the ejector cartridge fired. The seat itself went through the roof, but the [mechanic] impacted the roof and was thrown back through the overhead lights before dropping onto the concrete floor of the hangar. His injuries committed him to a wheelchair for life."	
178.	Martin Baker MRO Support	It is recommended that manufacturer support be used in the maintenance of the Martin baker ejection seats in the F-100. Unlike many other older types of ejection seats, Martin Baker, the manufacturer, still supports its older seats. Through its Maintenance, Repair and Overhaul (MRO), Martin-Baker can carry out maintenance if a customer requested this service. The company now offers a dedicated Maintenance, Repair and Overhaul (MRO) service, including a facility by one of its subsidiary, Martin-Baker America, in Johnstown, PA.	
179.	Rockwell WA-1.1 Ejection Seat With DART Modification	Ask applicant whether the DART modification was incorporated if the aircraft is equipped with a North American/Rockwell ejection seat. This is important because the modification itself could fail to operate as intended, and thus special attention is required on this item during maintenance/inspection. Late in F-100 operations, the F-100's North American/Rockwell WA-1.1 ejection seat incorporated the Directional Automatic Realignment of Trajectory (DART)" ejection system modification that coupled a ballistically spread parachute. The purpose of the ballistically spread chute was to bring the pilot to a more abrupt stop. The seat was to remain tethered to the aircraft by a cable. However, in many actual ejections, it did not. It could cause greater injury during ejection because it could thwart the proper separation sequence and/or cause the separated seat to go out of control. Specifically, as an F-100 notes at approximately 300 KIAS, the seat will reach the end of the lanyards and the [pilot] will not completely separate from the seat. The seat hit the end of the lanyards, the lap belt had opened, so there was not enough weight in the seat to break the frangible links, yet the butt snapper had not (yet) fired to get me away from the seat. The left snubbing lanyard held as advertised, but the right lanyard failed to hold, causing the seat to do a snap roll to the left.	
180.	Ejection Seat Modifications	Prohibit ejection seat modifications by the applicant/operator unless directly made by the manufacturer. Note: From a practical standpoint, only modifications to the Martin-Baker seats are likely to be substantiated since there still is OEM support.	

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181.	Air Intake and Duct	Verify the AIP incorporates the inspection of the air intake, spilt plate, and duct, as per the applicable USAF/NATO guidance. Loose panel separation inside of the air intake has led to F-100 accidents.	
182.	Fuel Vents and Drains	Verify the AIP incorporates the inspection of all fuel vents and drains (Sabre drains). This is also an important issue during preflight and servicing to prevent fires. In F-100 operations, servicing personnel unfamiliar with the aircraft have plugged drains and thus created a serious hazard.	
183.	Air Refueling Probe Structural Modifications	Ask the applicant whether the aircraft has the required structural modification of the air refueling probe. Several in-flight failures of the probe in F-100s triggered this modification. There is a TO covering this item. Note: It appears TO 1F-100-595 covers the modification of the original straight to the angled one, not the re-enforcement of the structure.	
184.	Nose Gear (Towing)	Verify the AIP and other procedures (servicing) address the towing of the aircraft. This is because when ground crews tow the aircraft, they may disconnect the torque link from the nose gear scissors by removing the pivot pin, which has to be reinserted and secured before flight. Unless this is done, the F-100's nose wheel scissors may disconnect because the unsecured pivot pin can work itself loose and fall out, causing the scissors assembly to fall open and allowing the nose wheel to swivel at random. This may compromise the landing since the aircraft might swerve off the runway on touchdown. Note: This must also be addressed in preflight by the PIC.	
185.	Ground Support Equipment Maintenance	Verify the AIP provides for the proper maintenance of all required ground support equipment such as the huffer, LOX cart, and hydraulic "mule."	

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F-100 Operating Limitations			
186.	AIP and Related Documentation	Require adherence to the AIP and related documentation as part of the operating limitations.	
187.	Understanding of the Operating Limitations	Require the applicant to sign the Acknowledgment of Special Operating Limitations form.	
188.	F-100 Pilot in Command (PIC) Requirements	Ensure that the operating limitations address PIC requirements. Direct transition from a modern corporate jet to the F-100 with minimum training is not a safe practice. In addition to holding the required Experimental Authorization, airplane category, the PIC should have (1) 20 hours dual training in the F-100F, (2) a structured ground school (similar to at least an USAF Short Course), (3) 1,000 hours in high-performance fighter/fighter-bomber experience in aircraft such as the T-38, F-4, A-4, F-16, F-18, and F-15, (4) proficiency and currency of 3-5 hours per month and 5-6 take-offs and landings (see below), (5) follow standard USAF proficiency standardization check procedures (see below). As a reference, the USAF required 29 hours of instruction for F-100 basic qualifications while the French Air Force opted for a longer 35-hours process, which included 5 hours dual in F-00Fs. In USAF ANG service, F-100 pilots were required to fly at last 10 hours a month to keep proficient while the Turkish Air Force required its F-100 frontline pilots to fly 240 hours a year and minimum pilot qualifications for F-100 training was 800 hours and 3 years of operational experience in other combat jet aircraft. Similarly, the French Air Force required pilot destined to F-100 squadrons to acquired flight time and experience in F-84Fs and Dassault IVA fighters before the F-100 assignment. In addition, the French Air Force required 400 hours in type for an F-100 pilot to be "mission capable." One of the reasons many ANG F-100 units achieved a higher level of safety than active duty Air Force was because by 1968, the average ANG pilot time in the F-100 was 1,000 hours while in frontline USAF units it was not uncommon to find pilots with less than 150 hours in type. The implications of this can be applied. F-100 aircraft have certain characteristics not familiar to other civilian aircraft, including most corporate jets. These include ejection seats, aerobatic capability, 45º swept wings, adverse yaw, no flaps (in A-C versions), vicious stall/spin characteristics, inertia coupling, and complex systems that may be unfamiliar to many. Some characteristics, like engine spool time, are critical. The J-57 engine has a slow engine spool time. This is a dangerous characteristic for pilots with experience in only modern jet engines with a higher spool times.	
189.	F-100 Recent Flight Experience	Recommend proficiency and currency of 3 hours per month and 5-6 takeoffs and landings. The typical general experience of "at least three takeoffs and three landings within the preceding 90 days" is not sufficient for the safe operation of the F-100. Note: Some flexibility could be provided in addressing this issue such as combining hours and landings (that is, 1 hour and 3 landings) and interjecting (but not replacing all F-100 flights with the specified period) certain high-performance flight profiles in another high-performance military jet such as the TA-4J or T-38.	
190.	USAF F-100 Checkout Procedures	Recommend the establishment of F-100 pilot check out certification process similar to the USAF's ATRC Form 132, as part of the Experimental Authorization. This grounds school process and documentation covered the operation of the aircraft with an emphasis on emergency procedures.	
191.	PIC Currency in Number of Aircraft	Recommend the operator limit the number of tactical jets the F-100 PIC stays current on. The USAF restricted the number of aircraft types a pilot could hold currency on to two or three. This should be considered by operators who have several aircraft types in their inventory.	
192.	F-100 Differences Training	Recommend the applicant/operator provide for differences in training between F-100 models. For example, if a pilot has had recent experience in an F-100D, transitioning to the F-100F should include training in the differences, such as differences in instrumentation and switches. Similarly, a pilot with recent flight experience in an ex-Turkish Air force F-100F equipped with the North American/Rockwell ejection seats should get training before transitioning to an ex-Danish Air Force TF-100F because there are many differences, in addition to the Martin-Baker ejections eat fitted to the ex-Danish Air Force aircraft.	
193.	Flight Manuals	Ensure the PIC must operates the aircraft as specified in the AFM (USAF "-1") and associated checklists for the specific F-100 version being flown.	

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194.	TO 1F-100-1 Section V Operating Limitations	The PIC must operate the aircraft as specified in section V of TO 1F-100-1, Operating Limitations, in addition to the FAA approved operating limitations. Note: Some limitations in the FAA approved operating limitations, such as airspeed limitations and asymmetric loading, supersede those in section 5 of the -1 (AFM). In other words, although the -1 allows operations to Mach 0.95, the FAA operating limitations do not.	
195.	F-100 Safety Supplements	Verify the applicant/operator has copies of the applicable Safety Supplements for the F-100 (that is, SF-1-1, SS-1-12) and that they are incorporated into the AIP and operational guidance as appropriate. Safety Supplements addressed and updated safety issues such as proper starter procedures, low airspeed operations, low altitude ejection, and revised EPR settings. Note: The most current version of the AFM usually provides a listing of affected Safety Supplements and this can be used as a reference.	
196.	F-100 Flight Manual Warnings, Cautions and Notes	Consider requiring the PIC to review all F-100 flight manual warnings, cautions, and notes before each flight.	
197.	Maintenance and Line Support	Verify the F-100 is operated with qualified crew chief/plane captains especially during preflight and post flight inspections as well as assisting the PIC during start-up and shutdown procedures. Disembarking the Hun may require some help from the maintenance chief. Note: In operational service and in addition to the specialized personnel for each major system (that is, hydraulics), the F-100 required two ground crew, a crew chief, and an assistant. This means operations relying on minimum support personnel should be carefully revaluated for an equivalent level of safety. Note: A crew chief (USAF) or airplane captain (U.S. Navy) is the person (a noncommissioned officer) who is in charge of the day-to-day operations, maintenance, and ground handling of an aircraft.	
198.	Ejection Seat System PIC Training	Require adequate ejection seat training for PIC and crew, if applicable, for the type of seat installed. The level of training may depend on past experience, type of seat and other factors. In addition to the specifics of the ejection seat, it should include (1) factors affecting the success of ejection, (2) decision to eject, (3) pre-ejection considerations, (4) causes of ejection injures, and (5) high altitude egress and low altitude egress. It is not simply a "home check out" to be accomplished in an hour or so. For example, the North American seat incorporated many pilot actions to properly function and give the pilot a reasonable chance at survival. This required training. USAF or U.S. Navy training protocols and guidance should be used. In addition, there are companies that provide this type of training. Several ejection seat types were fitted to the F-100. Not all ejection seats are the same. There might be limitation(s) for the ejection seat, that is, weight and height. Note: The record shows the safety record of attempted ejections in civilian former military aircraft is very poor, typically indicating poor training, leading to ejections outside of the envelope. The ejection envelope is a set of defined physical parameters within that an ejection may be successfully executed. It is primarily an interaction of two independent sets of parameters: the physically designed characteristics of the particular ejection system and the dynamics of the aircraft flight profile at the moment of ejection.	
199.	Ejection Seat System Ground Safety	Verify the safety of ejection seats on the ground. Verify ejection seats cannot be accidentally fired, including prohibitions of untrained personnel from sitting on the seats.	
200.	Ejection Seat System Safety Pins	Require PIC to carry the aircraft's escape systems safety pins on all flights and high speed taxi tests.	
201.	Parachutes	Comply with § 91.307, Parachutes and Parachuting. This regulation includes parachute requirements that include (1) the requirement for the parachute be of an approved type and packed by a certificated and appropriately rated parachute rigger and (2), if of a military type, that it be identified by an NAF, AAF, or AN drawing number, an AAF order number, or any other military designation or specification number. Note: In the F-100, there is specific USAF guidance affecting the parachute, such as TO 14D1-1-1, Styles of Parachutes to be Used, and TO 14D1-1-2, Cleaning of Parachute Assemblies.	
202.	TO 00-80G-1 and Display (That Is, Air Show) Safety	Recommend the use of TO 00-80G-1, Make Safe Procedures for Public Static Display, dated November 30, 2002, in preparation for displaying of the aircraft. This document addresses public safety around aircraft in the air show/display environment. It covers hydraulics, egress systems, fuel, arresting hooks, electrical, emergency power, pneumatic, air or ground launched missiles, weapons release (including inert rounds), access panels, antennae, and other equipment that can create a hazard peculiar to certain aircraft.	

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203.	High-Speed Controllability	Restrict transonic operations to Mach.8. There is no exhibition purpose to exceed this speed and it provides a good safety margin. Note: This restriction is related to other safety items discussed in this document, notably inertia coupling, and serious flutter and related damage even in normal operations. Refer to *V_{ne} of Mach 0.8* below.	
204.	Yaw and Pitch Damper	Verify that the Yaw and the Pitch Damper are operational. The F-100 had serious stability problems (pitch and yaw) and these needed to address these and mitigate flutter. The flutter mode on the F-100 was uncommon for the vertical and horizontal stabilizers. In the F-100, it would be expected that a thin surface like the horizontal tail to flutter. In fact, the first flutter mode was a fore and aft motion of the horizontal tail and the vertical tail. The North American structural engineers knew this, but it was known that the first structural instability would manifest itself in the fore and aft direction." The inertia coupling problem (aka Dutch Roll) was more manageable (not eliminated) by installing a yaw damper in the 146th F-100C, later retrofitted to earlier aircraft. Additionally, a pitch damper was added starting with the 301st F-100C. If either of the system is not operational, the aircraft should not be flown. On the F-100 pitch damper, NASA noted "the center evaluated the behavior of a pitching motion damper system on the first F- l00C received in 1956. As expected, the damper further increased the plane's resistance to coupling." Refer to *High AOA/Low Airspeed Loss of Control and Abrupt Maneuvering (Sabre Dance)* below.	
205.	Accelerometer	Ensure the aircraft's accelerometer is functional. This is a critical instrument to remain within the required G limitation of the aircraft.	
206.	External Loads	Restrict the installation of external stores to the wing that were not approved by the USAF or NATO. All external loads, including fuel tanks, and travel pods, cannot have an in-flight release mechanism. The emergency jettison circuit(s) must be disabled.	
207.	275-Gallon Type II Drop Tanks	Ensure 275-Gallon Type II drop tanks are not sued. This is because the Type II tanks were involved in many incidents and were classified as Limited Use. In fact, a safety of flight notice was issue to this effect and a TO for modifications of the fins was also issued. Only Type III 275-Gallon tanks classified as Continued Use should be used.	
208.	Pylon Ejectors	Prohibit explosive pylon charges (ejectors). The related pylon/ejector assemblies cannot be functional.	
209.	Drag Chute	Require the drag chute to be used for all flights. It is an operational requirement for all flights. Landing an F-100 without the drag chute is classified as an emergency. In addition, the operator needs to ensure adequate and safe handling procedures for the recovery of the drag chute by ground/servicing personnel after use. This is important because it may entail recovery from active movement areas in the airport, requiring coordination with airport personnel and ATC clearance/coordination. However, because drag chute failures in the F-100 were very common, no takeoff (abort) or landing distance requirement should be computed taking into account the use of the drag chute. This is necessary to ensure an adequate margin of safety. The following 1989 F-100F (N418FS) accident excerpt illustrates this: "The aircraft was returning to Bournemouth following a relatively uneventful test flight and had been cleared to position at 1,500 ft downwind for runway 08. The pilot rolled out onto final approach at an estimated distance of 2.5 NM, and flew the approach at 167 knots with the speed brake deployed. At 0.5 NM, the throttle was retarded to idle. The aircraft touched down at 145 knots and approximately 300 ft into the 6,030-foot runway. After lowering the nose, the drag chute was deployed and as no retardation was felt, moderate braking was initiated. When the tower informed the pilot that the parachute was "streaming" but had not inflated, the pilot briefly considered going around, but elected to continue with the landing. The wheel brakes were released and then re-applied, up to maximum, with approximately 3,000 ft of runway remaining and with the speed only reduce 122 knots. The pilot was aware of very little retardation and, as it became apparent that the aircraft would not stop before the end of the runway, he steered it to the right to miss the centerline approach lights. As the aircraft departed the right side of the runway at approximately 90 to 100 knots, the nose landing gear broke-off, the aircraft bounced and came to rest in a ditch. The pilot, who was injured, shut down the aircraft down and made a normal egress. There was no fire."	
210.	F-100 Brake System	Recommend the establishment of procedures for checking the F-100 brakes before taxi. This was a standard SOP in F-100 wings in the USAF.	
211.	Preflight Inspection	Verify an extensive preflight inspection, per USAF/NATO procedures, is in place for each flight. For example, a complete F-100 preflight inspection would take approximately 1 hour 15 minutes (average in the French Air Force was 2 hours) by a properly trained and current ground and flight crew.	

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212.	Post flight and Last Chance Check Procedures	Recommend the establishment of post flight and last chance inspection per USAF guidance. Note: Last chance checks may include coordination with the airport and ATC for activity in the movement areas.	
213.	MA-1A Barrier	Recommend procedures for the use of a barrier (MA-1A) system where available. Note: Serious damage and/or injury are possible as a result of a MA-1 arrestment. Refer to AC 150/5220-9, Aircraft Arresting Systems on Civil Airports, December 20, 2006.	
214.	BAK-6 and BAK-9 Cable Arresting System	Recommend procedures for the use of a cable arresting systems when available. Refer to AC 150/5220-9, Aircraft Arresting Systems on Civil Airports, December 20, 2006, and http://www.boeing.com/commercial/airports/faqs/arrestingsystems.pdf.	
215.	Arresting Hook	Require the hook to be operational for all flights. Recommend, as part of flight planning, consideration be given to identifying divert facilities (that is, an AFB or NAS) equipped with a cable arresting system in case it is needed.	
216.	Restrict Acrobatics	Only permit acrobatics per the appropriate USAF flight manual and prohibit snap rolls, abrupt maneuvers (including "rolling pull-outs"), and extreme yaw angles. This issue with the F-100 was so well known that even the Soviets discussed it in a pubic report in 1967 which noted "in practice, the most probable entry of an aircraft in to regimes with a sharply expressed interaction of motions during formation of a great angular velocity of roll is found in the process of the aircraft's carrying our maneuvers with an intensive change in the vertical load factor particularly when there is initial sideslip. In particular, as reported in the foreign press, such flight regimes occurred in supersonic American aircraft, the North American F-100 Super Sabre when its pilot made an energetic pull-out and simultaneous tilted the ailerons for a turn, particularly if the pilot in this case did not keep the pedals in a neutral position. In some cases, the entry of F-100 aircraft intro these regimes ended in an accident." Note: The F-100 has a rate roll of approximately 200º per second in the transonic range and a wing loading of about 75 lb/sq/ft, a high number when compared to the Mig-17 for example at 48 lb/sq/ft. There is no purpose in "revisiting" the aircraft's extreme yaw issues or placing torsional loads on the wing structure. Note: F-100 flight test data makes reference to F-100 "yaw-angle side loads" as well. Specifically, the aircraft was designed to a maximum of 8º yaw at a maximum speed (at maximum q or the dynamic load corresponding to maximum IAS.) Note: As part of its analysis of a F100A crash, NASA noted several airmen were killed in a series of 1954 crashes including George Welch, North American's chief test pilot. His aircraft broke up while completing acrobatics at supersonic speeds. If acrobatics are considered, any maneuvers must be G-limited, and completed above 10,000 ft, which was a standard USAF F-100 SOP. All acrobatics must take place over a pre-approved box in non-populated area or over the ocean. No low altitude acrobatics, including horizontal maneuvers should be permitted or wavers provided. Refer to *High AOA LOC (Sabre Dance) and Abrupt Maneuvering* below. Also see http://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/19690022539_1969022539.pdf.	
217.	Air Refueling	Prohibit air refueling. System should be disabled.	
218.	Hot and Pressure Refueling	Prohibit hot and pressure refueling. There are too many dangers with these types of operations.	
219.	Formation Takeoffs and Landings	Prohibit formation take-. The aircraft's instability, proposing and over rotation tendencies make this a dangerous practice. The possibility of a drag chute or brake failure adds to this concern. Note: Afterburner light-off issues are also a concern.	

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220.	Demilitarization	Verify the aircraft has been adequately demilitarized. A weapon, a weapon system, and related equipment can create safety of flight hazards under the jurisdiction of the FAA and must be removed. Removal of the M39 20mm cannons alone does not suffice. Other systems include: the A-4 gun sight, pylons and wiring (in the case of wiring, the firing circuitry must not have any continuity to it), AN/APG-30A ranging radar, chaff, SUU-21 bomb dispenser, Mk. VIII C and Mk. VII A for the F-100F pylons, flares or practice bombs (that is, Mk-76 bombs), ALQs (that is, ALQ-167, "Hot Pods," LGBTRs, racks such as TER 7, MER 7, and PMBR or Practice Multiple Bomb Rack, ECM/Jammer gear (such as ALQ-51, ALQ-126, Sanders ALQ-132, Xerox ALG-123, ALQ-167, AST-4, ALQ-119, ALQ-131), RHAW gear (that is, ALR-45), firing control (armament) panel(s), switches and triggers (including the AQM-37, AIM-9, AWRS, ARM-45 and Aero-14B panels), captive AIM-9 AAM rounds (CATM-9), and LABS system. In the F-100, ensuring the aircraft is not complying with TO 615, Additional Weapon Capability, is part of the demilitarization. With these systems, there are many safety issues that can preclude a finding of "condition for safe operation," and "protecting people and property on the ground," as required by statute and regulations. These safety issues include accidental firing, compartment fires, inadvertent discharge of flares, toxic chaff, electrical overloads of the aircraft electric system, danger of inadvertent release, structural damage to the aircraft, complex flight limitations, and harmful emissions. For additional information on what items and components are part of the aircraft's weapon systems, refer to T.O. 1F-100C-34-1-1, North American F-100 C(I), -D(I), and -F(I) Weapons Delivery Manual. Also, there is data indicating that the USAF may have published a TO specific to the F-100 and dealing with demilitarization. Note: Some of these weapon systems could be permitted for a R&D airworthiness certificate, but the related safety issues still have to be addressed, especially if the aircraft reverts back to an exhibition certificate. TO 00-80G-1, Make Safe Procedures for Public Static Display, dated November 30, 2002, can be used as a reference as well.	
221.	Display Airspeed	Recommend the aircraft be kept above 300 knots (display airspeed, i.e., maneuvers, turns) if displayed at air shows. This is because the control response and stability are best above that speed.	
222.	Mach Meter and Airspeed Calibration	Require the installation and calibration of a Mach meter or verify that the PIC makes the proper Mach determination before flight. Unless the airspeed indicator(s) is properly calibrated, transonic range operations may have to be restricted.	
223.	Phase I Flight Testing	Recommend, at minimum, all flight tests and flight test protocol(s) follows the intent and scope of acceptable USAF functionality test procedures. The aircraft needs detailed Phase I flight testing for a minimum of 10 hours. Returning a high-performance aircraft such as the F-100 to flight status after restoration cannot be accomplished by a few hours of "flying around." The safe operation of a F-100 require a demonstrated level of reliability.	
224.	Post-Maintenance Check Flights	Recommend post maintenance flight checks are incorporated in the maintenance (AIP) and operation of the aircraft. These were accomplished after each periodic inspection, (that is, 50, 100-hour). TO 1-1-300, Maintenance Operational Checks and Flight Checks, June 15, 2012, can be used as a reference. Note: The typical post-maintenance flight involving an F-100 lasted between 1 hour and 1 hour and 15 minutes.	
225.	Flight Over Populated Areas	Prohibit flights over all populated areas, including takeoffs and landings. Consider restricting the aircraft to blocks of airspace removed from populated areas, not just over flight of such areas. In all instances, there must be adequate and detailed egress and ingress routes in and out of all airports that are used to avoid flights over and near populated areas. Recommend the general avoidance of populated areas be accomplished by keeping the aircraft a certain distance away from those areas (that is, 2 nautical miles), not just "clear underneath" and not to direct energy at those areas such as keeping the populated areas behind the forward 180-degress quadrant in relation to the aircraft's flight path. This requires rigorous flight planning. To address this, any airport used must be evaluated as part of the program letter.	

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226.	Erratic Flight Paths After Ejections	The following are examples of F-100s erratic flight paths after ejections. The F-100 was involved in one of deadliest crashes involving a U.S. military aircraft. The 1959 Kadena Air Base F-100 crash occurred on June 30, 1959, in Okinawa, Japan. In the crash, a USAF F-100, on a test flight from Kadena AFB, suffered an engine fire after takeoff. Although the pilot steered the aircraft over the water, after the ejection of the pilot, the aircraft veered off and crashed into an elementary school and surrounding houses, killing eleven students and six other people in the neighborhood, and injuring 210 others, including 156 students at the school. A similar accident occurred two years earlier in Holland when after experiencing an engine failure, a USAF F-100 pilot pointed the aircraft at a body of water before ejecting, and yet the aircraft crashed into a hosing area, killing 5 people on the ground. It happened again on October 27, 1964 in England when another F-100 crashed into a residential area despite the pilot having pointed the aircraft out to sea after ejecting. Clearly, simply not over-flying a populated area is not enough to protect people and property on the ground near the aircraft's flight path. The following account by a USAF F-100 pilot illustrates this fear: "At 0956:50 hours on June 9, 1973, my wingman and I lifted off runway 30L at Lambert Field, St. Louis, Missouri and began a climbing left turn. In the climbing turn, the morning sun played across the instrument panel. As the sunlight moved off, I saw the "FIRE" warning light illuminated. At 0958:25 I told Two I was coming out of burner and spread it out. I pulled the throttle inboard and back to idle, then told Two, "Check me over, I got a fire light". Two confirmed, "Beautiful flames trickling out the aft end and smoke and flames from the bottom breather ports." I briefly considered trying to set her back down but rejected that idea immediately because of the fear the controls would become useless over the densely populated area…So I reversed my turn back towards an uninhabited area surrounding the Missouri river southwest of the metro area, If I jump, she'll crash!" But a fire can be highly motivating. I pulled the nose up, raised the left armrest partially, then let go of the stick, grabbed the right armrest and yanked. It seemed to take way too long for the canopy to blow off but it finally did and I found myself whistling through space. Two radioed Departure I was out and had a good chute. The time was 0959:35. The aircraft pitched over and went straight in, hitting dead center in the middle of the river." In 1974, following an ejection, an F-100 developed "a mind of its own" as its pilot noted that "meanwhile the silent Super Sabre was gliding several miles to the east, past the town of Edinburg" and …set down in a corn field a mile from town…."	
227.	Adequate Annual Program Letter	Verify the applicant's annual program letter is detailed enough and consistent with the applicable regulatory and policy requirements. Many applicants/operators submit inadequate and vague program letters and fail to submit them on an annual basis. Also verify the proposed activities (that is, an air show at a particular airport) are consistent with the applicable operating limitations (that is, avoiding populated areas) and do not pose a safety hazard, such as the runway being too short. Refer to http://www.warbirds-eaa.org/forms/.	
228.	Suitable Airport	Ensure all airports to be used are properly vetted in terms of suitability (that is, runway length, RSAs, emergency equipment). Requiring PPR (Prior Permission Required) would not be unreasonable in some cases. If this is contemplated, coordination with the Appropriate FAA Airports District Office (ADO) and FAA's Airports Compliance Division, ACO-100, is required to ensure compliance with the applicable 49 U.S.C airport access requirements as outlined in FAA Order 5190.6 FAA Airport Compliance Program. This order sets forth policies, procedures, interpretation, and the administration of the various federal requirements associated with FAA airport funding, which includes requirements for safe operations and terms and conditions for airport access at federally obligated airports.	
229.	Visual Meteorological Condition (VMC) and Instrument Flight Rules (IFR) Operations	Prohibit Instrument Meteorological Conditions (IMC) or night operations. Day VMC operations only. The F-100 was not a good night platform because of poor instrumentation, vertigo-inducing lighting, and an attitude direction indicator (ADI) prone to tumbling. In military service, night landings in the F-100 were very challenging and not recommended for pilots without significant F-100 experience. As such, civil night operations carry unnecessary risks. In addition, the F-100's windshield has a very acute angle and by head movement alone, a pilot can essentially "change" the apparent angle of the runway during an approach. Prohibit operations in known icing conditions. Comply with § 91.205.	
230.	Carrying of Passengers §91.319(a)(2)	Prohibit carrying passengers for compensation (and property) and for hire at all times. For hire flight training is permitted only in accordance with an FAA issued letter of deviation authority (LODA). FAA LODA policy limits training to pilots eligible for F-100 experimental aircraft authorization. Note: The May 18, 2012, fatal former military jet accident was one of many flights where "rides" were being offered to "a group of eight people had paid for [the] flight package."	

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231.	Passenger Training and Limitations	If a passenger [see above for limitations under §91.319(a)(2)] is permitted in the back seat of an F-100F, adequate training requirements and testing procedures must be implemented to allow the performance of that crew's position responsibilities per Section 4 Crew Duties of TO 1F-100D-1, USAF Flight Manual for the F-100D and F-100F. This training should not be a simple check out, but rather a structured training program (e.g., ground school on aircraft systems, emergency and abnormal procedures, "off-limits" equipment and switches, and actual cockpit training). The back seat qualification should also include (1) ground egress training (FAA approved ejection seat training), (2) ejection seat and survival equipment training, (3) abnormal/emergency procedures, and (4) normal procedures. In addition to any aircraft specific (i.e., systems and related documentation) training, we recommend that the *Naval Aviation Survival Training Program* **(**Non-aircrew NASTP Training) or/and *the United States Air Force Aerospace Physiology Program* (AFI 1 I-403, Aerospace Physiological Training Program) be used in developing these programs. In addition, passenger physiological and high-altitude training should be implemented for all operations above 18,000 feet. This issue can be addressed as part of the operating limitations by requiring the back seat training and incorporating the adequate reference (name) of the operator's training program. In addition, see section below entitled *PIC/Passenger Aeromedical Training.*	
232.	Reduce Vertical Separation Minimums (RVSM)	Restrict operations below RVSM altitudes (FL290).	
233.	High-Altitude Training	Recommend the PIC complete an FAA-approved physiological training course (that is, altitude chamber). Refer to FAA Civil Aerospace Medical Institute (CAMI) Physiology and Survival Training website for additional information.	
234.	PIC/Passenger Aeromedical Training	Properly train any passenger carried in the aircraft, in addition to the PIC. Such training should familiarize passengers with potential Aeromedical problems, which may occur during the flight. As an example in the USAF, passenger training is a one day course and includes approximately 6 hours of academic and chamber training. Passenger training academic requirements include — • Physiological Effects of Altitude, • Human Performance, • Oxygen Equipment, • Cabin Pressurization and Decompression, • Pressure Breathing, • Noise and Vibration, • Acceleration, • Physiological Aspects of Ejection Seat, • Parachute Training, • FAA approved ejection seat training. For additional information, refer to USAF Aerospace Physiology Program at http://ftp.rta.nato.int/public//PubFullText/RTO/MP/RTO-MP-021///$MP-021-13.PDF and Naval Aviation Survival Training Program (NASTP) at http://www.med.navy.mil/sites/nmotc/nsti/Pages/NASTPOverview.aspx.	
235.	Minimum Equipment for Flight	Ask the applicant to specify minimum equipment for flight and develop a list consistent with the applicable military guidance (USAF/Danish Air Force/NATO as applicable) and § 91.213. This is a critical issue with former military aircraft like the F-100, especially for items like the yaw and pitch dampers, the Hytrol anti-skid system, and the drag chute. Note: Both the anti-skid and drag chute systems were unreliable.	

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236.	Minimum Runway Length (General)	Recommend a minimum runway length of 8,000 feet. In addition, the PIC must verify, using the appropriate aircraft performance charts (TO 1F-100A-1-1, USAF Flight Manual Performance Data for the F-100 A, C, D, F Aircraft), that sufficient runway length is available with consideration given to field elevation and atmospheric conditions. To add a margin of safety, use the following:
		
		<u>For Takeoff</u>
		• No person may initiate an airplane takeoff unless it is possible to stop the airplane safely on the runway, as shown by the accelerate-stop distance data, and to clear all obstacles by at least 50 ft vertically (as shown by the takeoff path data) or 200 ft horizontally within the airport boundaries and 300 ft horizontally beyond the boundaries, without banking before reaching a height of 50 ft (as shown by the takeoff path data) and after that without banking more than 15 degrees.
		• In applying this section, corrections must be made for any runway gradient. To allow for wind effect, takeoff data based on still air may be corrected by taking into account not more than 50 percent of any reported headwind component and not less than 150 percent of any reported tailwind component.
		
		<u>For Landing</u>
		• No person may initiate an airplane takeoff unless the airplane weight on arrival, allowing for normal consumption of fuel and oil in flight (in accordance with the landing distance in the AFM for the elevation of the destination airport and the wind conditions expected there at the time of landing), would allow a full stop landing at the intended destination airport within 60 percent of the effective length of each runway described below from a point 50 ft above the intersection of the obstruction clearance plane and the runway. For the purpose of determining the allowable landing weight at the destination airport, the following is assumed:
		  o The airplane is landed on the most favorable runway and in the most favorable direction, in still air.
		  o The airplane is landed on the most suitable runway considering the probable wind velocity and direction and the ground handling characteristics of that airplane, and considering other conditions such as landing aids and terrain.
		
		Note: The F-100 has an unusually high number of overruns as part of its operational history, both on landing and as a result of aborted takeoffs. The aircraft's fast approach speed, around 166 knots (higher speeds in the range of 180-190 knots were not uncommon), with 1,500 lb of fuel, and notoriously weak brakes dictate a safety margin in terms of landing requirements. The same is true concerning takeoffs, where an abort creates a series of safety issues. Note: Minimum [emphasized] USAF and NATO runway lengths are 8,000 ft.	

237.	Runway Safety Areas (RSA)	Recommend restricting use to airports with appropriate runway safety areas (RSA) and Runway protection Zones (RPZ) to add a margin of safety. A runway safety area (RSA) is defined as the surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway. The RSA and RPZ standards are part of FAA's airport design standards. Refer to FAA AC 150/5300-13, Airport Design. In addition, where possible, recommend that standard USAF Potential Loss of Aircraft Zone (PLAZ) standards be used as well.	
238.	Takeoff and Landing Data (TOLD)	Recommend the use of TOLD or Minimum TOLD requirements. These include: acceleration check speed, refusal/maximum abort speed (dry/wet), rotation speed, takeoff speed and distance, and normal and heavyweight (landing immediately after takeoff) landing speeds and distances (dry/wet).	
239.	Acceleration Check and Takeoff Computations	Recommend computation of a 2,000 foot acceleration check speed anytime the computed takeoff roll exceeds 2,500 ft. When the computed takeoff roll is 2,500 ft or less, use the actual takeoff distance versus the computed takeoff distance to evaluate aircraft performance. Compute a refusal speed for all takeoffs. This is a standard USAF practice. Practically, this involves an acceleration check speed, which is using a ground reference during the takeoff run to check for a pre-calculated speed.	
240.	Landing Distance	For landing, use procedures similar to those described in § 91.1037 to allow a full stop landing within 80 percent of the effective length of each runway.	
241.	General Runway Considerations	Avoid directing energy at populated areas. Consider accelerate/stop distances, balanced field length, and critical field length in determining acceptable runway use as per CJAA (Classic Jet Aircraft Association) guidance.	

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242.	Runway Condition Reading (RCR) and Runway Surface Condition (RSC)	Consider using Runway Condition Reading (RCR) numbers. RCR is a measure of tire-to-runway friction coefficient. RCR is given as a whole number. This value is used to define the braking characteristics for various runway surface conditions. The reported RCR is therefore a factor in determining any performance involving braking, such as critical engine failure speed and refusal speed. Some airfields report runway braking characteristics in accordance with International Civil Aviation Organization (ICAO) documents, as good, medium, and poor. These can be related to ICAO categories. Similarly, Runway Surface Condition (RSC) can also be used. RSC is the average depth covering the runway surface measured to 1/10 inch (1 inch is equivalent to a RSC of 10). RSC types include: wet runway, standing water, slush on runway, and loose snow on runway. Refer to FAA Order JO7110.65, February 2012 and applicable military guidance.	
243.	Jet Blast and Power On Danger Areas	Establish adequate jet blast and power on safety (including heat and noise) procedures per the USAF-1 Flight Manual and TO 1F-100-2-1. The CJAA Jet Manual can be used as reference as well.	
244.	Servicing	Verify ground personnel are trained for F-100 operations with an emphasis on the potential for fires during servicing (fuel, oil, hydraulics, oxygen, pneumatic). Restrict non-trained personnel from servicing the aircraft.	
245.	Ground Support Equipment	Verify all required ground equipment is available for all flight operations and in a serviceable condition. Such an example is the huffer and the hydraulic "mule." This equipment has its own maintenance requirements and should be incorporated in the AIP.	
246.	Flight Servicing Certificate	Recommend a Flight Servicing Certificate or a similar document be used by the ground crew to attest to the aircraft's condition (that is, critical components such as tires, drag chute) before each flight to include the status of all servicing (that is, liquid levels, fuel levels, oil (that is, 58508e), hydraulic fluid (that is, 5606), oxygen).	
247.	Aerial Target Towing	Restrict all towing. Notwithstanding the standard language in the FAA Order 8130.2 limitations concerning towing, the F-100 is not to be used for towing targets since such operations pose a danger to property and people on the ground and endanger the aircraft. For example, there have been cases where the aerial target (that is, the K-11 tow target and cable, TDU-10 Dart Gunnery Target System, A/A 37U-15 tow subsystem) collided with the aircraft causing fatal damage to the flight controls system. The risk for mid-air collision is also too great. Moreover, some target towing systems' separation mechanism includes explosives, while others cannot be released, which poses hazards during landing.	
248.	Personal Flight Equipment	Recommend the operator use adequate personal flight equipment and attire to verify safe operations. This includes: helmet, oxygen mask, fire retardant (Nomex) flight suit, gloves (that is, Nomex or leather), foot gear (that is, boots), and clothing that does not interfere with cockpit systems and flight controls. Operating with a live ejection seat requires a harness. Therefore, recommend only an approved harness, compatible with the ejection seat be used.	
249.	ARFF Coordination	Coordinate with Aircraft Rescue and Fire Fighting (ARFF) personnel at any airport of landing (that is, safety briefing, ejection seat system, fuel system, emergency entrance, and engine shut-off). ARFF personnel should be provided with the relevant sections of the aircraft -1-1 (AFM) and -2-1 (General Airplane) and other appropriate references like Fire Fighting and Aircraft Crash Rescue, Vol. 3., Air University, Maxwell AFB, 1958.	
250.	ATC Coordination	Coordinate with Air Traffic Control (ATC) before any operation that may interfere with normal flow of traffic to ensure the requirement to avoid flight over populated areas is complied with. Note: ATC does not have the authority to waive any of the operating limitations or operating rules.	
251.	Class B Airspace	Prohibit operations Class B airspace.	

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252.	Military/Public Aircraft Operations	Some F-100 operators have entered into contracts with DOD to provide military missions such as air combat maneuvering (ACM), target towing, and electronic counter measures (ECM). Such operations constitute "public aircraft operations" (PAO), not civil operations under FAA jurisdiction. The operator is required to obtain a declaration of PAO from the contracting entity or risk civil penalty for operating the aircraft outside the limits of the FAA experimental certificate. Verify the operator understands PAO vs. operations under a civil certificate. For example, the purpose of an airworthiness certificate in the exhibition category is limited to activities listed in § 21.191(d). Note: The following notice, which was issued by AFS-1 in March 2012, should be communicated to the applicant: "Any pilot operating a U.S. civil aircraft with an experimental certificate while conducting operations such as air-to-air combat simulations, electronic counter measures, target towing for aerial gunnery, and/or dropping simulated ordinances is operating contrary to the limits of the experimental certificate. Any operator offering to use a U.S. civil aircraft with an experimental certificate to conduct operations such as air-to-air combat simulations, electronic counter measures, target towing for aerial gunnery, and/or dropping simulated ordinances pursuant to a contract or other agreement with a foreign government or other foreign entity would not be doing so in accordance with any authority granted by the FAA as the State of Registry or State of the Operator. These activities are not included in the list of experimental certificate approved operations and may be subject to enforcement action by FAA. For those experimental aircraft operating overseas within the limitations of their certificate, FAA Order 8130.2, section 7, paragraph 4071 (b) states "If an experimental airworthiness certificate is issued to an aircraft located in or outside of the United States for time-limited operations in another country, the experimental airworthiness certificate must be accompanied by appropriate operating limitations that have been coordinated with the responsible [civil aviation authority] CAA before issuance." For additional information on public aircraft status, refer to volume 76 FR 16349, Notice of Policy Regarding Civil Aircraft Operators Providing Contract Support to Government Entities (Public Aircraft Operations), dated March 23, 2011.	

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F-100 Risk Management, SOPs, and Best Practices			
253.	AFM Addendums	Consider additions or restrictions to the AFM, as per § 91.415. Operational restrictions should be also addressed in the AFM.	
254.	Cockpit Familiarization	It is recommended that detailed and comprehensive SOPs/training (not unlike the military-style training (known as "blindfold cockpit check with boldface items" conducted in a cockpit or cockpit simulator) be instituted to ensure adequate cockpit familiarization for the PIC. This was a standard practice in the USAF.	
255.	Fuel Mismanagement	SOPs should emphasis on fuel management and fuel starvation. There are issues with the fuel system, including determining total fuel, quantity remaining, fuel transfer/boost pumps, and fuel in external tanks, if installed.	
256.	In-Flight Canopy Separation	Revise the pilot checklist and back-seat occupant (F-100F and TF-100F) briefing to emphasize (that is, "warning—caution") properly closing the canopy.	
257.	V_{ne} of Mach 0.8.	Recommend a limitation of Mach 0.8 which provides a good safety margin for this aircraft. Although the F-100 was a supersonic aircraft, many issues near and at Mach 1 present risks not necessary for civilian operations. For example, the F-100 had in-board ailerons (like the Boeing 727) to counter control reversal that occurred when its thin wing twisted under the aerodynamic loads placed on outboard ailerons at high speed. The aircraft's speed produced a wing with a thickness/chord ratio of only 0.082 and 0.07 with slats, which is very thin when compared to the 0.10 ration found in the F-86. The thickness/chord ratio of the vertical and horizontal tail surfaces were 3.5 percent. Flutter on all flight controls (and wings-refer to *Wing Flutter Potential*, below) was also a serious issue as was adverse yaw and its inherent lack of longitudinal stability.	
258.	Wing Flutter Potential	Calculations by North American (manufacturer) indicate the F-100 airplane wing was subject to quasi-single-degree bending flutter near Mach 1.0. In model testing (7-percent-thick wings) encountered flutter over a Mach number range of about 1.10 to 0.94 at a frequency of 50 cycles per second. Although it is believed the full-scale airplane wing has approximately twice the scaled first-bending frequency as the model tested and, hence, will probably be free of this type of flutter, caution is still noted in terms of approaching this high transonic speed range.	

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259.	High AOA/Low Airspeed Loss of Control and Abrupt Maneuvering (Sabre Dance)	Emphasize the risk of high AOA/low speed operations and consider asking that procedures/training be adopted accordingly. Many F-100s have been lost due to LOC at high AOA and low speed. The combination of many of the aircraft's less than desirable characteristics (that is, high stall speed, inertia coupling, adverse yaw, center of lift shifting aft, and afterburner pitch-up), were lethal in those areas of the aircraft's flight envelope. To begin with, the F-100 has high stall speed (that is, 200+ knots in the C model). Next, it had a dangerous tendency to develop adverse yaw. Roll coupling (inertia coupling-Dutch Roll) at a high angle of attack followed. On the issue of inertia coupling, if an F-100 pilot pulled high Gs with a high roll rate, the opposing forces on the airplane would overcome the stabilizing effect of wings and control surfaces, causing the pilot to lose control. Note: This could be an issue at high speed as well. The F-100 is also known for its adverse yaw affect with aileron input, so the use of the rudder is critical, even when performing simple aileron rolls. In fact, as every F-100 pilot was taught, when the F-100 was in a high AOA and low speed situation, the stick should not be moved laterally, and the rudder was used for both roll and turn. During landing, pilots would center the stick and "work the rudders." The adverse yaw issue was never fixed by North American, the manufacturer. A roll at slow speed and a high angle of attack can produce unwanted pitch or yaw. In addition, at low speeds, the tips stalled first, with the stall progressing inboard. This not only rendered the ailerons less effective but also shifted the center of lift forward of the center of gravity, resulting in a tendency to pitch up—which in turn aggravated the stall. A pilot may be tempted to use the afterburner but the power of the afterburner blast, coupled with the pitch-up of the creeping stall, could raise the aircraft's nose even higher. The combination of these characteristics can be catastrophic. It was called Sabre Dance, and killed many F-100 pilots. In addition, flight controls could lock if the stick is moved too rapidly to maintain pitch and roll control, and this was due to the inability of the hydraulic system to cope with extreme demands, a problem first identified in the F-100A. Note: The following account of a Sabre Dance, which was not fatal, is relevant: "In 1961 at Nellis AFB I saw an F-100D do the Sabre Dance. The aircraft had a dart under its wing which was used for Air to air gunnery. On the takeoff roll, when he rotated the nose pitched straight up and that's when the dance began. It seemed like it went on for several minutes but it was short seconds until the right wing dropped and touched the ground, the nose dropped just enough for the pilot to gain some control. He flew it out of the stall, just a few feet above our heads and the tails of other F-100s on the ramp. The "shooters" setting at the end of the runway taxied back to their parking spots knowing for sure that the pilot was going to bail out when he got high enough. But they didn't know this pilot. He went on to the range and called back asking where everyone was at. He was towing the dart and ready to go to work." A witness to another Sabre Dance accident adds: "One accident was quite memorable. "LT. Fears in 55-3642 got it into a porpoise on takeoff, got airborne in a high AOA and stood on the thrust in…in the proverbial Sabre Dance. It rolled to the right and while inverted, scrapped the vertical fin on the runway, which lowered the nose to level flight. The roll continued to straight and level, and the takeoff was completed. During the porpoise, all three tires were blown so the hairy landing was made on flats. Post landing inspection revealed numerous holes in the flaps and lower fuselage from tires and wheel fragments. The tail skid was pushed into the AB and the AB nozzle was egg shaped." www.historynet.com/deadly-sabre-dance.htm.	
260.	Afterburner Pitch-Up	Emphasize the impact of afterburner use on the aircraft's pitching attitude. As discussed under *Sabre Dance*, the use of the afterburner would result in pitch-up, which, under certain circumstances such as low speed/high AOA, could be an issue. This pitch-up is not necessarily an effect familiar to many pilots with experience in other fighter-type aircraft like the F-5, F-4, or F-15. Note: to illustrate the F-100 pitch-up tendency, it is noted in the 1950s, NASA Ames tested a thrust-reverser application to the North American F-100. The system was tested in the wind tunnel and in flight by USAF Wright Field personnel, but large pitch trim changes and reverser exhaust heating problems discouraged its use.	
261.	Poor Stall Characteristics	Emphasize the aircraft's stall characteristics. As a NASA Ames report noted, the F-100's "deficiencies associated with lower-speed flight included poor stall characteristics (large roll-off, lack of stall warning), and poor lateral-directional stability." A stall situation in the F-100 resulted in airflow disruption first at the tips, progressing inboard, and resulting in the loss of lift, which was associated with a loss of control as well. See www.nasa.gov/centers/dryden/pdf/87832main_H-780.pdf.	
262.	Pitch-Yaw Coupling (Dutch Roll)	Emphasize this aircraft's characteristic. The F-100 experienced pitch-yaw coupling (Dutch Roll) and low directional stability. Dutch roll is a type of aircraft motion, consisting of an out-of-phase combination of "tail-wagging" and rocking from side to side. This yaw-roll coupling is one of the basic flight dynamic modes (others include phugoid, short period, and spiral divergence).	

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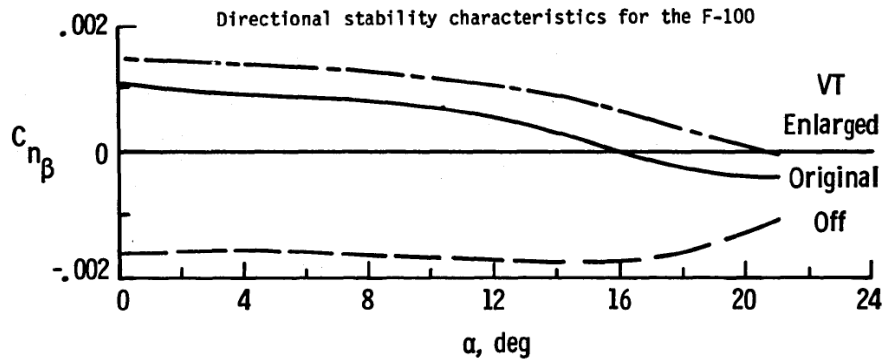
263.	Low Directional Stability High AOA	The aircraft's low directional stability was the cause of many early crashes (small vertical stabilizer F-100As). Additional wind tunnel tests were made, which indicated the need for an increase in the vertical tail area of about 27 percent (from the F-100A to the C and later models). As with stall characteristics, low directional stability combines to make the F-100 an unforgivable aircraft in certain flight conditions. Even with the larger tail, as shown by the diagram below, the aircraft's positive directional stability (variation of yawing-moment coefficient with angle of sideslip vs. AOA or) was significantly increased throughout the AOA range, and particularly at AOA angles exceeding 16º.  **Source: NASA.** The following NASA assessment illustrates the issue: "NASA tests revealed some additional sources of directional stability problems other than that associated with the decrease in tail lift-curve slope at supersonic speeds (small tail). For example, the tail contribution to directional stability is reasonably large, however, much of the tail contribution is used in simply overcoming the large instability of the body-wing. The instability of the body for supersonic designs had not previously been fully appreciated and was often an unexpected factor contributing to static and dynamic stability problems of many supersonic configurations. The source of this instability was, in general, the long slender bodies desired for low drag and the far-aft center-of-gravity locations caused by aft-mounted jet engines. The loss in tail contribution that did occur with increasing angle of attack was the result of an adverse side wash angle at the tail that was induced by the wake and vortex flows from the fore body and from the wing body juncture. Insofar as the F-100 was concerned, the most likely fix to the directional stability deficiency was to enlarge the tail area by 27 percent so that the tail contribution was increased and the angle of attack at which static directional instability occurred was increased to 21 degrees." For additional information, refer to Spearman, M. Leroy, Some Lessons Learned With Wind Tunnels, Langley Research Center, NASA, March 1986.	
264.	Aileron Reversal	Emphasize aileron reversal in training and SOPs. As discussed above, in several sections in this document, the critical use of the rudder in the F-100 must be addressed as a standalone item not only in training, but clearly identified in SOPs. The F-100 suffered from aileron reversal. As mentioned, the F-100 required extensive use of the rudder in maneuvers, where others required the use of ailerons. However, when ailerons were used, if too much aileron was used, the aircraft could roll violently in the opposite direction, frequently into uncontrolled flight, even at high speed, as it occurred to Mr. Bob Hoover during an F-100 flight. The traditional way to counter an unexpected roll was to apply opposite stick, but in the F-100, this only aggravated the situation. This is one of the F-100 characteristics that a simple "check-out" in the aircraft may not suffice because it may not erase engrained reflexes derived from experience in other aircraft.	

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265.	Airspeed Management on Final Approach	Recommend establishing training and SOPs to address the proper management of airspeed on final approach. This is important because 58 percent of all non-mechanical F-100 accidents were landing accidents. This is one of the most critical aspects of F-100 safety and is something training and currency must address. In other words, time on final "managing airspeed" in the pattern and on final is far more valuable than time at cruise. In fact, to reduce landing accidents, the USAF put together a team to go out to F-100 bases and demonstrate proper landing procedures and techniques, from pattern to touchdown. Not all of the F-100s are the same in this regard. For example, the F-100A and C models have an approach speed that can be 20 knots higher than the airspeed of the F-100F. In addition, the proper computation of the airspeed to be held on final (that is, variations due to weight, an increase of 3 knots per 1,000 lb, and 5 extra knots for each 10 knots of crosswind) is necessary. Strict adherence to the -1 and related SOPs is necessary for safe operations.	
266.	Touchdown and Deceleration Technique	In conjunction with the applicable AFM, and any specifics on the aircraft, recommend the establishments of procedures for correct touchdown and deceleration procedures. This was a standard SOP in F-100 wings in the USAF and may involve the proper sequencing of actions following touchdown, that is, touchdown at the correct speed, allowing the nose wheel to contact the runway immediately, holding the stick forward, engaging nose wheel steering, deploying the drag chute, retracting speed brakes, retracting flaps, and testing the anti-skid action.	
267.	Drag Chute Failures	Ensure the PIC trains and assumes drag chute failure for all flights because of the very high number of drag chute failures. Recommend the establishments of training and SOPs to address this. Effectively, the aircraft should not be operated while totally dependent on the drag chute system to stop on available runway.	
268.	Crosswind Operations	Recommend the applicant/operator adopt a maximum crosswind component for all operations, that is, a 10 knots crosswind component. This is because the combination of the aircraft's difficult stopping characteristics (that is, fast approach speed, bad brakes, poor drag chute operation) and the need to increase approach speed (as per the -1), increases risks unnecessarily.	
269.	Wet Runway	Recommend the applicant/operator refrain from operating the aircraft on any runway that has standing water.	
270.	FAA Advisory Circular AC 91-79	Recommend the use of FAA Advisory Circular AC 91-79, Runway Overrun Prevention. According to AC 91-79, safe landings begin long before touchdown. Adhering to standard operating procedures and best practices for stabilized approaches will always be the first line of defense in preventing a runway overrun.	
271.	360º Overhead Pattern Technique	Recommend the operator consider implementing SOPs to address the 360º overhead pattern technique and whether it should be used. This is recommended because operationally, the typical 350 knot initial speed permitted a greater distance in the pattern and hence a better airspeed management technique, notably adequate, not too fast for speeds on final and landing. However, if a 250-knot speed is used, in addition to a limiting 2G turn, this slower speed meant the aircraft would be close to the runway environment on the downwind leg during pattern maneuvering. This led to faster than normal approach speeds (pilots kept too much airspeed on the turn to final and this resulted in higher than normal speeds during approach and landing), causing some of the accidents due to shorter runways (some operational bases), overruns, and barrier arrestments. It is also recommended that proper procedures be considered and coordinated with ATC (that is, extended downwind, base, and final to give the F-100 "room") because if there is no civilian application for the 360º overhead pattern (outside the air show routine), it should not be used.	
272.	Low Approaches, High Speed, Low-Altitude Passes	Recommend no impromptu "low approaches" be permitted in normal operations outside the approved air show routine and during the exhibition of the aircraft in that context. An exhibition airworthiness certificate is for exhibition purposes only. In many cases, operators engage in "spur of the moment home air shows." Conducting such operations with an aircraft like the F-100 is not only inconsistent with the operating limitations typically issued, but also a potentially dangerous activity because of (1) lack of planning and coordination these operations entail, and (2) the inherent dangers of maneuvering this aircraft at a low level. Note: In a 2011 decision, the NTSB found high speed, low-altitude operations were intentional fly-bys, rather than go-arounds.	

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273.	Afterburner Failure	Recommend the establishment of SOPs limiting the use of the afterburner (consistent with the -1) because afterburner failure is a major safety concern and accident cause for the F-100. Note: Note: It was not uncommon for the afterburner eyelids failing to open or to close properly then failed to open or close improperly. If they failed to open when afterburner is selected, a violent compressor stall can occur. If they failed to close when afterburner is de-selected, there is a significant loss of thrust. Many accidents were cause by both types of failures. It could also create unwanted yaw when some would open and not others, or not do so simultaneously.	
274.	Limit the Use of the Afterburner	Recommend the use of the afterburner be limited to those phases of flight where it is actually necessary, such as takeoff. This is because the history of afterburner failures in the F-100 (original afterburner nozzle) justifies such a restriction to minimize this type of failure. Note: Many failures occurred right after the pilot came out of afterburner. As an experience F-100 pilot noted during an NTSB appeal, "it is not necessary to light the afterburner on climb-out with an indicated airspeed of 300 knots, and explained that even on a routine go around from an aborted approach you would not engage the afterburner because the chances of it not lighting are perhaps real and it could actually be less thrust because the eyelids of an F-100 open and if the burner doesn't light you actually have less thrust." www.ntsb.gov/alj/o_n_o/docs/AVIATION/5018.PDF	
275.	Runway Control Officer (RCO)	Recommend the operator consider implementing SOPs to have another pilot serve in a role similar to a RCO in the USAF. This was standard during F-100 operations. This process, if it can be implemented (that is, may require ATC coordination), will likely assist in mitigation several of the aircraft's safety issues, especially in the takeoff and landing environment.	
276.	Landing Pattern Checks	Recommend the operator consider incorporating "status checks" in the pattern to verify the status of several items that could indicate a failure, such as hydraulic pressure. For example, it was an SOP in the USAF for F-100s pilots to make a "base check" that would cover "gear down, pressure up, and indicators check"	
277.	Compressor Stall	The F-100/J-57 is very vulnerable to disturbed airflow and thus susceptible to compressor stalls, especially associated with abrupt maneuvering, high AOA, abrupt throttle movements, yaw movement, and afterburner use at low speed and high G loading. Compressor stalls in the F-100 could be extremely violent and large fires would exit both the intake and the tail pipe simultaneously, which would violently shake the whole aircraft and pilot. It could literally kick the pilot's feet off the rudders. In many cases, even under "benign conditions" (350 knots and medium altitudes), it caused engine failure, and loss of aircraft and crew. To illustrate the engine susceptibility to compressor stalls, it is noted in 1971 alone, the French Air Force recorded 46 such incidents. This issue must be addressed in training by the operator and properly understood and mitigated. Note: In 1966, the Danish Air Force grounded all of its F-100s because of compressor stalls. This problem required adjustments of the engine and fuel control system, which is something the USAF had been trying to do since the aircraft's flight test days at Edwards AFB. Despite this, J-57 compressor stalls remained a problem throughout the aircraft's operational service, especially at altitude.	
278.	Throttle Movements	Recommend the establishments of training and SOPs to address the slow spool-up time of the J-57 engine. Note: The J-57 throttle response was slow and could take up to 20 seconds from idle to military thrust. This can be an issue for pilots accustomed to more modern aircraft/engine combinations.	
279.	Engine Operating Limits	Adhere to all engine limitations in the applicable USAF/Danish Air Force/NATO flight manuals.	
280.	G Loading Limitations	"G" limitations are needed to help mitigate many concerns, including structural concerns (weak spar, refueling probe failure), potential loss of control, and compressor stalls. Two limitations are proposed: (1) a peak limit of 3.5gs, and (2) a sustained limit of 2.5Gs. If higher limits are proposed, the applicant must provide data to support that request. Without data, the FAA must ensure an adequate level of safety, which can only be accomplished by being very conservative because of the aircraft's history, age, and operations use.	
281.	Speed Limitations Due to Avionics and Other Equipment.	Some F-100 operators may have installed certain types of avionics such as the Aspen EFD-1000 PFD Pro system. However, it is important to note the top speed of this installation is 450 knots.	

Issue #	Issue(s)	Recommended Review, Action(s), and Coordination with Applicant	Notes, Action(s) Taken, and Disposition
282.	MB-3 Autopilot	Caution against the use of the MB-3 autopilot. The system is reportedly too unreliable. Note: Verify the functionally of any replacement system installed in the aircraft.	
283.	Ram Air Turbine (RAT)	Although the RAT is an essential system in the F-100, it cannot be considered as a full redundancy. This is because its effectiveness is limited, especially at low speed during the final phases of flight (150 knots). Famed Bob Hoover described such an instance when he stated "as the final turn for landing was completed, a landing flare was initiated and the flight controls began to stiffen. I was losing control of the aircraft as I neared the lake bed." The fact remain, in many cases, F-100 accidents have occurred despite the RAT being extended and in use. Therefore, it is recommended that SOPs be adopted to address its use as a full-fledged emergency. Note: At power settings above 45 percent, the RAT is not functional.	
284.	450-Gallon External Drop Tanks	Recommend SOPs be adopted to address the use of the 450 gallon external fuel tanks. This is because they did not have internal baffles and fuel sloshing could unbalance the aircraft beyond its CG limits during takeoff. Note: This can be an issue with other types of fuel tanks.	
285.	200-Gallon Drop Tanks	Recommend caution be used when supplementing the 275-gallon Type III fuel tanks with the 200-gallon tank. This is because the combination can re-introduce the high speed lateral instability of the aircraft. This issue was noted in F-100C operations.	
286.	Fuel Consumption and CG Shifting	Recommend emphasizing, and if necessary, establishing SOPs to address the aircraft's extreme sensitivity to CG changes associated with fuel consumption. This is particularly critical during an afterburner takeoff with drop tanks. With an afterburner takeoff, the fuel in the drop tanks can move back. The way the fuel system was set up in some F-100s (possibly F-100A), the aft fuselage would not feed with external tanks installed, and so the forward fuel (feed tank) would be used. In some cases, this imbalance caused a total loss of longitudinal controllability (CG well behind the maneuvering neutral point) and even very high positive and negative G loads at rotation with catastrophic results. Note: The applicability of this problem should be verified with the applicable AFM.	
287.	Flap Boundary Layer Control (BLC)	If installed and functional, recommend SOPs address the use of the system and its failure or de-activation. Its use has an impact on landing and they have a limited full deflection angle of 40º instead of the 45º.	
288.	Stall Fences	Recommend the applicant/operator note and appropriately address the fact that although the wing stall fences were installed in many F-100D and F models, some did not have the installation and in some cases the installations were removed. The issue is to determine whether it has an impact on the handling of the aircraft, and if so, (2) to determine that the applicable guidance (that is, AFM and performance data), reflects this change.	
289.	Asymmetric Wing Mounted Stores	Prohibit asymmetric wing mounted equipment regardless of the USAF/NATO AFM or -1.	
290.	Asymmetric Slat Deployment	Recommend SOPs address the possibility of slat malfunction, notably asymmetric deployment. Note: On the F-000, the slats would normally deploy at about 280 knots.	
291.	External Tank(s) Failure	Restrict external tanks to only those cleared by the USAF/Danish Air Force/NATO. Adhere to the drop tank limitations related to (1) takeoff and landing performance, (2) G limits, (3) airspeed, and (4) fuel in the tanks. Operationally, G limits of 4Gs and -1Gs were found to be insufficient and thus, more conservative limits may be necessary. No means to physically release the tank in-flight should be available. Drop tank failures and inadvertent separations were common and did result in aircraft destroyed and personnel killed. Typical failures involved in-flight separation, partial collapse, pylon failure, attach point failures, and serious damage to wings, flight controls, and leading edge slats.	
292.	40º Flap Set Up	Verify the -1 (AFM) and related SOPs reflects the final batch of 29 F-100Fs had modified flaps to give 40 degrees deflection rather than the usual 45 degrees.	

Issue #	Issue(s)	Recommended Review, Action(s), and Coordination with Applicant	Notes, Action(s) Taken, and Disposition
293.	Four (4) External Fuel Tank and Inboard-Only External Load Configurations	Prohibit the operation of the aircraft with 4 external fuel tanks because the aircraft becomes very unstable due to excessive yaw and shifting of the CG. Similarly, operations with only loads mounted on the inboard pylons. Both loading conditions should be restricted.	
294.	Over Rotation	Emphasize the concern of over rotation. Over rotation is a common F-100 accident cause. One of the worst cases of a military aircraft accident involved a Turkish AF F-100, which failed to climb after over rotation killing over 250 people when it impacted a crowded train near a Turkish Air Force air base.	
295.	Pilot Induced Oscillation (PIO)	Emphasize susceptibility to PIO on landing and takeoff. This phenomenon must be clearly understood by the PIC. Proper rotation and landing/flare technique is critical. Many F-100s crashed because of this phenomenon. In the F-100, if a pilot pulsed the stick (in some cases due to turbulence, or lighting the afterburner), the aircraft could pitch longitudinally at about 1 cycle per second, which is not unlike the natural frequency of the pilot. This presented a problem because the oscillation could diverge and the only solution was to release the stick, which could be a very unnatural action, especially if it occurred near the ground. Note: A PIO, as defined by MIL-HDBK-1797A, is a sustained or uncontrollable oscillations resulting from efforts of the pilot to control the aircraft and occurs when the pilot of an aircraft inadvertently commands an often increasing series of corrections in opposite directions, each an attempt to cover the aircraft's reaction to the previous input with an overcorrection in the opposite direction. An aircraft in such a condition can appear to be "porpoising"; switching between upward and downward directions. As such, it is a coupling of the frequency of the pilot's inputs and the aircraft's own frequency.	
296.	Spin Recovery	Recommend the proper spin recovery techniques be reviewed for the version in question (refer to AFM) and for all configurations the aircraft might be operated under. Note: Spin recovery techniques change over time and are varied from model to model. For example, a technique that was applied in some cases to the F-100A involved holding the stick all the way back and holding full aileron into the spin, both unconventional recovery inputs.	
297.	Yaw Damper	Ask the applicant if the aircraft's electrically-powered yaw damper system can cause a rudder "hard power" to the right when engine power (and hence hydraulic power) is low, air start switch on, and the RAT deployed. This is important because in the event on an engine failure, failure to turn off the yaw damper system could cause right rudder input despite left rudder corrections. This issue is critical and must be verified and identified in the appropriate AFM for the aircraft.	
298.	Specific Range	Recommend SOPs addressing minimum landing fuel. Verify actual aircraft specific range (nautical air miles traveled per pound of fuel used).	
299.	Bingo and Minimum Landing Fuel	To add a safety margin, comply with § 91.167. Note: In the F-100, 600 lb is classified as "emergency fuel," and at 500 lb, the fuel quantity system was inherently unreliable. Minimum landing fuel, which is 1,300 lb as per TO 1F-100-1N (1,500-1,600 lb is recommended). In addition, a "Bingo" fuel status (a pre-briefed amount of fuel for an aircraft that would allow a safe return to the base of intended landing) should be used in all flights. Note: Bingo fuel and minimum landing fuel are not necessarily the same, in that a call for Bingo fuel and a RTB still require managing the minimum landing fuel.	
300.	Cold Weather	Recommend establishing SOPs to address the aircraft's sensitivities to cold weather, including hydraulic seal failures and leakages, and moisture freezing in airspeed systems and rupturing lines.	
301.	Suspected Flight Control Failure and Other in-Flight Emergencies	Recommend establishing SOPs for troubleshooting suspected in-flight emergencies such as flight controls failures, and loss of power through specific checklist procedures, altitude, and clear location (that is, safe ejection area/controlled bailout area).	

Issue #	Issue(s)	Recommended Review, Action(s), and Coordination with Applicant	Notes, Action(s) Taken, and Disposition
302.	North American/Rockwell WA-1.1 Ejection Seat Manual D-Ring Activation	Recommend PIC and other crew (when authorized) review and practice the manual activation of the parachute D-Ring if the aircraft is equipped with the North American/Rockwell WA-1.1 ejection seat. This is because there are many recorded instances where, following ejection, pilots had to manually pull the D-Ring to open the parachute because it could fail to open as part of the ejection sequence. One account details how a pilot had to stabilize himself and pulled his own D-ring to engage his parachute.	
303.	"Keying the Eyelids" Post flight Check	Depending on the type of nozzle, recommend establishing SOPs for the post flight inspection of the afterburner nozzles, a procedure known as "keying the eyelids." This was done before engine shutdown by opening panel 48 (underside of the aircraft), locating and turning the "key" that opened the afterburner eyelids to ensure the proper operation of the system. This was also done after engine change.	
304.	Coordination for Use of MA-1A Barrier BAK-6 and BAK-9 Cable Arresting Systems	Recommend the applicant/operator become familiar with the systems and coordinate (ahead of time) with the appropriate military entities (USAF, ANG, U.S. Navy) that own these systems if any of these systems are located at any airport where operations are to take place or consider as divert airports.	
305.	Reporting Malfunctions and Defects	Ask the applicant/operator to report malfunctions and equipment defects found in maintenance, preflight, flight, and post flight inspection. This would yield significant safety benefits to operators, the FAA, and the industry as a whole.	
306.	Type Clubs or Organizations	Recommend the applicant/operator join an F-100 type club or organization. This allows not only for facilitating information collection and dissemination, but also access to historical data and operational experience with the aircraft.	

Attachment 3—Additional Resources and Recommendations

Additional Resources

- F-100 accident reports and accident data issued by the USAF, other military operators, and civilian accident investigation entities, like the UK's AAIB and Germany's BFU.
- Air University, Maxwell AFB. *Fire Fighting and Aircraft Crash Rescue, Vol. 3*, 1958.
- Australia's CAAP 30-3(0), *Approved Maintenance Organization (AMO) — Limited Category Aircraft*, Civil Aviation Advisory Publication, December 2001. This publication addresses the restoration and maintenance of ex-military aircraft and is an excellent guide for developing adequate aircraft maintenance and inspection programs.
- CAP 632, *Operation of Permit to Fly Ex-Military Aircraft on the UK Register*. This is a comprehensive source of information and guidance on topics like technical requirements, specialist equipment and systems, pilot/crew qualification, operational requirements, records and oversight procedure, and safety management.
- Chamberlain, H. Dean. FAA News, *Armed and Dangerous*, November/December 2003.
- *CJAA Jet Blast Guide*. October 21, 2009.
- *CJAA Safety Operations Manual*. June 30, 2008.
- Cockrell, Alan. Deadly Sabre Dance, Aviation History magazine, July 2011.
- COMNAVAIRFORINST 4790.2A, chapter 16, *Intermediate Level (I-Level) Maintenance Data System (MDS) Functions, Responsibilities, and Source Document Procedures*, CH-2 10, November 2009.
- Drury, Colin G. and Watson, Jean (FAA). *Human Factors Good Practices in Borescope Inspection*, June 7, 2001
- *Eject! Eject! Eject!-Human Factors in Delayed Ejection*, http://www.avmed.in/2011/05/eject-eject-eject-human-factors-in-delayed-ejection/
- Ejection Systems and the Human Factors: A Guide for Flight Surgeons and Aeromedical Trainers, Defense and Civil Institute of Environmental Medicine, Department of National Defense, Canada, May 1988.
- FAA AC 150/5220-22, *Engineered Materials Arresting Systems* (EMAS) for Aircraft Overruns
- FAA AC 150/5300-13, *Airport Design*.
- FAA AC 5220-9, *Aircraft Arresting Systems*, December 20, 2006.
- Flight Dynamics Directorate, Wright Laboratory, Air Force Materiel Command, WPAFB. Flutter Prevention Handbook: A Preliminary Collection, March 1997. This document includes a case study discussing flutter and the F-100's horizontal stabilizer.
- Journal of the Super Sabre Society (Magazine). *The Intake*, http://www.supersabresociety.com.
- Morris, Greg. EAA Warbirds of America. Warbird (magazine), *Warbird Airmanship*, March 2009.
- NATO. AFSP-1(A), *Aviation Safety*, March 2007.
- NATOPS. *Aircraft Refueling*, June 15, 2002.
- NATOPS. NAVAIR 00-80R-14, *U.S. Navy Aircraft Firefighting and Rescue Manual*, October 15, 2003.
- NATOPS. OPNAVINST 3710.7U, *General Flight and Operating Instructions*, November 23, 2009.

- NAVAIR 00-80T-109, *Aircraft Refueling NATOPS Manual*, June 15, 2002.
- *Naval Aviation Maintenance Program Standard Operating Procedures* (NAMPSOPs), chapter 10.
- NAVPERS 00-8-T-80, *Aerodynamics for Naval Aviators*. January 1965.
- New Zealand Civil Aviation Authority AC 43-21 *Escape and Egress Systems*, December 25, 1997.
- Transport Canada. *Maintenance and Manufacturing Staff* Instructions, MSI 52, Issuance of Special Certificate of Airworthiness—Limited, March 31, 2006.
- UK CAA Safety Regulation Group. *Civil Air Displays: A Guide for Pilots*, 2003.
- *USAF Aerospace Physiology Program*, http://ftp.rta.nato.int/public//PubFullText/RTO/MP/RTO-MP-021///$MP-021-13.PDF.
- USAF. F-100 Aircraft Accident Summary Reports, 1958-1979.
- USAF. 366th Fighter Bomber Wing-Standard Operating Procedures F-100, January 1958.
- USAF TO 00-80G-1. *Make Safe Procedures for Public Static Display*, November 30, 2002.
- USAF TO 1-1-300, Maintenance Operational Checks and Flight Checks, June 15, 2012.
- USAF TO 1-1-691, Corrosion Prevention and Control Manual.
- USAF TO 1-1A-1 Engineering Handbook Series for Aircraft Repair, General Manual for Structural Repair, November 15, 2006.
- U.S. Department of Defense. Manual 4160.28 (volume 3), Defense Demilitarization: Procedural Guidance, June 7, 2011.
- Jet Engine Accident Investigation. National Aircraft Accident Investigation, Federal Aviation Administration, Aeronautical Center, Oklahoma, 1959. (General Electric Publication). This document provides a detailed analysis of jet engine failure modes, malfunction analysis, cause factor analysis, afterburner operations, and many other issues relevant to the J-57 engine installed in the F-100.
- Portuguese Air Force Physiological Training Program, AMC Indoctrination and Safety Department at http://ftp.rta.nato.int/public//PubFullText/RTO/MP/RTO-MP-021

Recommendations for Review of Prior Actions

- As provided by § 91.415, review the submitted maintenance manual(s) and AIP. Work with the applicant to revise the AIP as needed based on any concerns identified in Attachment 2 to this document. For example, a F-100 AIP can be modified to address or verify—
  - Consistency with the applicable airframe, powerplant, and systems military technical orders to verify that replacement/interval times are addressed.
  - Tracking replacement items and corrective action.
  - All AIP section and sub-sections include the proper guidance/standards (that is, TOs) for all systems, groups, and tasks.
  - No “on condition” for items that have replacement times unless proper technical data to substantiate the change, that is, aileron boost and oxygen regulator.
  - Ejection seat system replacement times must be adhered to. No “on condition” for rocket moors and propellants. Make the distinction between replacement times, that is, “shelf life” vs. “installed life limit.” For example, a 9-year replacement in the AIP does not address a 2-year installed limit.
  - Any deferred log is related to a listing of minimum equipment for flight.
  - Inclusion of a document revision page(s).

- Request a detailed program letter from the applicant to verify the proposed operations are consistent with the purpose of the airworthiness certificate. For example, there may be a need to review the proposed airports to be used.
- Verify the application for airworthiness does not constitute brokering. Section 21.191(d) was not intended to allow for the brokering or marketing of experimental aircraft. This includes individuals who manufacture, import, or assemble aircraft, and then apply for and receive experimental exhibition airworthiness certificates so they can sell the aircraft to buyers. Section 21.191(d) only provides for the exhibition of an aircraft's flight capabilities, performance, or unusual characteristics at air shows, and for motion picture, television, and similar productions. Certificating offices must verify that all applications for exhibition airworthiness certificates are for the purposes specified under § 21.191(d), and are from the registered owners who will exhibit the aircraft for those purposes. Applicants must also provide the applicable information specified in § 21.193.
- Review any related documents from U.S. Customs and Border Protection and the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) for the aircraft. If the aircraft was not imported as an aircraft, or if the aircraft configuration is not as stated in Form ATF-6, it may not be eligible for an airworthiness certificate.

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Defense Demilitarization: Procedural Guidance. Department of Defense MANUAL 4160.28, Volume 3, June 7, 2011.
FAA v. DAVID P. TOKOPH. FAA Docket SE-16225, NTSB Order No. EA-5018, February 6, 2003.
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North American Aviation F-100 Aircraft Organizational Maintenance Manual - Electrical Systems TO 1F-100D-3-6.
North American Aviation F-100 Aircraft Organizational Maintenance - General Airplane - Manual-TO 1F-100D-2-1.
North American Aviation F-100 Aircraft Organizational Maintenance - Gunnery and Escape Systems.
North American Aviation F-100 Aircraft Organizational Maintenance Manual - Hydraulic Operated Systems TO 1F-100C-3-4.
North American Aviation F-100 Aircraft List of Applicable Publication Manual.
North American Aviation F-100 DF Aircraft Structural Repair Manual 1F-100D-3.
North American Aviation F-100 D Aircraft Illustrated Parts Breakdowns Manual TO 1F-100D(I)-4.
North American Aviation F-100 D Aircraft Operating Procedures Manual – 1958.
North American Aviation F-100 D Aircraft Loading Manual.

North American F-100 C(I), -D(I), &-F(I) Weapons Delivery Manual TO 1F-100C-34-1-1.
North American F-100F N26AZ Inspection Program, Collings Foundation, 2/13/2011.
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Attachment 5—Partial Listing of F-100 Accidents and Relevant Incidents

#	Date	Version	Operator	Severity	Probable Cause and Remarks
1.	July 11, 1994	TF-100F	N414FS	Fatal	Flew Into the Ground - Low Altitude Flight
2.	February 19, 1992	QF-100	USAF	Non-Fatal	Unknown-Possible NOLO
3.	November 22, 1991	QF-100D	USAF	Non-Fatal	Landing Accident
4.	August 8, 1991	QF-100D	USAF	Non-Fatal	Unknown
5.	November 15, 1989	QF-100D	USAF	Non-Fatal	Takeoff Accident (AND)
6.	July 19, 1989	QF-100D	USAF	Non-Fatal	NOLO
7.	July 18, 1989	TF-100F	N418FS	Non-Fatal	Drag Chute Failure-Overrun (6,000-ft Runway)
8.	April 9, 1989	F-100C	Turkish Air Force	Non-Fatal	Crashed During Post Restoration Flight
9.	October 5, 1988	QF-100D	USAF	Non-Fatal	NOLO
10.	March 29, 1988	QF-100	USAF	Non-Fatal	Unknown
11.	February 26, 1988	QF-100D	USAF	Non-Fatal	Crashed on Landing
12.	February 26, 1988	QF-100D	USAF	Non-Fatal	Crashed on Landing
13.	December 10,1987	QF-100D	USAF	Non-Fatal	Crashed on Landing
14.	September 9, 1987	QF-100D	USAF	Non-Fatal	Crashed on Landing
15.	September 7, 1987	F-100F	Turkish Air Force	Unknown	Unknown
16.	March 20, 1987	QF-100	USAF	Non-Fatal	Unknown
17.	March 19, 1987	F-100C	Turkish Air Force	Fatal	Engine Failure
18.	January 29, 1987	QF-100	USAF	Non-Fatal	Unknown
19.	April 11, 1986	QF-100D	USAF	Non-Fatal	Crashed on Takeoff
20.	February 21, 1986	QF-100	USAF	Non-Fatal	Crashed on Landing
21.	October 29, 1985	QF-100	USAF	Non-Fatal	LOC
22.	September 9, 1985	F-100C	Turkish Air Force	Fatal	Mid-Air (1st Aircraft)
23.	September 9, 1985	F-100C	Turkish Air Force	Fatal	Mid-Air (2nd Aircraft)
24.	August 14, 1985	F-100D	Danish Air Force	Unknown	Unknown
25.	August 14, 1985	F-100C	Turkish Air Force	Unknown	Landing Accident
26.	August 12, 1985	QF-100D	USAF	Non-Fatal	Engine Failure-Flame Holders
27.	April 11, 1985	QF-100D	USAF	Non-Fatal	Crashed Gulf of Mexico
28.	March 3, 1985	F-100D	Danish Air Force	Unknown	Unknown
29.	February 28, 1985	F-100F	Turkish Air Force	Unknown	Engine Failure
30.	February 16, 1985	F-100F	Turkish Air Force	Unknown	Unknown
31.	February 12, 1985	F-100F	Turkish Air Force	Unknown	Crashed on Airfield
32.	October 20, 1984	F-100C	Turkish Air Force	Unknown	Unknown
33.	October 11, 1984	F-100D	Danish Air Force	Unknown	Unknown
34.	October 11, 1984	F-100D	Turkish Air Force	Unknown	Unknown
35.	July 20, 1984	QF-100	USAF	Non-Fatal	Unknown
36.	July 4, 1984	F-100C	Turkish Air Force	Fatal	Landing Accident
37.	April 24, 1984	QF-100	USAF	Non-Fatal	Unknown
38.	April 7, 1984	F-100C	Turkish Air Force	Fatal	Unknown
39.	March 22, 1984	QF-100	USAF	Non-Fatal	Unknown
40.	January 13, 1984	QF-100	USAF	Non-Fatal	Cashed on Landing

#	Date	Version	Operator	Severity	Probable Cause and Remarks
41.	January 6, 1984	F-100C	Turkish Air Force	Fatal	Landing Accident
42.	December 12, 1983	F-100D	Danish Air Force	Unknown	Mid-Air
43.	October 25, 1983	F-100C	Turkish Air Force	Non-Fatal	Unknown
44.	August 12, 1983	F-100D	Turkish Air Force	Non-Fatal	Unknown
45.	July 29, 1983	F-100D	Danish Air Force	Unknown	Unknown
46.	May 21, 1983	F-100D	Turkish Air Force	Unknown	Mid-Air (1st Aircraft)
47.	May 21, 1983	F-100D	Turkish Air Force	Unknown	Mid-Air (2nd Aircraft)
48.	April 26, 1983	F-100D	Danish Air Force	Unknown	Unknown
49.	March 16, 1982	F-100A	Taiwan Air Force	Fatal	Unknown
50.	February 11, 1982	F-100D	Danish Air Force	Unknown	Unknown
51.	February 11, 1982	F-100D	Turkish Air Force	Fatal	Mid-Air
52.	October 12, 1981	F-100D	Danish Air Force	Unknown	Unknown
53.	October 12, 1981	F-100D	Turkish Air Force	Fatal	Unknown
54.	September 23, 1981	F-100F	Danish Air Force	Non-Fatal	Landing Accident
55.	September 8, 1981	TF-100F	Danish Air Force	Unknown	Nose-Gear Failure
56.	May 6, 1980	F-100D	Danish Air Force	Unknown	Fuel Starvation
57.	March 25, 1980	F-100A	Taiwan Air Force	Non-Fatal	Unknown
58.	December 1979	F-100A	Taiwan Air Force	Non-Fatal	Unknown
59.	February 2, 1979	F-100D	USAF (IN ANG)	Fatal	Landing Accident (Brig. Gen. Petercheff)
60.	November 20, 1978	F-100D	French Air Force	Non-Fatal	Engine Failure-Fuel System Failure
61.	October 6, 1978	F-100F	USAF (CT ANG)	Non-Fatal	Unknown
62.	June 7, 1978	F-10)D	USAF (IN ANG)	Fatal	Unknown
63.	April 14, 1978	F-100C	Turkish Air Force	Unknown	Emergency Landing
64.	April 14, 1978	F-100F	USAF (MO ANG)	Non-Fatal	Unknown
65.	April 5, 1978	F-100D	USAF (MA ANG)	Unknown	Unknown
66.	February 24, 1978	F-100D	USAF (INANG)	Non-Fatal	Engine Fire (Cracked Weld on #7 Nozzle Cluster)
67.	February 12, 1978	F-100F	USAF (GA ANG)	Non-Fatal	Unknown
68.	January 24, 1978	F-100D	USAF (IN ANG)	Non-Fatal	Unknown
69.	December 24, 1977	F-100D	USAF (OH ANG)	Non-Fatal	Engine Failure
70.	December 22, 1977	F-100D	USAF	Unknown	Unknown
71.	October 23, 1977	F-100F	USAF	Non-fatal	Hit Trees-Not Repaired
72.	August 2, 1977	F-100D	French Air Force	Non-Fatal	Engine Failure
73.	July 28, 1977	F-100D	USAF (TX ANG)	Fatal	Flew Into the Ground (Red Flag)
74.	June 15, 1977	F-100D	USAF (MI ANG)	Fatal	Unknown
75.	June 13, 1977	F-100D	USAF (IN ANG)	Fatal	Mechanical Failure
76.	June 1, 1977	F-100F	Danish Air Force	Unknown	Fuel Pump Failure
77.	May 4, 1977	F-100D	Danish Air Force	Unknown	Runaway Trim
78.	February 10, 1977	F-100D	French Air Force	Non-Fatal	Engine Fire-Hyd.-Runway Excursion
79.	November 19, 1976	F-100D	Danish Air Force	Unknown	LOC
80.	November 9, 1976	F-100D	Danish Air Force	Unknown	Nose-Gear Failure
81.	October 5, 1976	F-100D	Danish Air Force	Unknown	Nose-Gear Failure

#	Date	Version	Operator	Severity	Probable Cause and Remarks
82.	July 13, 1976	F-100D	USAF (TX ANG)	Unknown	Unknown
83.	June 9, 1976	TF-100F	Danish Air Force	Unknown	Engine Failure
84.	May 27, 1976	F-100F	Taiwan Air Force	Non-Fatal	Unknown
85.	March 16, 1976	TF-100F	Danish Air Force	Unknown	Engine Failure
86.	March 10, 1976	F-100A	Taiwan Air Force	Non-Fatal	Unknown
87.	February 26, 1976	F-100F	Danish Air Force	Unknown	Oil System Failure- Engine Failure
88.	February 3, 1976	F-100F	Danish Air Force	Unknown	Engine Failure
89.	February 3, 1976	F-100C	Turkish Air Force	Unknown	Unknown
90.	January 23, 1976	F-100D	USAF (OH ANG)	Non-fatal	Flight Control Failure (Possible Stab Failure)
91.	1977	F-100D	Danish Air Force	Unknown	Fuel System Failure
92.	1976	F-100D	USAF (OH ANG)	Non-Fatal	Flight Controls Failure
93.	October 25, 1975	F-100D	French Air Force	Non-Fatal	Barrier (AND)
94.	September 23, 1975	F-100F	USAF (LA ANG)	Non-Fatal	Unknown
95.	July 17, 1975	F-100D	French Air Force	Non-Fatal	Compressor Stall-Aircraft Destroyed
96.	June 1975	F-100D	USAF (OH ANG)	Fatal	Unknown-Failed Ejection
97.	May 26, 1975	F-100D	French Air Force	Non-Fatal	Engine Fire
98.	May 1975	F-100F	USAF (OH ANG)	Fatal	Unknown (IFR Procedure)
99.	April 23, 1975	F-100D	French Air Force	Non-Fatal	Barrier (AND)
100.	March 12, 1975	F-100F	USAF (MO ANG)	Fatal (2)	CFIT
101.	December 3, 1974	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
102.	November 23, 1974	F-100F	USAF (IN ANG)	Non-Fatal	Unknown
103.	October 22, 1974	F-100D	French Air Force	Non-Fatal	Hard Landing-Nose Gear Failure (AND)
104.	October 4, 1974	F-100D	USAF (MA ANG)	Non-Fatal	Drag Chute Failure-Overrun - Hit Car
105.	August 13, 1974	F-100D	French Air Force	Non-Fatal	In-Flight Drop Tank Separation (AND)
106.	August 8, 1974	F-100D	French Air Force	Non-Fatal	In-Flight Travel Pod Separation (AND)
107.	July 22, 1974	F-100C	Turkish Air Force	Non-Fatal	Overrun-Aborted Takeoff
108.	July 20, 1974	F-100C	Turkish Air Force	Non-Fatal	Engine Failure (1st Aircraft)
109.	July 20, 1974	F-100C	Turkish Air Force	Non-Fatal	Engine Failure (2nd Aircraft)
110.	July 14, 1974	F-100F	USAF (SD ANG)	Non-Fatal	Unknown
111.	June 19, 1974	F-100F	USAF	Fatal	Crashed on Approach
112.	June 13, 1974	F-100D	French Air Force	Non-Fatal	Compressor Stall-Air Intake Structural Failure
113.	May 31, 1974	F-100D	USAF (OH ANG)	Non-Fatal	LOC
114.	March 2, 1974	F-100D	USAF (INANG)	Non-Fatal	Engine Failure (Main Bearing Seizure)
115.	February 20, 1974	F-100C	Turkish Air Force	Unknown	Emergency Landing (Destroyed)
116.	February 19, 1974	F-100D	French Air Force	Non-Fatal	Tail Strike-Nose Gear Collapse
117.	February 6, 1974	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
118.	January 17, 1974	F-100D	USAF (MO ANG)	Fatal	Hit Tress on Final (Failed Ejection)
119.	December 17, 1973	F-100D	French Air Force	Fatal	LOC During Maneuvering
120.	November 11, 1973	F-100D	French Air Force	Non-Fatal	In-Flight Drop Tank Separation (AND)
121.	October 19, 1973	F-100D	French Air Force	Fatal (2)	LOC During Maneuvering
122.	October 10, 1973	F-100D	French Air Force	Non-Fatal	Engine Failure-Fuel System Failure

#	Date	Version	Operator	Severity	Probable Cause and Remarks
123.	August 29, 1973	F-100D	French Air Force	Non-Fatal	Tire Burst on Takeoff-Barrier (AND)
124.	August 11, 1973	F-100D	USAF (IA ANG)	Non-Fatal	Mid Air (1st Aircraft)
125.	August 11, 1973	F-100D	USAF (IA ANG)	Non-Fatal	Mid Air (1st Aircraft)
126.	July 28, 1973	F-100D	French Air Force	Non-Fatal	LOX Contamination
127.	July 14, 1973	F-100D	French Air Force	Non-Fatal	Spin
128.	July 18, 1973	F-100D	French Air Force	Non-Fatal	Barrier on Landing (AND)
129.	June 20, 1973	F-100A	Taiwan Air Force	Non-Fatal	Unknown
130.	June 18, 1973	F-100C	Turkish Air Force	Unknown	Crashed After Takeoff
131.	June 9, 1973	F-100D	USAF (MOANG)	Non-Fatal	Engine Fire
132.	May 11, 1973	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
133.	May 8, 1973	F-100F	USAF (CO ANG)	Non-Fatal	Unknown
134.	April 24, 1973	F-100D	French Air Force	Non-Fatal	Runway Excursion (AND)
135.	March 28, 1973	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
136.	March 22, 1973	F-100F	Turkish Air Force	Unknown	Unknown
137.	March 10, 1973	F-100D	Danish Air Force	Unknown	Engine Failure
138.	February 21, 1973	F-100F	Danish Air Force	Unknown	Mid-Air (1st Aircraft)
139.	February 21, 1973	F-100F	Danish Air Force	Unknown	Mid-Air (2nd Aircraft)
140.	February 14, 1973	F-100D	French Air Force	Non-Fatal	Ground Fire During Defueling
141.	January 26, 1973	F-100D	French Air Force	Non-Fatal	Airspeed Indicator Failure on TO-Barrier (AND)
142.	January 24, 1973	F-100D	USAF	Non-Fatal	Engine Failure
143.	January 24, 1973	F-100D	USAF (MO ANG)	Non-Fatal	Engine Flameout
144.	1973	F-100A	Taiwan Air Force	Non-Fatal	Unknown
145.	November 23, 1972	F-100D	French Air Force	Non-Fatal	Landing Gear Failure (Hard Landing) (AND)
146.	September 14, 1972	F-100D	French Air Force	Non-Fatal	Landing Gear Failure on landing (Locking) (AND)
147.	August 27, 1972	F-100C	USAF (IA ANG)	Non-Fatal	Unknown
148.	August 7, 1972	F-100C	USAF	Fatal	Unknown
149.	July 8, 1972	F-100C	USAF	Fatal	LOC-Maneuvering
150.	June 19, 1972	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
151.	May 30, 1972	F-100F	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
152.	April 13, 1972	F-100D	Danish Air Force	Unknown	LOC
153.	March 28, 1972	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
154.	February 21, 1972	F-100A	Taiwan Air Force	Unknown	Unknown
155.	February 16, 1972	F-100D	Turkish Air Force	Unknown	Mid-Air (1st Aircraft)
156.	February 16, 1972	F-100D	Turkish Air Force	Unknown	Mid-Air (2nd Aircraft)
157.	1972	F-100D	USAF (Ohio ANG)	Non-Fatal	Compressor Stall
158.	December 31, 1971	F-100D	French Air Force	Non-Fatal	Inadvertent Canopy Jettison on the Ground (AND)
159.	December 20, 1971	F-100D	French Air Force	Non-Fatal	Compressor Stall-Landing-Barrier (AND)
160.	October 21, 1971	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
161.	October 11, 1971	F-100D	French Air Force	Non-Fatal	Tire Burst on Landing (AND)
162.	September 10, 1971	F-100D	French Air Force	Non-Fatal	Runway Excursion (AND)
163.	September 9, 1971	F-100D	French Air Force	Non-Fatal	Hydraulic Failure (Utility) (AND)

#	Date	Version	Operator	Severity	Probable Cause and Remarks
164.	September 9, 1971	F-100D	French Air Force	Non-Fatal	Compressor Stall (AND)
165.	September 6, 1971	F-100D	French Air Force	Non-Fatal	Engine Failure Takeoff-Fire (AND)
166.	September 6, 1971	F-100D	French Air Force	Non-Fatal	Hydraulic Failure (Utility) (AND)
167.	September 6, 1971	F-100D	French Air Force	Non-Fatal	Brake Failure (AND)
168.	August 26, 1971	F-100D	USAF	Non-Fatal	Low Approach Hit Ground Structures
169.	August 19, 1971	F-100D	French Air Force	Non-Fatal	Engine-(Partial Power Loss)-No RAT (AND)
170.	August 2, 1971	F-100C	USAF (ANG)	Non-Fatal	Unknown
171.	July 9, 1971	F-100D	USAF	Non-Fatal	Engine Fire
172.	July 5, 1971	F-100F	USAF	Non-Fatal	Unknown
173.	July 12, 1971	F-100C	USAF (CO ANG)	Non-Fatal	Mid-Air (1st Aircraft)
174.	July 12, 1971	F-100C	USAF (CO ANG)	Non-Fatal	Mid-Air (2nd Aircraft)
175.	July 10, 1971	F-100C	USAF (CO ANG)	Non-Fatal	Unknown
176.	June 18, 1971	F-100F	French Air Force	Fatal (1)	LOC Yaw Axis-Drop Tank Flutter (V_{ne})
177.	June 13, 1971	F-100D	USAF (IA ANG)	Fatal	Unknown
178.	May 17, 1971	F-100D	French Air Force	Non-Fatal	Gear Failed to Retract-Hydraulic Failure (AND)
179.	April 21, 1971	F-100D	French Air Force	Non-Fatal	Drop Tank Separates on Landing-Pylon/Electrical
180.	April 13, 1971	F-100D	French Air Force	Non-Fatal	LOC on Landing-Nose Gear Failure (AND)
181.	March 12, 1971	F-100D	USAF	Non-Fatal	Engine Failure
182.	March 11, 1971	F-100D	USAF	Non-Fatal	Afterburner Failure on Takeoff (Fire)
183.	February 11, 1971	F-100D	USAF	Fatal	PIO on Landing-Failed Ejection (OOE)
184.	January 29, 1971	F-100D	French Air Force	Fatal	Engine Failure/Emergency Landing
185.	January 25, 1971	F-100D	French Air Force	Non-Fatal	Undershoot
186.	January 21, 1971	F-100D	French Air Force	Non-Fatal	Maneuvering
187.	January 7, 1971	F-100F	French Air Force	Non-Fatal	Pilot Gear Interference with FC -Barrier
188.	December 12, 1970	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
189.	November 30, 1970	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
190.	November 20, 1970	F-100D	French Air Force	Non-Fatal	Overrun-Barrier (AND)
191.	November 20, 1970	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
192.	November 16, 1970	F-100D	French Air Force	Non-Fatal	LOC on Touchdown (AND)
193.	October 27, 1970	F-100C	USAF	Fatal	Unknown
194.	October 25, 1970	F-100D	USAF	Non-Fatal	Undershoot (Hit Approach Lights)
195.	October 21, 1970	F-100C	USAF	Fatal	Unknown
196.	September 16, 1970	F-100D	French Air Force	Non-Fatal	Brake (Hydraulic) Failure (AND)
197.	September 3, 1970	F-100F	French Air Force	Non-Fatal	Canopy Shattered-AR Accident (AND)
198.	September 1, 1970	F-100F	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
199.	August 11, 1970	F-100D	Danish Air Force	Unknown	Engine Failure
200.	July 30, 1970	F-100D	USAF	Fatal	Low Altitude Flight
201.	July 24, 1970	F-100D	USAF	Non-Fatal	Crashed on Final
202.	July 21, 1970	F-100C	USAF	Non-Fatal	Unknown
203.	July 17, 1970	F-100C	USAF (AZ ANG)	Non-Fatal	Dart Tow Rig Separation on TO-(Crashed)
204.	July 11, 1970	F-100C	USAF (IA ANG)	Non-Fatal	Unknown

#	Date	Version	Operator	Severity	Probable Cause and Remarks
205.	July 9, 1970	F-100F	French Air Force	Non-Fatal	Drag Chute Failure (Pilot Error)-Barrier (AND)
206.	Summer 1970	F-100D	USAF	Non-Fatal	Engine Failure-Oil Starvation (FOD) (D. Rutan)
207.	June 30, 1970	F-100D	USAF	Non-Fatal	Pilot Error
208.	June 26, 1970	F-100F	USAF	Non-Fatal	Unknown
209.	June 24, 1970	F-100F	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
210.	June 4, 1970	F-100D	French Air Force	Non-Fatal	Nose-Wheel Steering Failure (Hydraulic) (AND)
211.	May 28, 1970	F-100D	USAF	Unknown	Unknown
212.	May 26, 1970	F-100D	French Air Force	Non-Fatal	Nose-Wheel Steering Failure (Hydraulic) (AND)
213.	May 18. 1970	F-100D	USAF	Fatal	CFIT
214.	May 15, 1970	F-100F	USAF	Fatal	Fuel Control Failure (Debris)
215.	May 15, 1970	F-100F	USAF	Fatal	Over Rotation-Sabre Dance on Takeoff
216.	May 15, 1970	F-100D	French Air Force	Non-Fatal	Inadvertent In-Flight Drag Chute Opening (AND)
217.	May 15, 1970	F-100F	USAF	Fatal	Mid-Air (1st Aircraft)
218.	May 15, 1970	F-100F	USAF	Fatal	Mid-Air (2nd Aircraft)
219.	May 8, 1970	F-100D	USAF	Non-Fatal	Hard Landing-Gear Failure
220.	May 7, 1970	F-100C	USAF (NM ANG)	Non-Fatal	Unknown
221.	April 10, 1970	F-100F	USAF	Fatal	Unknown
222.	March 20, 1970	F-100F	Danish Air Force	Unknown	LOC-Adverse Yaw
223.	March 20, 1970	F-100C	USAF	Unknown	Unknown
224.	March 8, 1970	F-100D	USAF	Non-Fatal	Unknown
225.	March 5, 1970	F-100D	USAF	Fatal	CFIT
226.	February 17, 1970	F-100D	French Air Force	Non-Fatal	Shimmy Damper Failure on landing (AND)
227.	February 17, 1970	F-100D	USAF	Non-Fatal	Engine failure-Oil Loss
228.	February 3, 1970	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
229.	January 30, 1970	F-100D	USAF	Fatal	Low Altitude Flight
230.	January 20, 1970	F-100D	French Air Force	Non-Fatal	Oxygen System Failure (AND)
231.	January 13, 1970	F-100D	USAF	Non-Fatal	Engine failure-Oil Loss
232.	January 7, 1970	F-100D	USAF	Non-Fatal	Compressor Stall
233.	1970	F-100D	USAF	Unknown	LOC-Landing-Pilot Error (1)
234.	1970	F-100D	USAF	Unknown	LOC-Landing-Pilot Error (2)
235.	1970	F-100D	USAF	Unknown	LOC-Landing-Pilot Error (3)
236.	December 18, 1969	F-100D	USAF	Unknown	Unknown
237.	December 11, 1969	F-100D	French Air Force	Non-Fatal	Structural Damage Rudder Leading Edge (AND)
238.	December 2, 1969	F-100D	USAF	Fatal	Unknown
239.	November 5, 1969	F-100F	USAF	Non-Fatal	Unknown
240.	October 10, 1969	F-100D	USAF	Non-Fatal	Drag Chute Failure-Overrun-Hit Vehicle
241.	October 7, 1969	F-100F	USAF (KS ANG)	Fatal	Engine Failure (Crashed Into Homes)
242.	October 7, 1969	F-100D	USAF	Non-Fatal	LOC-Maneuvering (Low Speed ACM)
243.	October 4, 1969	F-100D	USAF	Non-Fatal	Fuel System Failure-Engine Failure
244.	October 1, 1969	F-100D	USAF	Unknown	Unknown
245.	September 24, 1969	F-100D	USAF	Non-Fatal	Pilot Error

#	Date	Version	Operator	Severity	Probable Cause and Remarks
246.	September 18, 1969	F-100D	USAF	Non-Fatal	Engine Failure
247.	September 13, 1969	F-100D	USAF	Non-Fatal	Crashed on Final
248.	September 10, 1969	F-100D	French Air Force	Non-Fatal	PIO on Landing (AND)
249.	September 9, 1969	F-100D	French Air Force	Non-Fatal	Barrier on Landing (AND)
250.	August 15, 1969	F-100D	USAF	Fatal	Stall on Takeoff
251.	August 12, 1969	F-100C	USAF (CO ANG)	Fatal	LOC Base to Final Turn (Smoke in the Cockpit)
252.	August 7, 1969	F-100D	USAF	Non-Fatal	Engine Failure
253.	August 6, 1969	F-100D	USAF	Fatal	Unknown
254.	July 30, 1969	F-100D	USAF	Non-Fatal	In-Flight Engine Fire
255.	July 24, 1969	F-100D	USAF	Fatal	Low Altitude Flight
256.	July 24, 1969	F-100D	USAF	Fatal	Crashed on Approach
257.	July 16, 1969	F-100D	USAF	Fatal	Sabre Dance on Final (Failed Ejection)
258.	June 24, 1969	F-100F	French Air Force	Fatal (2)	LOC During Maneuvering
259.	June 17, 1969	F-100D	USAF (NM ANG)	Non-Fatal	Unknown
260.	June 5, 1969	F-100D	French Air Force	Non-Fatal	Spin
261.	June 3, 1969	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
262.	May 19, 1969	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
263.	May 13, 1969	F-100D	USAF	Unknown	Unknown
264.	May 10, 1969	F-100D	USAF	Unknown	Unknown
265.	May 5, 1969	F-100D	USAF	Non-Fatal	Engine Failure
266.	May 1, 1969	F-100D	USAF	Non-Fatal	Engine Failure
267.	April 1, 1969	F-100D	USAF	Non-Fatal	Engine failure-Compressor Stall
268.	March 27, 1969	F-100C	USAF	Fatal	In-Flight Structural failure (Wing)
269.	March 18, 1969	F-100D	USAF	Unknown	Unknown
270.	March 17, 1969	F-100C	USAF	Non-Fatal	Unknown
271.	February 27, 1969	F-100C	USAF	Unknown	Unknown
272.	February 26, 1969	F-100C	USAF	Fatal	Unknown
273.	January 29, 1969	F-100D	USAF	Unknown	Unknown
274.	January 27, 1969	F-100D	French Air Force	Non-Fatal	Nose Gear failed to Extend for Landing (AND)
275.	January 11, 1969	F-100C	USAF	Unknown	Unknown
276.	January 9, 1969	F-100D	USAF	Non-Fatal	Mid-Air (1st Aircraft)
277.	January 9, 1969	F-100D	USAF	Non-Fatal	Mid-Air (2nd Aircraft)
278.	January 4, 1969	F-100C	USAF	Fatal	Mid-Air (1st Aircraft)
279.	January 4, 1969	F-100C	USAF	Fatal	Mid-Air (2nd Aircraft)
280.	December 9, 1968	F-100F	USAF	Non-Fatal	Unknown
281.	November 16, 1968	F-100D	USAF	Fatal	Pilot Disorientation
282.	November 15, 1968	F-100D	French Air Force	Non-Fatal	In-Flight Canopy Separation (AND)
283.	November 12, 1968	F-100D	USAF	Non-Fatal	Engine Failure at Takeoff
284.	November 12, 1968	F-100D	USAF	Unknown	Unknown
285.	October 29, 1968	F-100D	USAF	Non-Fatal	Runway Collision (1st Aircraft)
286.	October 29, 1968	F-100D	USAF	Non-Fatal	Runway Collision (1st Aircraft)

#	Date	Version	Operator	Severity	Probable Cause and Remarks
287.	October 17, 1968	F-100D	USAF	Fatal	Aborted Takeoff-Overrun
288.	September 25, 1968	F-100D	USAF	Fatal	Unknown
289.	September 22, 1968	F-100C	USAF (IA ANG)	Non-Fatal	Afterburner Failure
290.	September 5, 1968	F-100D	French Air Force	Non-Fatal	Abort-Nose Gear Failure-Barrier (AND)
291.	October 29, 1968	F-100D	USAF	Non-Fatal	Brake failure-Ground Collision on Takeoff
292.	October 19, 1968	F-100D	USAF	Non-Fatal	Ground Collision on Landing (1st Aircraft)
293.	October 19, 1968	F-100D	USAF	Non-Fatal	Ground Collision on Landing (2nd Aircraft)
294.	August 26, 1968	F-100C	USAF	Non-Fatal	Unknown
295.	August 18, 1968	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
296.	August 17, 1968	F-100D	USAF	Non-Fatal	Engine Failure-Crashed Landing
297.	August 13, 1968	F-100D	USAF	Non-Fatal	Hit Tower Structure-Crash Landing
298.	August 8, 1968	F-100C	USAF (NY ANG)	Non-Fatal	Engine Failure
299.	July 27, 1968	F-100F	USAF	Non-fatal	Engine Failure
300.	July 26, 1968	F-100D	USAF	Unknown	Unknown
301.	July 25, 1968	F-100D	French Air Force	Non-Fatal	Smoke in the Cockpit-CSD Oil Into AC (AND)
302.	July 22, 1968	F-100D	USAF	Non-Fatal	Lightning Strike-LOC
303.	July 19, 1968	F-100D	Danish Air Force	Unknown	Fuel Tank Hit Tail
304.	June 18, 1968	F-100D	USAF	Fatal	Unknown
305.	June 7, 1968	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
306.	June 6, 1968	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-A/C Heavy-Barrier (AND)
307.	May 21, 1968	F-100F	USAF	Non-Fatal	Bird Strike
308.	May 11, 1968	F-100D	USAF	Non-Fatal	Ground Collision on Landing (1st Aircraft) (AND)
309.	May 11, 1968	F-100D	USAF	Non-Fatal	Ground Collision on Landing (2nd Aircraft) (AND)
310.	May 8, 1968	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
311.	May 2, 1968	F-100D	French Air Force	Non-Fatal	Excessive Speed on Landing-Barrier (AND)
312.	April 24, 1968	F-100D	French Air Force	Non-Fatal	Hard Landing-Nose Gear Failure (AND)
313.	April 23, 1968	F-100D	USAF	Fatal	Aborted Takeoff
314.	April 23, 1968	F-100D	USAF	Fatal	CFIT After Missed Approach
315.	April 22, 1968	F-100C	USAF	Fatal	Unknown
316.	April 20, 1968	F-100D	USAF	Non-Fatal	Engine Failure
317.	March 19, 1968	F-100D	USAF	Non-Fatal	LOC-Spin-Maneuvering
318.	March 14, 1968	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
319.	March 8, 1968	F-100D	Danish Air Force	Unknown	LOC at Night
320.	March 4, 1968	F-100D	USAF (NY ANG)	Non-Fatal	Mid-Air (1st Aircraft)
321.	March 4, 1968	F-100D	USAF (NY ANG)	Non-Fatal	Mid-Air (2nd Aircraft)
322.	February 9, 1968	F-100D	French Air Force	Non-Fatal	Drag Chute Failure (AND)
323.	February 8, 1968	F-100C	USAF (OH ANG)	Fatal (3)	Unknown-2 Killed on the Ground
324.	January 29, 1968	F-100D	French Air Force	Non-Fatal	Main Landing Gear Failure (AND)
325.	January 14, 1968	F-100D	USAF	Fatal	Engine Failure
326.	December 22, 1967	F-100D	French Air Force	Non-Fatal	Abort-Airspeed Indicator Failure-Barrier
327.	December 6, 1967	F-100D	French Air Force	Non-Fatal	Undershoot (AND)

#	Date	Version	Operator	Severity	Probable Cause and Remarks
328.	October 21, 1967	F-100D	USAF	Non-Fatal	Structural Failure (Wings) (Thunderbirds)
329.	October 4, 1967	F-100D	French Air Force	Non-Fatal	Undershoot (AND)
330.	September 25, 1967	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
331.	September 21, 1967	F-100D	French Air Force	Non-Fatal	Undershoot (AND)
332.	September 11, 1967	F-100D	USAF	Non-Fatal	Engine Failure
333.	September 8, 1967	F-100D	USAF	Unknown	Unknown
334.	September 5, 1967	F-100D	French Air Force	Non-Fatal	Engine Failure
335.	September 1, 1967	F-100F	USAF	Non-Fatal	Unknown
336.	August 31, 1967	F-100C	USAF (KS ANG)	Non-Fatal	Unknown
337.	August 31, 1967	F-100D	USAF	Unknown	Unknown
338.	August 23, 1967	F-100D	Danish Air Force	Unknown	Engine Failure
339.	August 23, 1967	F-100D	USAF	Non-Fatal	Engine Failure-Crashed Into Houses
340.	August 22, 1967	F-100C	USAF (OH ANG)	Fatal	Unknown
341.	August 18, 1967	F-100D	USAF	Non-Fatal	Engine Failure
342.	August 13, 1967	F-100D	USAF	Fatal	Unknown
343.	August 9, 1967	F-100F	USAF (IA ANG)	Non-Fatal	Unknown
344.	August 9, 1967	F-100D	USAF	Fatal	Unknown
345.	August 6, 1967	F-100C	USAF (NY ANG)	Fatal	Unknown
346.	July 24, 1967	F-100D	USAF	Non-Fatal	Gyro Failure in Weather
347.	July 21, 1967	F-100C	USAF (NJ ANG)	Non-Fatal	Unknown
348.	July 6, 1967	F-100C	USAF	Non-Fatal	Unknown
349.	June 25, 1967	F-100D	USAF	Unknown	Unknown
350.	June 24, 1967	F-100D	USAF	Unknown	Unknown
351.	June 20, 1967	F-100C	USAF (MO ANG)	Fatal	Unknown
352.	June 20, 1967	F-100C	USAF (NY ANG)	Fatal	Unknown
353.	June 13, 1967	F-100D	USAF	Fatal	Structural Failure (Wings)
354.	June 6, 1967	F-100D	USAF	Fatal	Structural Failure (Wings)
355.	June 6, 1967	F-100D	USAF	Non-Fatal	Compressor Stall-Engine Failure
356.	June 1, 1967	F-100D	French Air Force	Non-Fatal	CFIT
357.	June 1, 1967	F-100D	French Air Force	Non-Fatal	Engine Fire-Spin
358.	May 16, 1967	F-100D	USAF	Non-Fatal	In-Flight Fire and Explosion
359.	May 10, 1967	F-100D	USAF	Fatal	Structural Failure (Wings)
360.	May 10, 1967	F-100D	Danish Air Force	Unknown	LOC-Takeoff at Night
361.	April 15, 1967	F-100C	USAF (KS ANG)	Fatal	Unknown
362.	March 23, 1967	F-100F	USAF	Fatal (2)	Unknown
363.	March 21, 1967	F-100D	French Air Force	Non-Fatal	In-Flight Canopy Separation (AND)
364.	March 10, 1967	F-100D	USAF	Non-Fatal	Engine Failure
365.	February 19, 1967	F-100D	USAF	Non-Fatal	Engine Failure
366.	January 30, 1967	F-100	USAF	Fatal	CFIT
367.	January 27, 1967	F-100D	French Air Force	Non-Fatal	Hit High Tension Line (AND)
368.	January 3, 1967	F-100C	USAF	Fatal	LOC After Entering Clouds

#	Date	Version	Operator	Severity	Probable Cause and Remarks
369.	December 22, 1966	F-100D	USAF	Unknown	Unknown
370.	December 16, 1966	F-100D	USAF	Fatal	CFIT
371.	December 15, 1966	F-100D	USAF	Unknown	Unknown
372.	December 14, 1966	F-100C	USAF (IA ANG)	Fatal	Unknown
373.	November 28, 1966	F-100C	USAF	Fatal	Unknown
374.	November 23, 1966	F-100C	USAF (NJ ANG)	Non-Fatal	Unknown
375.	November 15, 1966	F-100C	USAF	Fatal	Runway Collision (1st Aircraft)
376.	November 15, 1966	F-100C	USAF	Fatal	Runway Collision (2nd Aircraft)
377.	October 18, 1966	F-100D	French Air Force	Fatal	LOC in Weather (Missed Approach)
378.	October 12, 1966	F-100F	USAF	Fatal (2)	Mid-Air (Thunderbirds)
379.	October 11, 1966	F-100F	USAF	Non-Fatal	Unknown
380.	September 16, 1966	F-100D	USAF	Non-Fatal	Mid-Air (1st Aircraft) (AND)
381.	September 16, 1966	F-100D	USAF	Non-Fatal	Mid-Air (2nd Aircraft) (AND)
382.	September 16, 1966	F-100D	USAF	Non-Fatal	Mid-Air-Thunderbirds (1st Aircraft) (AND)
383.	September 13, 1966	F-100D	USAF	Non-Fatal	Mid-Air Thunderbirds (2nd Aircraft) (AND)
384.	September 13, 1966	F-100D	USAF	Non-Fatal	Mid-Air Thunderbirds (3rd Aircraft)
385.	September 10, 1966	F-100D	USAF	Non-Fatal	Unknown
386.	August 24, 1966	F-100F	USAF	Non-Fatal	Unknown
387.	August 17, 1966	F-100D	USAF	Non-Fatal	Unknown
388.	August 17, 1966	F-100D	USAF	Unknown	Unknown
389.	August 15, 1966	F-100D	USAF	Non-Fatal	Engine Flameout
390.	August 11, 1966	F-100C	USAF	Non-Fatal	Unknown
391.	July 24, 1966	F-100D	USAF	Non-Fatal	Engine Failure
392.	June 28, 1966	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
393.	June 23, 1966	F-100C	USAF (KS ANG)	Fatal	Unknown
394.	June 13, 1966	F-100D	French Air Force	Non-Fatal	LOC on Touchdown-Nose Wheel Failure (AND)
395.	May 25, 1966	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
396.	May 23, 1966	F-100D	USAF	Unknown	Unknown
397.	May 18, 1966	F-100D	USAF	Non-Fatal	Unknown
398.	May 13, 1966	F-100F	USAF	Non-Fatal	Engine Failure
399.	May 9, 1966	F-100D	French Air Force	Non-Fatal	Accidental Drop Tank Release (AND)
400.	May 7, 1966	F-100C	USAF (MO ANG)	Fatal	Unknown
401.	May 4, 1966	F-100D	USAF	Unknown	Unknown
402.	April 4, 1966	F-100D	USAF	Non-Fatal	Flight Control Failure During FTF
403.	April 1, 1966	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
404.	March 18, 1966	F-100D	French Air Force	Non-Fatal	Engine Overheat-Emergency Landing (AND)
405.	March 13, 1966	F-100F	USAF	Non-Fatal	Engine Failure
406.	March 6, 1966	F-100D	USAF	Non-Fatal	Unknown
407.	March 3, 1966	F-100C	USAF	Unknown	Unknown
408.	February 26, 1966	F-100C	USAF (NJ ANG)	Non-Fatal	Engine Failure Oil Pressure Loss
409.	February 20, 1966	F-100C	USAF (NJ ANG)	Non-Fatal	Unknown

#	Date	Version	Operator	Severity	Probable Cause and Remarks
410.	February 14, 1966	F-100D	USAF	Non-Fatal	Engine Failure
411.	February 3, 1966	F-100C	USAF (OH ANG)	Non-Fatal	Unknown
412.	January 28, 1966	F-100D	French Air Force	Non-Fatal	In-Flight Pylon and Drop Tank Separation (AND)
413.	January 26, 1966	F-100D	French Air Force	Non-Fatal	In-Flight Drop Tank Collapse-Pylon (AND)
414.	January 24, 1966	F-100D	USAF	Non-Fatal	Engine Failure
415.	January 17, 1966	F-100D	Danish Air Force	Unknown	LOC-Over the Sea
416.	December 9, 1965	F-100D	USAF	Non-Fatal	Engine Failure
417.	December 3, 1965	F-100D	French Air Force	Non-Fatal	Overrun-Barrier (Aircraft Not Destroyed)
418.	December 3, 1965	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
419.	December 1, 1965	F-100D	USAF	Fatal	Crashed on Final
420.	November 24, 1965	F-100A	Taiwan Air Force	Non-Fatal	Unknown
421.	November 19, 1965	F-100D	USAF	Non-Fatal	Fuel Leak Ignited on the Ramp
422.	November 6, 1965	F-100C	USAF (NY ANG)	Fatal	Unknown
423.	November 4, 1965	F-100A	Taiwan Air Force	Non-Fatal	Unknown
424.	November 4, 1965	F-100C	USAF	Unknown	Unknown
425.	November 1965	F-100D	USAF	Non-Fatal	Engine Failure-Oil Loss
426.	October 21, 1965	F-100F	USAF	Non-Fatal	Unknown
427.	September 23, 1965	F-100D	USAF	Unknown	Unknown
428.	September 22, 1965	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
429.	September 15, 1965	F-100D	French Air Force	Non-Fatal	Hard Landing-Nose Wheel Failure (AND)
430.	September 9, 1965	F-100F	USAF	Fatal (2)	Unknown
431.	September 6, 1965	F-100C	USAF (IA ANG)	Fatal	Unknown
432.	September 5, 1965	F-100D	French Air Force	Non-Fatal	In-Flight Pylon and Drop Tank Failure (AND)
433.	September 2, 1965	F-100C	USAF (CO ANG)	Non-Fatal	Unknown
434.	September 1, 1965	F-100D	French Air Force	Non-Fatal	Smoke in the Cockpit-Drag Chute Failure (AND)
435.	August 10, 1965	F-100D	USAF	Fatal	Unknown
436.	August 8, 1965	F-100D	USAF (MO ANG)	Non-Fatal	Engine Failure After Takeoff (Hit House)
437.	July 17, 1965	F-100D	Danish Air Force	Unknown	Engine (Compressor) Failure
438.	July 9, 1965	F-100D	USAF	Fatal	Unknown
439.	June 22, 1965	F-100D	USAF	Non-Fatal	Fuel Starvation
440.	June 21, 1965	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Tire Burst-Barrier (AND)
441.	June 18, 1965	F-100D	French Air Force	Non-Fatal	Brake Failure-Runway Excursion (AND)
442.	June 2, 1965	F-100D	USAF	Non-Fatal	Engine Failure
443.	May 27, 1965	F-100F	USAF	Non-Fatal	Unknown
444.	May 17, 1965	F-100D	French Air Force	Non-Fatal	AC/DC Failure (AND)
445.	May 17, 1965	F-100D	French Air Force	Non-Fatal	Overrun (AND)
446.	May 12, 1965	F-100D	USAF	Unknown	Unknown
447.	May 12, 1965	F-100F	USAF (MA ANG)	Fatal (2)	Unknown
448.	May 9, 1965	F-100C	USAF (IA ANG)	Non-Fatal	Unknown
449.	May 4, 1965	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
450.	April 29, 1965	F-100D	USAF	Non-Fatal	Compressor Stall

#	Date	Version	Operator	Severity	Probable Cause and Remarks
451.	April 24, 1965	F-100C	USAF (CA ANG)	Non-Fatal	Unknown
452.	April 12, 1965	F-100F	French Air Force	Non-Fatal	In-Flight Canopy Separation (AND)
453.	April 10, 1965	F-100D	USAF	Non-Fatal	Unknown
454.	April 8, 1965	F-100F	USAF	Fatal	Engine Failure
455.	March 18, 1965	F-100A	Taiwan Air Force	Non-Fatal	Unknown
456.	March 9, 1965	F-100A	Taiwan Air Force	Non-Fatal	Unknown
457.	March 1, 1965	F-100D	USAF	Non-Fatal	Flight Control Failure on TO (Trim)-Overrun
458.	February 24, 1965	F-100D	USAF	Unknown	Unknown
459.	February 19, 1965	F-100D	USAF	Fatal	Flew Into the Ground at Low Level
460.	February 5, 1965	F-100C	USAF	Non-Fatal	Mid-Air (1st Aircraft)
461.	February 5, 1965	F-100C	USAF	Non-Fatal	Mid-Air (2nd Aircraft)
462.	February 5, 1965	F-100C	USAF (IA ANG)	Non-Fatal	Unknown
463.	January 28, 1965	F-100D	USAF	Fatal (3)	Engine Failure on TO-Civilians Fatalities
464.	January 19, 1965	F-100D	French Air Force	Non-Fatal	In-Flight Pylon and Drop Tank Separation (AND)
465.	January 2, 1965	F-100D	USAF	Non-Fatal	Engine Failure
466.	December 31, 1964	F-100D	French Air Force	Fatal	Mid-Air (1st Aircraft)
467.	December 31, 1964	F-100D	French Air Force	Fatal	Mid-Air (2nd Aircraft)
468.	December 19, 1964	F-100D	USAF	Non-Fatal	Flight Control Failure
469.	December 17, 1964	F-100D	French Air Force	Non-Fatal	In-Flight Refueling Probe Failure (AND)
470.	December 9, 1964	F-100D	USAF	Non-Fatal	LOC
471.	December 4, 1964	F-100D	Danish Air Force	Unknown	Fuel/Engine Fire
472.	November 26, 1964	F-100D	USAF	Non-Fatal	Engine Failure (Engine Fuel Pump/Control)
473.	November 24, 1964	F-100F	USAF	Non-fatal	Unknown
474.	November 20, 1964	F-100D	French Air Force	Non-Fatal	Overrun (Pilot Error-Braking Action (AND)
475.	November 18, 1964	F-100D	French Air Force	Non-Fatal	Overrun-Anti-Skid/NW Steering Failure (AND)
476.	November 4, 1964	F-100D	French Air Force	Non-Fatal	Abort-Tire Burst-Runway Excursion (AND)
477.	November 4, 1964	F-100F	French Air Force	Non-Fatal	In-Flight Canopy Separation (AND)
478.	October 31, 1964	F-100C	USAF (OH ANG)	Non-Fatal	Unknown
479.	October 27, 1964	F-100D	USAF	Unknown	Engine Failure-Impact Residential Area
480.	October 20, 1964	F-100D	French Air Force	Fatal	Engine Fire on the Ground-(AND)
481.	October 8, 1964	F-100D	French Air Force	Fatal	Stall During Maneuvering
482.	October 8, 1964	F-100D	French Air Force	Non- Fatal	Gear-Up Landing (AND)
483.	September 18, 1964	F-100D	French Air Force	Non-Fatal	Abort-Elevator Failure-Barrier
484.	September 18, 1964	F-100D	USAF	Fatal	Unknown
485.	September 17, 1964	F-100D	USAF	Non-Fatal	Unknown
486.	August 18, 1964	F-100F	USAF	Non-Fatal	Mid-Air
487.	July 29, 1964	F-100D	Danish Air Force	Unknown	LOC-Adverse Yaw
488.	July 17, 1964	F-100F	Taiwan Air Force	Unknown	Unknown
489.	July 15, 1964	F-100D	USAF	Unknown	Unknown
490.	July 10, 1964	F-100F	French Air Force	Non-Fatal	Runway Excursion-Crosswind-A/C Destroyed
491.	July 7, 1964	F-100F	Danish Air Force	Unknown	LOC

#	Date	Version	Operator	Severity	Probable Cause and Remarks
492.	July 7, 1964	F-100C	USAF	Non-Fatal	Unknown
493.	July 4, 1964	F-100D	USAF (MO ANG)	Non-Fatal	Unknown
494.	June 18, 1964	F-100F	USAF	Non-Fatal	Unknown
495.	June 16, 1964	F-100A	USAF	Non-Fatal	Unknown
496.	June 9, 1964	F-100D	USAF	Unknown	Unknown
497.	June 8, 1964	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Overrun-Barrier
498.	June 8, 1964	F-100C	USAF (DC ANG)	Fatal	Unknown
499.	June 4, 1964	F-100D	USAF	Fatal	Mechanical Failure-Lost at Sea
500.	May 27, 1964	F-100D	USAF	Fatal	Failure to Pull-Out of Dive
501.	May 20, 1964	F-100D	French Air Force	Non-Fatal	Right Main Landing Gear Failure
502.	May 12, 1964	F-100F	French Air Force	Non-Fatal	In-Flight Canopy Separation (AND)
503.	April 24, 1964	F-100D	USAF	Non-Fatal	Unknown
504.	April 6, 1964	F-100D	USAF	Unknown	Unknown
505.	March 13, 1964	F-100F	USAF	Non-Fatal	Unknown
506.	March 6, 1964	F-100C	USAF	Non-Fatal	Engine Failure
507.	February 26, 1964	F-100D	USAF	Unknown	Unknown
508.	February 3, 1964	F-100C	USAF	Non-Fatal	Flameout
509.	January 9, 1964	F-100C	USAF	Non-Fatal	Unknown
510.	December 14, 1963	F-100C	USAF	Non-Fatal	Unknown
511.	November 22, 1963	F-100C	USAF	Unknown	Unknown
512.	November 13, 1963	F-100C	USAF	Non-Fatal	Mid-Air (1st Aircraft)
513.	November 13, 1963	F-100C	USAF	Non-Fatal	Mid-Air (2nd Aircraft)
514.	December 12, 1963	F-100D	Danish Air Force	Unknown	LOC
515.	October 21, 1963	F-100D	French Air Force	Non-Fatal	In-Flight Drop Tank Separation (AND)
516.	October 9, 1963	F-100D	French Air Force	Non-Fatal	Undershoot (AND)
517.	October 8, 1963	F-100F	USAF	Non-Fatal	Unknown
518.	October 4, 1963	F-100D	French Air Force	Non-Fatal	Night Runway Excursion (Sideline) (AND)
519.	October 1963	F-100F	USAF	Non-Fatal	Engine Failure
520.	September 27, 1963	F-100C	USAF	Non-Fatal	Unknown
521.	September 25, 1963	F-100D	French Air Force	Non-Fatal	Barrier Arrestment (AND)
522.	September 24, 1963	F-100D	USAF	Non-Fatal	Landing Accident
523.	September 11, 1963	F-100D	French Air Force	Non-Fatal	Lightning Strike (Aircraft Destroyed)
524.	September 11, 1963	F-100D	USAF	Unknown	Unknown
525.	August 29, 1963	F-100D	French Air Force	Non-Fatal	Brake Failure
526.	August 22, 1963	F-100D	USAF	Non-Fatal	LOC
527.	August 21, 1963	F-100D	French Air Force	Non-Fatal	Engine Fire-Explosion-Hit Residences
528.	August 21, 1963	F-100D	French Air Force	Non-Fatal	In-Flight Pylon and Drop Tank Separation (AND)
529.	August 19, 1963	F-100C	USAF	Fatal	Unknown
530.	August 14, 1963	F-100D	French Air Force	Non-Fatal	In-Flight Fire-Total Hydraulics Failure
531.	August 14, 1963	F-100D	French Air Force	Non-Fatal	Barrier Arrestment
532.	August 10, 1963	F-100A	Taiwan Air Force	Non-Fatal	Unknown

#	Date	Version	Operator	Severity	Probable Cause and Remarks
533.	August 2, 1963	F-100D	USAF	Unknown	Unknown
534.	July 15, 1963	F-100D	USAF	Non-Fatal	Mid-Air (1st Aircraft)
535.	July 15, 1963	F-100D	USAF	Fatal	Mid-Air (2nd Aircraft)
536.	July 7, 1963	F-100D	French Air Force	Non-Fatal	Emergency Landing-Overheat-Ground Fire
537.	June 27, 1963	F-100D	French Air Force	Non-Fatal	Barrier Arrestment
538.	July 3, 1963	F-100D	Danish Air Force	Unknown	Fuel Leak
539.	July 3, 1963	F-100D	USAF	Unknown	Unknown
540.	June 27, 1963	F-100D	French Air Force	Non-Fatal	Overrun-Aborted Takeoff-Engine Failure
541.	June 25, 1963	F-100D	USAF	Fatal	CFIT
542.	June 25, 1963	F-100D	USAF	Unknown	Mid-Air (1st Aircraft)
543.	June 25, 1963	F-100D	USAF	Unknown	Mid-Air (2nd Aircraft)
544.	June 23, 1963	F-100D	French Air Force	Non-Fatal	Abort-Airspeed Indicator Failure-Barrier
545.	June 11, 1963	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (Failed) (AND)
546.	May 26, 1963	F-100C	USAF	Non-Fatal	Unknown
547.	May 23, 1963	F-100C	USAF	Non-Fatal	Mid-Air (1st Aircraft)
548.	May 23, 1963	F-100C	USAF	Non-Fatal	Mid-Air (2nd Aircraft)
549.	May 20, 1963	F-100D	French Air Force	Non-Fatal	Hard Landing-Nose Gear Failure
550.	May 19, 1963	F-100C	USAF (NY ANG)	Fatal	Unknown
551.	May 14, 1963	F-100F	USAF	Fatal (2)	Unknown
552.	May 14, 1963	F-100C	USAF (KS ANG)	Non-Fatal	Unknown
553.	May 13, 1963	F-100C	USAF	Non-Fatal	Unknown
554.	May 13, 1963	F-100C	USAF	Fatal	LOC on Touchdown (Jet Wash)
555.	May 7, 1963	F-100F	USAF	Fatal (2)	Unknown
556.	April 19, 1963	F-100F	French Air Force	Non-Fatal	Brake and Anti-Skid Failure (AND)
557.	April 17, 1963	F-100D	French Air Force	Non-Fatal	Drag Chute/Anti-Skid Failure-Barrier (AND)
558.	April 10, 1963	F-100D	USAF	Unknown	Unknown
559.	April 8, 1963	F-100A	USAF (CT ANG)	Non-Fatal	Engine Failure
560.	March 21, 1963	F-100D	French Air Force	Non-Fatal	Brake and Rudder Failure (Hydraulic) (AND)
561.	March 20, 1963	F-100D	French Air Force	Non-Fatal	Barrier
562.	March 19, 1963	F-100D	Danish Air Force	Unknown	Mid-Air (1st Aircraft)
563.	March 19, 1963	F-100D	Danish Air Force	Unknown	Mid-Air (2nd Aircraft)
564.	March 19, 1963	F-100D	French Air Force	Non-Fatal	Brake and Rudder Failure (Hydraulic) (AND)
565.	March 13, 1963	F-100D	USAF	Unknown	Unknown
566.	March 4, 1963	F-100F	USAF	Fatal (2)	Unknown
567.	February 28, 1963	F-100D	French Air Force	Non-Fatal	In-Flight Drop Tank Separation (AND)
568.	February 17, 1962	F-100C	USAF	Non-Fatal	Hit Ground Structure (AND) (Thunderbirds
569.	February 10, 1963	F-100D	USAF	Fatal	Unknown
570.	February 7, 1963	F-100F	USAF	Non-Fatal	Unknown
571.	February 5, 1963	F-100A	Taiwan Air Force	Non-Fatal	Unknown
572.	February 4, 1963	F-100D	French Air Force	Non-Fatal	Hit Snow Bank on Landing (AND)
573.	January 31, 1963	F-100D	USAF	Fatal	Unknown

#	Date	Version	Operator	Severity	Probable Cause and Remarks
574.	January 30, 1963	F-100D	Danish Air Force	Fatal	LOC
575.	January 25, 1963	F-100A	USAF (AZ ANG)	Fatal	Unknown
576.	January 23, 1963	F-100D	USAF	Fatal	Compressor Stall-Engine Failure
577.	January 22, 1963	F-100D	USAF	Unknown	Unknown
578.	January 16, 1963	F-100D	USAF	Non-Fatal	In-Flight Fire
579.	January 15, 1963	F-100F	USAF	Fatal	Unknown
580.	January 6, 1963	F-100D	French Air Force	Non-Fatal	Drag Chute/Anti-Skid Failure (AND)
581.	December 20, 1962	F-100D	USAF	Unknown	Unknown
582.	December 7, 1962	F-100F	USAF	Non-Fatal	Unknown
583.	December 4, 1962	F-100D	USAF	Unknown	Unknown
584.	November 29, 1962	F-100C	USAF (CO ANG)	Non-Fatal	Unknown
585.	November 20, 1962	F-100D	French Air Force	Non-Fatal	Aborted Takeoff-Barrier (AND)
586.	November 14, 1962	F-100D	Danish Air Force	Unknown	Mid-Air (1st Aircraft)
587.	November 14, 1962	F-100D	Danish Air Force	Unknown	Mid-Air (2nd Aircraft)
588.	November 10, 1962	F-100D	Danish Air Force	Unknown	Fuel Tank Explosion
589.	September 30, 1962	F-100F	French Air Force	Non-Fatal	Aborted Takeoff-Engine Failure (AND)
590.	September 18, 1962	F-100D	USAF	Non-Fatal	Engine Flameout
591.	September 4, 1962	F-100D	French Air Force	Non-Fatal	Runway Excursion-Brake (Hyd.) Failure (AND)
592.	October 9, 1962	F-100A	USAF	Fatal	Explosion After TO-Crashed on Runway
593.	October 3, 1962	F-100C	USAF	Fatal	Flew Into the Ground
594.	October 2, 1962	F-100D	French Air Force	Non-Fatal	In-Flight Drop Tank Separation (AND)
595.	October 1, 1962	F-100D	USAF	Non-Fatal	Unknown
596.	September 28, 1962	F-100F	USAF	Non-Fatal	Unknown
597.	September 18, 1962	F-100D	USAF	Unknown	Unknown
598.	August 31, 1962	F-100C	USAF	Non-Fatal	Unknown
599.	August 23, 1962	F-100C	USAF	Fatal	Unknown
600.	August 22, 1962	F-100D	USAF	Fatal (1)	Engine Failure-Hit 3 Homes-Killed 1
601.	August 14, 1962	F-100D	USAF	Unknown	Unknown
602.	August 9, 1962	F-100F	USAF	Non-Fatal	Unknown
603.	August 4, 1962	F-100D	USAF	Unknown	Unknown
604.	July 31, 1962	F-100C	USAF (IA ANG)	Non-Fatal	Unknown
605.	July 19, 1962	F-100D	USAF	Unknown	Unknown
606.	July 17, 1962	F-100D	USAF	Unknown	Unknown
607.	June 23, 1962	F-100F	USAF	Non-Fatal	Unknown
608.	June 21, 1962	F-100F	USAF	Non-Fatal	Unknown
609.	June 19, 1962	F-100C	USAF (DC ANG)	Fatal	Unknown
610.	May 31, 1962	F-100A	USAF (CT ANG)	Fatal	Unknown
611.	May 17, 1962	F-100D	USAF	Non-Fatal	Engine Failure (Main Fuel Shutoff Valve)
612.	May 11, 1962	F-100F	French Air Force	Non-Fatal	In-Flight Canopy Separation (AND)
613.	May 8, 1962	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier
614.	May 5, 1962	F-100F	French Air Force	Non-Fatal	Drag Chute Failure-Barrier

#	Date	Version	Operator	Severity	Probable Cause and Remarks
615.	May 2, 1962	F-100C	USAF	Fatal	Unknown
616.	April 20, 1962	F-100C	USAF	Unknown	Flight Control Failure
617.	April 11, 1962	F-100F	USAF	Fatal (2)	Unknown
618.	April 6, 1962	F-100F	USAF	Non-Fatal	Unknown
619.	March 21, 1962	F-100F	USAF	Fatal (2)	Unknown
620.	March 14, 1962	F-100C	USAF (NY ANG)	Non-Fatal	Unknown
621.	March 14, 1962	F-100D	French Air Force	Non-Fatal	Inadvertent Drag Chute Deployment on TO
622.	March 9, 1962	F-100D	USAF	Non-Fatal	Unknown
623.	March 6, 1962	F-100C	USAF (DC ANG)	Non-Fatal	Unknown
624.	March 1, 1962	F-100C	USAF	Non-Fatal	Unknown
625.	February 24, 1962	F-100C	USAF (IA ANG)	Non-Fatal	Unknown
626.	February 16, 1962	F-100D	French Air Force	Fatal	Pilot Disorientation on Approach
627.	February 15, 1962	F-100C	USAF	Non-Fatal	Unknown
628.	January 26, 1962	F-100D	French Air Force	Non-Fatal	Anti-Skid Failure-Overrun
629.	1962	F-100C	Turkish Air Force	Fatal (250)	Over-Rotation (Collided With Train)
630.	December 31, 1961	F-100D	USAF	Fatal	Unknown
631.	December 23, 1961	F-100A	Taiwan Air Force	Non-Fatal	Unknown
632.	December 19, 1961	F-100D	USAF	Fatal	Possible Mechanical
633.	December 7, 1961	F-100D	USAF	Non-Fatal	Engine Power Loss
634.	December 1, 1961	F-100C	USAF	Non-Fatal	Engine Fire on Takeoff-Flight Controls Failure
635.	November 29, 1961	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier
636.	November 29, 1961	F-100D	French Air Force	Non-Fatal	In-Flight Separation of Cargo Pod (Damage)
637.	November 29, 1961	F-100D	French Air Force	Non-Fatal	Drop Tank Separation on Takeoff (AND)
638.	November 28, 1961	F-100D	USAF	Unknown	Unknown
639.	October 25, 1961	F-100D	USAF	Unknown	Unknown
640.	October 17, 1961	F-100D	USAF	Unknown	Unknown
641.	October 5, 1961	F-100F	French Air Force	Non-Fatal	Landing Gear Failure on Landing (AND)
642.	October 2, 1961	F-100D	French Air Force	Non-Fatal	Landing Gear Failure on Landing (AND)
643.	September 20, 1961	F-100C	USAF	Fatal	Unknown
644.	September 18, 1961	F-100D	French Air Force	Non-Fatal	Afterburner Failure (AND)
645.	September 18, 1961	F-100C	USAF	Non-Fatal	Unknown
646.	September 17, 1961	F-100C	USAF	Non-Fatal	Engine Failure (Thunderbirds)
647.	September 14, 1961	F-100D	USAF	Fatal	Flameout-Fuel Starvation
648.	September 12, 1961	F-100C	USAF	Fatal	LOC on Takeoff (Sabre Dance)
649.	September 9, 1961	F-0100D	USAF	Fatal	Fire on the Ramp (Pilot Killed)
650.	September 7, 1961	F-100C	USAF	Fatal	Unknown
651.	September 7, 1961	F-100D	USAF	Non-Fatal	Ground Accident
652.	September 5, 1961	F-100C	USAF	Fatal	Unknown
653.	August 25, 1961	F-100D	USAF	Fatal (2)	Engine Failure (2 Infants Killed on the Ground)
654.	August 25, 1961	F-100D	French Air Force	Non-Fatal	Afterburner Failure-Fire-Emergency Landing
655.	August 22, 1961	F-100C	USAF	Unknown	Unknown

#	Date	Version	Operator	Severity	Probable Cause and Remarks
656.	August 22, 1961	F-100D	USAF	Unknown	Unknown
657.	August 16, 1961	F-100C	USAF	Non-Fatal	Unknown
658.	August 15, 1961	F-100A	USAF	Unknown	Unknown
659.	August 6, 1961	F-100C	USAF	Unknown	Unknown
660.	August 1, 1961	F-100C	USAF	Unknown	Unknown
661.	July 31, 1961	F-100D	USAF	Fatal	CFIT
662.	July 25, 1961	F-100C	USAF	Fatal	Unknown
663.	July 26, 1961	F-100C	USAF	Non-Fatal	Unknown
664.	July 16, 1961	F-100F	USAF	Non-Fatal	Unknown
665.	July 13, 1961	F-100F	USAF	Fatal (2)	Unknown
666.	July 13, 1961	F-100D	USAF	Fatal	Unknown
667.	July 12, 1961	F-100C	USAF	Non-Fatal	Overrun
668.	July 7, 1961	F-100C	USAF	Non-Fatal	Engine failure-Oil Loss-Bearing Failure
669.	July 6, 1961	F-100D	French Air Force	Non-Fatal	Afterburner Failure (AND)
670.	July 4, 1961	F-100C	USAF	Non-Fatal	Unknown
671.	June 26, 1961	F-100D	Danish Air Force	Unknown	Oil System Failure
672.	June 23, 1961	F-100C	USAF	Non-Fatal	Engine Failure-Hydraulic Failure-LOC
673.	June 20, 1961	F-100D	USAF	Unknown	Unknown
674.	June 19, 1961	F-100D	USAF	Non-Fatal	Engine Fire After Takeoff
675.	June 10, 1961	F-100C	USAF (CA ANG)	Mom-Fatal	Unknown
676.	June 1, 1961	F-100A	USAF	Non-Fatal	Engine Failure
677.	May 26, 1961	F-100D	French Air Force	Non-Fatal	PIO on Landing-Nose Wheel Collapse (AND)
678.	May 18, 1961	F-100D	French Air Force	Non-Fatal	Pilot Error-Crosswind Landing-(AND)
679.	May 12, 1961	F-100F	Danish Air Force	Non-Fatal	LOC-Flat Spin
680.	May 3, 1961	F-100D	USAF	Unknown	Unknown
681.	May 2, 1961	F-100D	USAF	Unknown	Unknown
682.	April 27, 1961	F-100D	French Air Force	Non-Fatal	Fuel Pump-Emergency Landing (AND)
683.	April 24, 1961	F-100D	USAF	Unknown	Unknown
684.	April 20, 1961	F-100D	USAF	Unknown	Unknown
685.	April 6, 1961	F-100D	USAF	Fatal	Unknown (Thunderbirds)
686.	March 31, 1961	F-100D	USAF	Non-Fatal	Engine Failure
687.	March 29, 1961	F-100D	French Air Force	Non-Fatal	Oil/Fuel Exchanger Cracks (Destroyed)
688.	March 27, 1961	F-100D	USAF	Unknown	Unknown
689.	March 20, 1961	F-100C	USAF	Non-Fatal	Unknown
690.	March 17, 1961	F-100F	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
691.	March 16, 1961	F-100D	French Air Force	Non-Fatal	In-Flight Canopy Separation (AND)
692.	March 9, 1961	F-100D	Danish Air Force	Unknown	Fuel Leak-Engine Explosion
693.	February 23, 1961	F-100D	USAF	Unknown	Unknown
694.	February 7, 1961	F-100D	USAF	Non-Fatal	LOC on Landing-Go-Around-Excursion
695.	February 3, 1961	F-100D	French Air Force	Non-Fatal	Pilot Error-Nose Wheel Steering (AND)
696.	January 28, 1961	F-100A	USAF (CT ANG)	Non-Fatal	Unknown

#	Date	Version	Operator	Severity	Probable Cause and Remarks
697.	January 21, 1961	F-100C	USAF	Non-Fatal	Wheel Shimmy-Veered Off-Gear Collapse
698.	January 20, 1961	F-100D	USAF	Non-Fatal	Complete Hydraulic Failure
699.	January 13, 1961	F-100F	USAF	Non-Fatal	Hydraulic Failure
700.	January 13, 1961	F-100D	USAF	Non-Fatal	Flight Controls Failure
701.	January 10, 1961	F-100D	USAF	Non-Fatal	Flight Control Failure
702.	1961	F-100C	USAF	Non-Fatal	Engine Failure (Thunderbirds)
703.	December 27, 1960	F-100A	USAF (NM ANG)	Fatal	Unknown
704.	December 13, 1960	F-100F	French Air Force	Non-Fatal	Engine Failure-Landing-Barrier
705.	December 5, 1960	F-100C	USAF	Non-Fatal	Mid-Air (1st Aircraft)
706.	December 5, 1960	F-100C	USAF	Non-Fatal	Mid-Air (2nd Aircraft)
707.	November 30, 1960	F-100D	USAF	Non-Fatal	Aborted Takeoff-Canopy Failure-Overrun
708.	November 30, 1960	F-100C	USAF	Non-Fatal	Gear Retraction on the Ramp (AND)
709.	November 30, 1960	F-100D	USAF	Non-Fatal	Unknown
710.	November 29, 1960	F-100D	USAF	Non-Fatal	Flight Control Failure (Elevator)
711.	November 29, 1960	F-100D	USAF	Non-Fatal	LOC on Landing (AND)
712.	November 19, 1960	F-100A	USAF (CT ANG)	Non-Fatal	Unknown
713.	November 18, 1960	F-100D	USAF	Non-Fatal	Engine Fire-Explosion
714.	November 18, 1960	F-100C	USAF	Non-Fatal	Unknown
715.	November 16, 1960	F-100A	USAF (NM ANG)	Non-Fatal	Unknown
716.	November 14, 1960	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier
717.	October 28, 1960	F-100D	French Air Force	Non-Fatal	Drag Chute Deployed on Takeoff
718.	October 21, 1960	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
719.	October 19, 1960	F-100C	USAF	Fatal	Flew Into the Ground
720.	October 14, 1960	F-100D	USAF	Fatal	Flew Into the Ground During IFR Approach
721.	October 14, 1960	F-100C	USAF	Non-Fatal	Afterburner Failure After Takeoff (AND)
722.	October 9, 1960	F-100A	USAF (AZ ANG)	Fatal	Unknown
723.	September 28, 1960	F-100D	USAF	Non-Fatal	Main Landing Gera Failure on Landing
724.	September 23, 1960	F-100D	French Air Force	Non-Fatal	Undershoot (A/C Seriously Damaged)
725.	September 21, 1960	F-100A	USAF (NM ANG)	Non-Fatal	Unknown
726.	September 16, 1960	F-100D	USAF	Unknown	Unknown
727.	September 16, 1960	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier
728.	September 13, 1960	F-100C	USAF	Non-Fatal	Unknown
729.	September 9, 1960	F-100D	French Air Force	Non-Fatal	In-Flight Drop Tank Separation (AND)
730.	September 9, 1960	F-100C	USAF	Non-Fatal	Shimmy-Main Gear Failure (AND)
731.	September 8, 1960	F-100D	French Air Force	Non-Fatal	Mid-Air
732.	September 6, 1960	F-100D	French Air Force	Non-Fatal	In-Flight Drop Tank Separation (AND)
733.	August 30, 1960	F-100D	French Air Force	Non-Fatal	In-Flight Drop Tank Separation (AND)
734.	August 26, 1960	F-100D	French Air Force	Non-Fatal	Tire Burst-Aircraft Not Destroyed
735.	August 25, 1960	F-100D	French Air Force	Non-Fatal	Brake Failure-Aircraft Not Destroyed
736.	August 22, 1960	F-100F	USAF	Non-Fatal	Engine Failure After Takeoff
737.	August 17, 1960	F-100A	USAF (AZ ANG)	Non-Fatal	Unknown

#	Date	Version	Operator	Severity	Probable Cause and Remarks
738.	August 16, 1960	F-100D	French Air Force	Non-Fatal	Tail Strike (A/C Seriously Damaged)
739.	August 12, 1960	F-100F	USAF	Fatal (2)	Mechanical Failure After Takeoff
740.	August 11, 1960	F-100D	French Air Force	Non-Fatal	Drop Tank Separation on Landing (AND)
741.	August 10, 1960	F-100C	USAF	Non-Fatal	LOC-Maneuvering (Adverse Yaw)
742.	August 10, 1960	F-100C	USAF	Non-Fatal	Engine Failure - Spin
743.	August 5, 1960	F-100C	USAF	Non-Fatal	Engine Failure
744.	August 5, 1960	F-100F	French Air Force	Fatal (2)	Fuel System Failure-Crash Landing
745.	August 4, 1960	F-100F	Taiwan Air Force	Non-Fatal	Unknown
746.	August 1960	F-100D	French Air Force	Fatal	Engine Failure (Bearings Failure)
747.	July 27, 1960	F-100D	USAF	Fatal	Unknown (Thunderbirds)
748.	July 13, 1960	F-100C	USAF	Fatal	Unknown
749.	July 12, 1960	F-100C	USAF	Fatal	Unknown
750.	July 1, 1960	F-100C	USAF	Non-Fatal	Engine Fire on Takeoff
751.	June 15, 1960	F-100C	USAF	Non-Fatal	Drag Chute Failure-Barrier (AND)
752.	June 14, 1960	F-100D	USAF	Non-Fatal	Engine Failure
753.	June 13, 1960	F-100C	USAF	Non-Fatal	LOC on Landing-Tire Burst
754.	June 12, 1960	F-100D	USAF	Fatal	Engine Failure on Takeoff
755.	June 9, 1960	F-100D	USAF	Unknown	Unknown
756.	June 8, 1960	F-100D	French Air Force	Non-Fatal	Brake Failure-Overrun (AND)
757.	June 3, 1960	F-100D	French Air Force	Non-Fatal	FOD (A/C Destroyed)
758.	June 2, 1960	F-100F	USAF	Non-Fatal	Stall-Touch and Go Landing
759.	June 1, 1960	F-100D	USAF	Non-Fatal	Flight Controls Failure (Hydraulic) (Boyd)
760.	June 1, 1960	F-100D	French Air Force	Non-Fatal	In-Flight Drop Tank Separation (AND)
761.	May 20, 1960	F-100C	USAF	Non-Fatal	Shimmy-Runway Excursion
762.	May 19, 1960	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Overrun (AND)
763.	May 14, 1960	F-100D	French Air Force	Non-Fatal	PIO-Nose Wheel Failure (AND)
764.	May 13, 1960	F-100D	USAF	Non-Fatal	Hit Range Tower
765.	May 12, 1960	F-100D	French Air Force	Fatal	Engine Failure-Turbine Blade Failure
766.	May 10, 1960	F-100F	French Air Force	Non-Fatal	In-Flight Canopy Failure (AND)
767.	May 10, 1960	F-100D	French Air Force	Non-Fatal	Overrun (AND)
768.	May 9, 1960	F-100D	USAF	Fatal	Unknown
769.	May 6, 1960	F-100D	USAF	Non-Fatal	In-Flight Explosion
770.	April 28, 1960	F-100D	French Air Force	Non-Fatal	Afterburner Failure (AND)
771.	April 24, 1960	F-100D	French Air Force	Unknown	Landing Accident
772.	April 20, 1960	F-100D	USAF	Non-Fatal	In-Flight Slat Separation-Hydraulics-LOC
773.	April 20, 1960	F-100C	USAF	Non-Fatal	Engine failure on Final-Crash Landing
774.	April 14, 1960	F-100D	USAF	Fatal	Unknown
775.	April 9, 1960	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Barrier (AND)
776.	April 8, 1960	F-100D	French Air Force	Non-Fatal	Landing Gear Well Fire (AND)
777.	April 6, 1960	F-100	USAF	Fatal	Sabre Dance
778.	April 4, 1960	F-100D	USAF	Non-Fatal	Unknown

#	Date	Version	Operator	Severity	Probable Cause and Remarks
779.	March 29, 1960	F-100D	USAF	Non-Fatal	Engine Flameout (Maneuvering)
780.	March 28, 1960	F-100C	USAF	Fatal	LOC-Base to Final
781.	March 26, 1960	F-100C	USAF	Fatal	Unknown
782.	March 18, 1960	F-100C	USAF	Non-Fatal	Afterburner Failure-In-Flight Fire
783.	March 18, 1960	F-100C	USAF	Unknown	Unknown
784.	March 11, 1960	F-100CA	USAF	Non-Fatal	Unknown
785.	March 8, 1960	F-100C	USAF	Non-Fatal	Unknown
786.	March 8, 1960	F-100C	USAF	Non-Fatal	Unknown
787.	March 5, 1960	F-100D	French Air Force	Fatal	Engine Failure-Hydraulic Failure
788.	March 1, 1960	F-100F	USAF	Fatal	Mid-Air
789.	March 1, 1960	F-100A	USAF	Non-Fatal	Unknown
790.	February 3, 1960	F-100D	French Air Force	Non-Fatal	Afterburner Failure (Aircraft Not Destroyed)
791.	February 3, 1960	F-100D	French Air Force	Non-Fatal	Locked Brake on Takeoff
792.	February 1, 1960	F-100C	USAF	Non-Fatal	Mid-Air (1st Aircraft)
793.	February 1, 1960	F-100F	USAF	Non-Fatal	Mid-Air (2nd Aircraft)
794.	January 28, 1960	F-100D	French Air Force	Non-Fatal	Drag Chute Failure-Overrun
795.	January 16, 1960	F-100C	USAF	Non-Fatal	Unknown
796.	January 13, 1960	F-100C	USAF	Non-Fatal	Tire Failure-Veered Off Runway
797.	January 4, 1960	F-100D	USAF	Fatal	LOC on Final
798.	January 4, 1960	F-100D	USAF	Non-Fatal	Possible Engine Failure
799.	December 28, 1959	F-100D	USAF	Non-Fatal	Abort-Barrier System Failure
800.	December 24, 1959	F-100C	USAF	Non-Fatal	Unknown
801.	December 20, 1959	F-100F	USAF	Unknown	Unknown
802.	December 8, 1959	F-100C	USAF	Non-Fatal	LOC During Dive
803.	November 28, 1959	F-100C	USAF	Non-Fatal	Hit trees On Final-Overrun (AND)
804.	November 27, 1959	F-100C	USAF	Non-Fatal	Unknown
805.	November 25, 1959	F-100C	USAF	Fatal	Flew Into the Ground
806.	November 25, 1959	F-100C	USAF	Non-Fatal	Unknown
807.	November 17, 1959	F-100D	USAF	Non-Fatal	Collision With Aerial Target at Release
808.	November 13, 1959	F-100C	USAF	Non-Fatal	Unknown
809.	November 13, 1959	F-100D	USAF	Unknown	Unknown
810.	October 29, 1959	F-100D	French Air Force	Non-Fatal	Nose-Gear Failure (AND)
811.	October 26, 1959	F-100C	USAF	Non-Fatal	Landing Gear Failure on Touchdown (AND)
812.	October 16, 1959	F-100D	USAF	Non-Fatal	Engine Failure
813.	October 17, 1959	F-100D	USAF	Non-Fatal	Unknown
814.	October 12, 1959	F-100C	USAF	Non-Fatal	LOC After Landing-Runway Excursion
815.	October 12, 1959	F-100C	USAF	Fatal	Engine Failure-Flight Controls Failure
816.	October 2, 1959	F-100C	USAF	Non-Fatal	Engine Failure
817.	October 2, 1959	F-100C	USAF	Unknown	Unknown
818.	October 1, 1959	F-100D	French Air Force	Fatal	Oil System Failure-Engine Failure
819.	September 23, 1959	F-100D	USAF	Unknown	Unknown

#	Date	Version	Operator	Severity	Probable Cause and Remarks
820.	September 16, 1959	F-100C	USAF	Non-Fatal	Inadvertent Gear Extension in Flight (TB Team)
821.	September 9, 1959	F-100D	USAF	Non-Fatal	Ground Accident
822.	September 1, 1959	F-100D	French Air Force	Non-Fatal	In-Flight Drop Tank Separation (AND)
823.	September 1, 1959	F-100C	USAF	Non-Fatal	Unknown
824.	September 1959	F-100D	USAF	Non-Fatal	Engine Failure
825.	August 25, 1959	F-100C	USAF	Non-Fatal	Drag Chute Failure-Barrier (AND)
826.	August 21, 1959	F-100D	USAF	Non-Fatal	Flight Controls Failure
827.	August 17, 1959	F-100C	USAF	Non-Fatal	Unknown
828.	August 13, 1959	F-100F	USAF	Non-Fatal	Unknown
829.	August 12, 1959	F-100C	USAF	Non-Fatal	Engine Failure (5 Civilians Killed)
830.	August 7, 1959	F-100C	USAF	Non-Fatal	Flight Controls Failure (Elevator)
831.	July 8, 1959	F-100C	USAF	Non-Fatal	Engine Failure (Bearing Support)
832.	July 3, 1959	F-100C	USAF	Non-Fatal	Long Touchdown-Aborted Go-Around
833.	June 30, 1959	F-100D	USAF	Fatal (17)	Engine Failure (210 Injured in a School)
834.	June 20, 1959	F-100D	USAF	Non-Fatal	Gear-Up Landing
835.	June 16, 1959	F-100C	USAF	Non-Fatal	Unknown
836.	June 12, 1959	F-100C	USAF	Non-Fatal	Engine Failure (Thunderbirds)
837.	May 31, 1959	F-100C	USAF	Non-Fatal	Hit Tower on High-Speed Pass (AND)
838.	May 26, 1959	F-100C	USAF	Fatal	LOC at Low Altitude-Maneuvering
839.	May 26, 1959	F-100C	USAF	Unknown	Unknown
840.	May 26, 1959	F-100D	USAF	Unknown	Ground Accident
841.	May 15, 1959	F-100D	USAF	Unknown	Crashed at Sea During Ferry Flight (Bermuda)
842.	May 14, 1959	F-100D	USAF	Non-Fatal	Shimmy-Unsuccessful Barrier (AND)
843.	May 12, 1959	F-100D	USAF	Non-Fatal	Engine Fire
844.	May 11, 1959	F-100C	USAF	Unknown	Unknown
845.	May 1, 1959	F-100C	USAF	Fatal	Engine Failure on Takeoff
846.	April 8, 1959	F-100F	USAF	Unknown	Unknown
847.	April 21, 1959	F-100D	USAF	Unknown	Unknown
848.	April 20, 1959	F-100D	USAF	Non-Fatal	Engine Failure-LOC
849.	April 16, 1959	F-100D	French Air Force	Non-Fatal	Drag Chute Failure (AND)
850.	April 15, 1959	F-100F	USAF	Fatal (2)	Drop Tank Separated and Hit Aircraft
851.	April 14, 1959	F-100D	USAF	Non-Fatal	Flight Controls Failure on TO-Hit Barrier
852.	April 11, 1959	F-100D	USAF	Non-Fatal	Engine Fire
853.	April 8, 1959	F-100D	USAF	Unknown	Unknown
854.	April 2, 1959	F-100D	USAF	Non-Fatal	Mid-Air (1st Aircraft)
855.	April 2, 1959	F-100F	USAF	Non-Fatal	Mid-Air (2nd Aircraft) (AND)
856.	March 27, 1959	F-100C	USAF	Non-Fatal	Afterburner Failure
857.	March 26, 1959	F-100D	USAF	Non-Fatal	Destroyed on the Ground (Azores)
858.	March 25, 1959	F-100D	USAF	Non-Fatal	Drag Chute Failure-Barrier (AND)
859.	March 15, 1959	F-100D	USAF	Unknown	Unknown
860.	March 12, 1959	F-100C	USAF	Fatal	Mid-Air-LOC-Spin (Thunderbirds)

#	Date	Version	Operator	Severity	Probable Cause and Remarks
861.	March 12, 1959	F-100C	USAF	Fatal	Crashed on Go-Around After GCA Approach
862.	March 12, 1959	F-100C	USAF	Non-Fatal	LOC After Landing-Runway Excursion
863.	March 12, 1959	F-100C	USAF	Non-Fatal	Crashed on Final
864.	March 12, 1959	F-100C	USAF	Non-Fatal	Engine Failure (28,000 Ft.)
865.	March 10, 1959	F-100C	USAF	Non-Fatal	Undershoot (Thunderbirds) (AND)
866.	March 10, 1959	F-100C	USAF	Non-Fatal	LOC on landing (Jet Wash) Overrun
867.	March 6, 1959	F-100C	USAF	Non-Fatal	Engine Fire-Fuel Leakage
868.	March 6, 1959	F-100D	USAF	Non-Fatal	Unknown
869.	March 3, 1959	F-100D	USAF	Fatal	Unknown
870.	February 27, 1959	F-100D	USAF	Non-Fatal	Unknown
871.	February 24, 1959	F-100F	USAF	Non-Fatal	Unknown
872.	February 9, 1959	F-100D	USAF	Non-Fatal	Afterburner Failure-Flameout
873.	February 8, 1959	F-100D	USAF	Non-Fatal	Unknown
874.	February 3, 1959	F-100C	USAF	Non-Fatal	Unknown
875.	February 2, 1959	F-100C	USAF	Non-Fatal	Unknown
876.	February 1, 1959	F-100C	USAF	Non-Fatal	LOC After Landing-Runway Excursion (Side)
877.	January 28, 1959	F-100D	USAF	Non-Fatal	Unknown
878.	January 22, 1959	F-100D	USAF	Non-Fatal	Engine Failure (Explosion)-Fire
879.	January 22, 1959	F-100D	USAF	Non-Fatal	Unknown
880.	January 19, 1959	F-100A	USAF	Non-Fatal	Mid-Air (1st Aircraft)
881.	January 19, 1959	F-100A	USAF	Non-Fatal	Mid-Air (2nd Aircraft)
882.	January 19, 1959	F-100F	USAF	Non-Fatal	Mid-Air (1st Aircraft)
883.	January 19, 1959	F-100F	USAF	Non-Fatal	Mid-Air (2nd Aircraft)
884.	January 18, 1959	F-100C	USAF	Fatal	LOC-Spin (Adverse Yaw)
885.	January 12, 1959	F-100A	USAF	Non-Fatal	Explosion on Takeoff
886.	January 9, 1959	F-100D	USAF	Fatal	Unknown
887.	January 8, 1959	F-100D	USAF	Fatal	Unknown
888.	January 6, 1959	F-100D	USAF	Fatal	Unknown
889.	January 5, 1959	F-100D	USAF	Fatal	Unknown
890.	1959	F-100C	USAF	Non-Fatal	Engine Flameout-Fuel Manifold (Thunderbirds)
891.	December 29, 1958	F-100D	USAF	Fatal	Engine Fire After TO (1 Killed on the Ground)
892.	December 22, 1958	F-100F	USAF	Non-Fatal	Unknown
893.	December 18, 1958	F-100C	USAF	Non-Fatal	LOC on Landing-Drag Chute-(Crosswind)
894.	December 12, 1958	F-100D	USAF	Non-Fatal	Unknown
895.	December 12, 1958	F-100D	USAF	Non-Fatal	Unknown
896.	December 12, 1958	F-100D	USAF	Non-Fatal	Unknown
897.	December 11, 1958	F-100F	USAF	Fatal (2)	Hit Ground During Low Level Flight
898.	December 11, 1958	F-100D	USAF	Non-Fatal	Unknown
899.	December 8, 1958	F-100C	USAF	Non-Fatal	Spin
900.	December 8, 1958	F-100C	USAF	Non-Fatal	Afterburner Failure on Takeoff
901.	December 5, 1958	F-100D	USAF	Non-Fatal	Unknown

#	Date	Version	Operator	Severity	Probable Cause and Remarks
902.	December 3, 1958	F-100C	USAF	Non-Fatal	Flameout-Fuel Starvation (1st Aircraft)
903.	December 3, 1958	F-100C	USAF	Non-Fatal	Flameout-Fuel Starvation (2nd Aircraft)
904.	December 2, 1958	F-100C	USAF	Non-Fatal	Engine Failure-Cockpit Smoke
905.	December 1, 1958	F-100D	USAF	Fatal	Unknown
906.	November 25, 1958	F-100F	USAF	Non-Fatal	Unknown
907.	November 22, 1958	F-100F	USAF	Fatal	Unknown
908.	November 6, 1958	F-100F	USAF	Non-Fatal	LOC-Maneuvering
909.	October 29, 1958	F-100D	USAF	Fatal (2)	Engine Fire-Residential Area (Pilot OK)
910.	October 28, 1958	F-100D	USAF	Non-Fatal	Unknown
911.	October 20, 1958	F-100D	USAF	Non-Fatal	Horizontal Stabilizer Failure
912.	October 20, 1958	F-100F	USAF	Non-Fatal	Ground Accident
913.	October 17, 1958	F-100D	French Air Force	Non-Fatal	Oil System Loss
914.	October 15, 1958	F-100D	USAF	Non-Fatal	Unknown
915.	October 14, 1958	F-100D	USAF	Non-Fatal	Unknown
916.	October 10, 1958	F-100F	USAF	Non-Fatal	Unknown
917.	October 9, 1958	F-100F	USAF	Fatal	Unknown
918.	October 8, 1958	F-100D	USAF	Fatal	Flew Into the Ground
919.	October 7, 1958	F-100F	USAF	Non-Fatal	Ground Fire
920.	October 1, 1958	F-100C	USAF	Non-Fatal	Unknown
921.	September 28, 1958	F-100D	USAF	Non-Fatal	Unknown
922.	September 23, 1958	F-100D	USAF	Non-Fatal	Unknown
923.	September 19, 1958	F-100D	USAF	Fatal	Drag Chute Failure-Overrun-Side Excursion
924.	September 19, 1958	F-100D	USAF	Non-Fatal	Unknown
925.	September 18, 1958	F-100D	USAF	Non-Fatal	Engine Failure (AC Failure in Addition)
926.	September 18, 1958	F-100A	USAF	Fatal	Possible Pilot Incapacitation
927.	September 17, 1958	F-100D	USAF	Non-Fatal	Unknown
928.	September 15, 1958	F-100D	USAF	Fatal	Unknown
929.	September 11, 1958	F-100C	USAF	Non-Fatal	Unknown
930.	September 10, 1958	F-100D	USAF	Non-Fatal	Unknown
931.	September 8, 1958	F-100D	USAF	Fatal	Unknown
932.	September 6, 1958	F-100D	USAF	Non-Fatal	Unknown
933.	September 4, 1958	F-100D	USAF	Non-Fatal	Unknown
934.	August 27, 1858	F-100D	USAF	Non-Fatal	Hydraulic Failure
935.	August 26, 1958	F-100C	USAF	Non-Fatal	Unknown
936.	August 26, 1958	F-100D	USAF	Non-Fatal	Unknown
937.	August 23, 1958	F-100D	USAF	Non-Fatal	Unknown
938.	August 22, 1958	F-100D	USAF	Fatal	Unknown
939.	August 18, 1958	F-100D	USAF	Non-Fatal	Throttle Failure
940.	August 11, 1958	F-100D	USAF	Non-Fatal	Flight Controls Failure
941.	August 8, 1958	F-100D	USAF	Non-Fatal	Nose Tire Burst on Takeoff (AND)
942.	August 8, 1958	F-100D	USAF	Non-Fatal	Engine FOD on TO (FOD)-Barrier-Fire

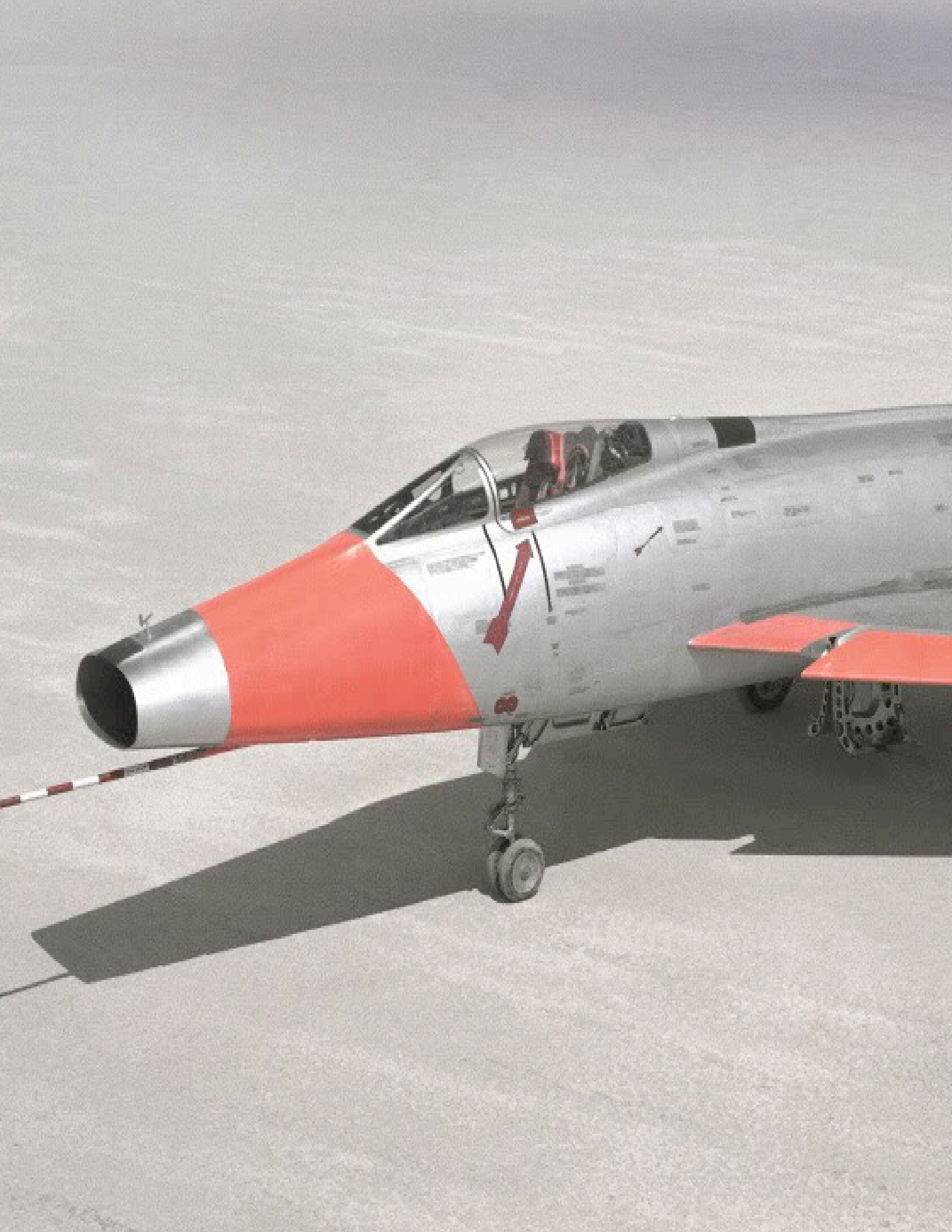
#	Date	Version	Operator	Severity	Probable Cause and Remarks
943.	August 7, 1958	F-100D	USAF	Non-Fatal	Unknown
944.	August 7, 1958	F-100D	USAF	Non-Fatal	Unknown
945.	August 4, 1958	F-100A	USAF	Non-Fatal	Runway Excursion (Side) on Landing (AND)
946.	July 31, 1958	F-100C	USAF	Non-Fatal	LOC on Roll Out (AND)
947.	July 30, 1958	F-100D	USAF	Fatal	Flew Into the Ground
948.	July 28, 1958	F-100D	USAF	Non-Fatal	Ground Accident
949.	July 25, 1958	F-100A	USAF	Non-Fatal	Afterburner Failure After Takeoff
950.	July 25, 1958	F-100D	USAF	Non-Fatal	Unknown
951.	July 25, 1958	F-100FD	USAF	Fatal	Unknown
952.	July 24, 1958	F-100D	USAF	Non-Fatal	Unknown
953.	July 22, 1958	F-100D	USAF	Non-Fatal	Unknown
954.	July 22, 1958	F-100D	USAF	Fatal	Unknown
955.	July 21, 1958	F-100D	USAF	Fatal	Unknown
956.	July 22, 1958	F-100C	USAF	Non-Fatal	Tire Failure After Landing (AND)
957.	July 20, 1958	F-100D	USAF	Fatal	LOC-Stall on Final
958.	July 19, 1958	F-100D	USAF	Non-Fatal	Unknown
959.	July 18, 1958	F-100D	USAF	Non-Fatal	LOC on Go-Around (Sabre Dance)
960.	July 17, 1958	F-100D	USAF	Non-Fatal	Unknown
961.	July 16, 1958	F-100C	USAF	Fatal	Engine Failure (High Oil Pressure)
962.	July 16, 1958	F-100C	USAF	Fatal	Unknown
963.	July 16, 1958	F-100D	USAF	Non-Fatal	Unknown
964.	July 12, 1958	F-100C	USAF	Non-Fatal	Mid-Air (1st Aircraft)
965.	July 12, 1958	F-100C	USAF	Fatal	Mid-Air (2nd Aircraft)
966.	July 10, 1958	F-100C	USAF	Fatal	Unknown
967.	July 9, 1958	F-100D	USAF	Non-Fatal	Engine Failure (#1 Turbine Wheel Disintegration)
968.	July 9, 1958	F-100D	USAF	Non-Fatal	Engine Failure-Compressor Stall
969.	July 8, 1958	F-100C	USAF	Non-Fatal	Unknown
970.	July 8, 1958	F-100D	USAF	Non-Fatal	Engine Failure
971.	July 8, 1958	F-100C	USAF	Non-Fatal	Engine Failure
972.	July 5, 1958	F-100C	USAF	Fatal	Mid-Air (1st Aircraft)
973.	July 5, 1958	F-100C	USAF	Fatal	Mid-Air (2nd Aircraft)
974.	July 3, 1958	F-100C	USAF	Non-Fatal	Tire Burst-(AND)
975.	July 2, 1958	F-100D	USAF	Fatal	Unknown (2 People Killed on the Ground)
976.	June 30, 1958	F-100F	USAF	Fatal	Unknown
977.	June 28, 1958	F-100D	USAF	Non-Fatal	Unknown
978.	June 27, 1958	F-100C	USAF	Non-Fatal	Hydraulic Failure (Utility)-Runway Excursion
979.	June 26, 1958	F-100C	USAF	Non-Fatal	Flight Controls Failure (Hydraulics)
980.	June 26, 1958	F-100D	USAF	Non-Fatal	Unknown
981.	June 24, 1958	F-100D	USAF	Fatal	Unknown
982.	June 17, 1958	F-100D	USAF	Non-Fatal	LOC After Landing
983.	June 16, 1958	F-100C	USAF	Non-Fatal	Unknown

#	Date	Version	Operator	Severity	Probable Cause and Remarks
984.	June 16, 1958	F-100C	USAF	Non-Fatal	Mid-Air (With B-57)
985.	June 12, 1958	F-100D	USAF	Fatal	Engine Failure
986.	June 9, 1958	F-100C	USAF	Non-Fatal	Engine Failure
987.	June 5, 1958	F-100F	French Air Force	Non-Fatal	LOC on Touchdown
988.	June 3, 1958	F-100C	USAF	Non-Fatal	Afterburner Failure After Takeoff
989.	May 27, 1958	F-100C	USAF	Non-Fatal	Hit Trees at Low Level-Return for Landing
990.	May 27, 1958	F-100D	USAF	Fatal	Flight Control Failure
991.	May 27, 1958	F-100F	USAF	Fatal (2)	Unknown
992.	May 25, 1958	F-100F	USAF (NM ANG)	Non-Fatal	Unknown
993.	May 23, 1958	F-100C	USAF	Non-Fatal	LOC After Touchdown (AND)
994.	May 22, 1958	F-100D	USAF	Non-Fatal	Spin
995.	May13, 1958	F-100D	USAF	Unknown	Unknown
996.	May13, 1958	F-100C	USAF	Non-Fatal	Unknown
997.	May 11, 1958	F-100C	USAF	Non-Fatal	Engine Fire
998.	May 9, 1958	F-100F	USAF	Fatal (2)	Unknown
999.	May 8, 1958	F-100D	USAF	Non-Fatal	Unknown
1000.	May 7, 1958	F-100D	USAF	Non-Fatal	Unknown
1001.	May 6, 1958	F-100C	USAF	Fatal	Hit Water During Low Altitude Roll Maneuver
1002.	May 5, 1958	F-100D	USAF	Non-Fatal	Engine Failure at Takeoff
1003.	April 30, 1958	F-100F	USAF	Non-Fatal	Unknown
1004.	April 29, 1958	F-100D	USAF	Non-Fatal	Drag Chute Failure-Barrier (AND)
1005.	April 25, 1958	F-100F	USAF	Non-Fatal	Unknown
1006.	April 23, 1958	F-100D	USAF	Non-Fatal	Drop Tank Separated-Aborted Takeoff-Fire
1007.	April 23, 1958	F-100C	USAF	Non-Fatal	Drag Chute Failure-Overrun
1008.	April 21, 1958	F-100F	USAF	Non-Fatal	Unknown
1009.	April 21, 1958	F-100D	USAF	Non-Fatal	Unknown
1010.	April 21, 1958	F-100F	USAF	Fatal (47)	Mid-Air (United DC-7- UAL 736)
1011.	April 23, 1958	F-100C	USAF	Non-Fatal	In-Flight Fire-Vent Overheat
1012.	April 18, 1958	F-100D	USAF	Fatal	Engine Failure on Final
1013.	April 17, 1958	F-100A	USAF	Non-Fatal	Drag Chute Failure-Barrier
1014.	April 16, 1958	F-100C	USAF	Non-Fatal	Engine Failure (Power Loss)
1015.	April 15, 1958	F-100D	USAF	Fatal	Over Rotation
1016.	April 15, 1958	F-100F	USAF	Non-Fatal	Unknown
1017.	April 14, 1958	F-100D	USAF	Fatal	Electrical Failure
1018.	April 14, 1958	F-100C	USAF	Non-Fatal	Unknown
1019.	April 14, 1958	F-100F	USAF	Non-Fatal	Unknown
1020.	April 13, 1958	F-100C	USAF	Fatal	Unknown
1021.	April 11, 1958	F-100D	USAF	Non-Fatal	Zero Length Rocket Tests
1022.	April 10, 1958	F-100D	USAF	Non-Fatal	Mechanical Failure-LOC
1023.	April 8, 1958	F-100C	USAF	Fatal	Mid-Air (1st Aircraft)
1024.	April 8, 1958	F-100C	USAF	Fatal	Mid-Air (2nd Aircraft)

#	Date	Version	Operator	Severity	Probable Cause and Remarks
1025.	April 7, 1958	F-100D	USAF	Non-Fatal	Engine Failure
1026.	March 24, 1958	F-100C	USAF	Non-Fatal	Drag Chute Failure-Barrier
1027.	March 24, 1958	F-100D	USAF	Non-Fatal	Unknown
1028.	March 22, 1958	F-100D	USAF	Fatal	Mid-Air
1029.	March 21, 1958	F-100D	USAF	Non-Fatal	Drag Chute Failure-Runway Excursion
1030.	March 19, 1958	F-100D	USAF	Non-Fatal	Unknown
1031.	March 17, 1958	F-100F	USAF	Non-Fatal	Engine Flameout
1032.	March 16, 1958	F-100F	USAF	Non-Fatal	Unknown
1033.	March 13, 1958	F-100C	USAF	Non-Fatal	Engine Failure
1034.	March 11, 1958	F-100D	USAF	Non-Fatal	Engine Failure
1035.	March 10, 1958	F-100A	USAF	Non-Fatal	In-Flight Gear Door Separation (AND)
1036.	March 8, 1958	F-100D	USAF	Non-Fatal	Unknown
1037.	March 8, 1958	F-100D	USAF	Non-Fatal	Unknown
1038.	March 7, 1958	F-100D	USAF	Non-Fatal	Hydraulic Failure (Utility)
1039.	March 4, 1958	F-100C	USAF	Non-Fatal	Compressor Stall-Engine Failure
1040.	March 1, 1958	F-100D	USAF	Non-Fatal	Landing gear Collapsed on Landing
1041.	February 26, 1958	F-100C	USAF	Non-Fatal	Afterburner Failure-Barrier (Unsuccessful)
1042.	February 26, 1958	F-100F	USAF	Non-Fatal	Unknown
1043.	February 24, 1958	F-100D	USAF	Non-Fatal	Unknown
1044.	February 24, 1958	F-100D	USAF	Non-Fatal	Unknown
1045.	February 17, 1958	F-100A	USAF	Non-Fatal	Brake Failure After Landing (AND)
1046.	February 17, 1958	F-100A	USAF	Non-Fatal	Hit By Aircraft With Brake Failure (AND)
1047.	February 13, 1958	F-100D	USAF	Non-Fatal	Engine Fire on Takeoff
1048.	February 13, 1958	F-100D	USAF	Non-Fatal	Engine Failure
1049.	February 11, 1958	F-100D	USAF	Fatal	Unknown
1050.	February 10, 1958	F-100D	USAF	Non-Fatal	Drop Tank Separated in Flight (A/C Damaged)
1051.	February 8, 1958	F-100D	USAF	Fatal	Afterburner Failure-Barrier (Unsuccessful)
1052.	February 2, 1958	F-100D	USAF	Fatal	Unknown
1053.	January 27, 1958	F-100C	USAF	Non-Fatal	Drag Chute Failure Brake Failure-Side Excursion
1054.	January 25, 1958	F-100D	USAF	Non-Fatal	Unknown
1055.	January 21, 1958	F-100D	USAF	Non-Fatal	PIO on Takeoff Followed by Hard Landing
1056.	January 20, 1958	F-100D	USAF	Non-Fatal	Engine Failure-Fire
1057.	January 20, 1958	F-100C	USAF	Non-Fatal	Drag Chute Failure-Utility Failure-Barrier
1058.	January 18, 1958	F-100D	USAF	Non-Fatal	Engine Failure
1059.	January 18, 1958	F-100D	USAF	Non-Fatal	Flameout-Fuel Starvation
1060.	January 18, 1958	F-100D	USAF	Fatal	Gyro Failure-LOC
1061.	January 14, 1958	F-100D	USAF	Non-Fatal	Unknown
1062.	January 13, 1958	F-100D	USAF	Non-Fatal	LOC on Touchdown
1063.	January 10, 1958	F-100D	USAF	Non-Fatal	Unknown
1064.	January 8, 1958	F-100D	USAF	Fatal	CFIT (Weather) (1st Aircraft)
1065.	January 8, 1958	F-100D	USAF	Fatal	CFIT (Weather) (2nd Aircraft)

#	Date	Version	Operator	Severity	Probable Cause and Remarks
1066.	January 6, 1958	F-100	USAF	Non-Fatal	Engine Failure
1067.	January 5, 1958	F-100D	USAF	Non-Fatal	Undershoot-Runway Excursion
1068.	January 2, 1958	F-100A	USAF	Non-Fatal	Mid-Air Collision With Arial Target
1069.	December 30, 1957	F-100D	USAF	Non-Fatal	Engine Failure-Flight Controls/Electrical Failure
1070.	December 18, 1957	F-100D	USAF	Fatal (3)	Unknown (3 People on the Ground)
1071.	December 17, 1957	F-100D	USAF	Fatal(2)	Unknown (2 Civilian Fatalities)
1072.	December 17, 1957	F-100D	USAF	Non-Fatal	Mid-Air (1st Aircraft)
1073.	December 17, 1957	F-100D	USAF	Fatal	Mid-Air (2nd Aircraft)
1074.	December 16, 1957	F-100D	USAF	Non-Fatal	Mechanical-Post-Maintenance Flight
1075.	December 16, 1957	F-100D	USAF	Fatal	LOC on Final
1076.	December 11, 1957	F-100C	USAF	Non-Fatal	Unknown
1077.	December 10, 1957	F-100C	USAF	Non-Fatal	Unknown
1078.	December 6, 1957	F-100D	USAF	Non-Fatal	Drag Chute Failure-Barrier (AND)
1079.	December 5, 1957	F-100D	USAF	Fatal	Engine Fire (Failed Ejection and Water Entry)
1080.	December 3, 1957	F-100D	USAF	Non-Fatal	Landing Gear Failed to Extend
1081.	December 2, 1957	F-100D	USAF	Fatal	Engine Failure
1082.	November 27, 1957	F-100C	USAF	Non-Fatal	LOC Maneuvering-Spin (Adverse Yaw)
1083.	November 19, 1957	F-100A	USAF	Non-Fatal	Afterburner Failure-Abort-Overrun
1084.	November 18, 1957	F-100D	USAF	Non-Fatal	Abort-Engine Failure-Barrier (AND)
1085.	November 17, 1957	F-100	USAF	Non-Fatal	Unknown
1086.	November 17, 1957	F-100C	USAF	Fatal	LOC on GCA Approach
1087.	November 14, 1957	F-100C	USAF	Fatal (5)	Cockpit Fire After TO (5 Civilians Fatalities)
1088.	November 10, 1957	F-100C	USAF	Non-Fatal	In-Flight Tank Separation-Wing Damage (AND)
1089.	November 7, 1957	F-100C	USAF	Non-Fatal	Nose Gear Collapse After Landing
1090.	November 6, 1957	F-100D	USAF	Non-Fatal	PIO on Landing (A/C Seriously Damaged)
1091.	October 30, 1957	F-100A	USAF	Non-Fatal	Flameout-Fuel Starvation
1092.	October 24, 1957	F-100A	USAF	Fatal	Unknown
1093.	October 23, 1957	F-100A	USAF	Non-Fatal	Mid-Air With Aerial Target
1094.	October 23, 1957	F-100D	USAF	Non-Fatal	Afterburner Failure-Engine Failure
1095.	October 18, 1957	F-100C	USAF	Non-Fatal	Possible Fuel Starvation During IFR Approach
1096.	October 28, 1957	F-100D	USAF	Fatal	CSD Failure-Low Altitude Ejection
1097.	October 20, 1957	F-100	USAF	Non-Fatal	Mechanical Failure
1098.	October 20, 1957	F-100	USAF	Non-Fatal	Oil System Failure-Engine Failure-Fire
1099.	October 18, 1957	F-100C	USAF	Non-Fatal	Engine Failure
1100.	October 3, 1957	F-100F	USAF	Fatal (2)	Unknown
1101.	October 2, 1957	F-100D	USAF	Fatal	LOC-Maneuvering
1102.	September 28, 1957	F-100D	USAF	Non-Fatal	Engine Failure
1103.	September 26, 1957	F-100C	USAF	Fatal	Possible LOC-Yaw Damper Failure
1104.	September 23, 1957	F-100D	USAF	Fatal	LOC on Final
1105.	September 23, 1957	F-100D	USAF	Fatal	LOC on Final-Pilot Disorientation
1106.	September 21, 1957	F-100D	USAF	Non-Fatal	Engine Failure

#	Date	Version	Operator	Severity	Probable Cause and Remarks
1107.	September 18, 1957	F-100D	USAF	Non-Fatal	Landing Gear Collapse-Runway Excursion
1108.	September 18, 1957	F-100D	USAF	Non-Fatal	Undershoot-All Gears Collapsed
1109.	September 17, 1957	F-100D	USAF	Non-Fatal	LOC on Landing-Hydraulic Valve
1110.	September 17, 1957	F-100A	USAF	Non-Fatal	Engine Partial Power Loss-Flight Control Failure
1111.	September 16, 1957	F-100D	USAF	Fatal	LOC in Clouds
1112.	September 16, 1957	F-100C	USAF	Non-Fatal	Aborted Takeoff-Afterburner Failure
1113.	September 16, 1957	F-100D	USAF	Fatal	LOC in Cloud After Takeoff
1114.	September 16, 1957	F-100C	USAF	Non-Fatal	Afterburner Failure-Abort-Overrun
1115.	September 15, 1957	F-100D	USAF	Non-Fatal	LOC on Go-Around
1116.	September 4, 1957	F-100C	USAF	Non-Fatal	LOC on Landing
1117.	September 3, 1957	F-100C	USAF	Non-Fatal	Engine Failure-Fire
1118.	August 29, 1957	F-100D	USAF	Non-Fatal	Drag Chute Failure-Barrier
1119.	August 13, 1957	F-100C	USAF	Non-Fatal	Unknown
1120.	August 12, 1957	F-100C	USAF	Non-Fatal	Ground Collision During Taxing (Brake Failure)
1121.	August 10, 1957	F-100C	USAF	Non-Fatal	Engine Failure
1122.	August 9, 1957	F-100C	USAF	Non-Fatal	Aborted Takeoff-Failed Barrier Arrestment
1123.	August 9, 1957	F-100A	USAF	Non-Fatal	Engine Failure
1124.	August 5, 1957	F-100D	USAF	Non-Fatal	LOC After Abort
1125.	August 1, 1957	F-100A	USAF	Non-Fatal	Nose Gear Failure on Touchdown
1126.	July 25, 1957	F-100C	USAF	Fatal	Possible Pilot Incapacitation
1127.	July 23, 1957	F-100D	USAF	Non-Fatal	Drag Chute Failure/Brake Failure-Barrier
1128.	July 23, 1957	F-100C	USAF	Non-Fatal	LOC After Landing (AND)
1129.	July 17, 1957	F-100D	USAF	Non-Fatal	Shimmy-Nose Gear Failure
1130.	July 17, 1957	F-100C	USAF	Non-Fatal	LOC-Flight Controls Failure
1131.	July 10, 1957	F-100D	USAF	Non-Fatal	Flight Control Failure on TO-Overrun (AND)
1132.	July 6, 1957	F-100D	USAF	Non-Fatal	Engine Failure
1133.	July 2, 1957	F-100A	USAF	Fatal	Unknown
1134.	July 1, 1957	F-100A	USAF	Non-Fatal	Compressor Stall
1135.	June 13, 1957	F-100D	USAF	Non-Fatal	PIO on Landing-Gear Collapse
1136.	May 28, 1957	F-100C	USAF	Fatal	LOC Base to Final-Stall
1137.	May 27, 1957	F-100C	USAF	Non-Fatal	Flight Controls Failure (Hydraulic Leakage)
1138.	May 19, 1957	F-100C	USAF	Non-Fatal	In-Flight Drop Tank Separation (Damage)
1139.	May 16, 1957	F-100D	USAF	Non-Fatal	Drag Chute Failure-Barrier Unsuccessful
1140.	April 23, 1957	F-100D	USAF	Non-Fatal	Drag Chute Failure-Overrun (AND)
1141.	April 21, 1957	F-100D	USAF	Fatal	Mid-Air
1142.	April 19, 1957	F-100A	USAF	Non-Fatal	Compressor Stall-Engine Failure
1143.	April 9, 1957	TF-100C	USAF	Non-Fatal	LOC-Spin-In-Flight Break-Up
1144.	March 27, 1957	F-100D	USAF	Non-Fatal	Possible Engine Fire (Pilot Ejected Early)
1145.	March 6, 1957	F-100C	USAF	Non-Fatal	Unknown
1146.	February 28, 1957	F-100C	USAF	Non-Fatal	Engine Failure (Explosion)
1147.	February 26, 1957	F-100D	USAF	Non-Fatal	Bird Strike

#	Date	Version	Operator	Severity	Probable Cause and Remarks
1148.	February 26, 1957	F-100C	USAF	Non-Fatal	LOC After Touchdown-Tire Burst (AND)
1149.	February 21, 1957	F-100C	USAF	Fatal	LOC-Stall Base to Final
1150.	February 18, 1957	F-100A	USAF	Non-Fatal	Hard Landing at Night (AND)
1151.	February 17, 1957	F-100C	USAF	Non-Fatal	Drag Chute Failure-Barrier (AND)
1152.	February 14, 1957	F-100A	USAF	Non-Fatal	Compressor Stall-Engine Failure
1153.	February 8, 1957	F-100D	USAF	Non-Fatal	Engine Failure
1154.	February 7, 1957	F-100C	USAF	Non-Fatal	Drag Chute Failure-Barrier (AND)
1155.	January 23, 1957	F-100D	USAF	Non-Fatal	In-Flight Drag Chute Separation-Overrun
1156.	January 21, 1957	F-100D	USAF	Non-Fatal	Engine Failure After Stall Practice
1157.	January 18, 1957	F-100C	USAF	Fatal	Engine Failure-Flight Controls Failure on Final
1158.	January 15, 1957	F-100C	USAF	Non-Fatal	Hard Landing-Wheel Failure-Run. Excursion
1159.	January 8, 1957	F-100D	USAF	Fatal	LOC in the Pattern (Emergency)
1160.	January 5, 1957	F-100C	USAF	Non-Fatal	Ground Damaged by Debris From Exploding T-33
1161.	January 3, 1957	F-100C	USAF	Fatal	Engine Failure
1162.	November 23, 1956	F-100D	USAF	Non-Fatal	Crashed on Takeoff
1163.	November 23, 1956	F-100D	USAF	Non-Fatal	Engine Power Loss-Hard Landing
1164.	November 20, 1956	F-100C	USAF	Non-Fatal	Emergency Fuel ON Landing-Overrun-Barrier
1165.	November 16, 1956	F-100	USAF	Non-Fatal	Lost At Sea (Unknown)
1166.	October 27, 1956	F-100C	USAF	Non-Fatal	Engine Flameout-Fuel Starvation
1167.	October 25, 1956	F-100	USAF	Unknown	Unknown
1168.	October 22, 1956	F-100A	USAF	Non-Fatal	Engine Failure
1169.	October 9, 1956	F-100D	USAF	Non-Fatal	Engine Failure
1170.	October 2, 1956	F-100A	USAF	Non-Fatal	Engine Failure on Takeoff
1171.	October 2, 1956	F-100A	USAF	Non-Fatal	Engine Failure
1172.	October 1, 1956	F-100C	USAF	Non-Fatal	Engine Fire-Hydraulic Failure
1173.	September 21, 1956	F-100C	USAF	Unknown	Engine Failure-Hydraulic Failure
1174.	September 14, 1956	F-100C	USAF	Non-Fatal	Shimmy-Nose Gear Failure (AND)
1175.	August 10, 1956	F-100A	USAF	Non-Fatal	Compressor Stall-Engine Failure
1176.	July 23, 1956	F-100C	USAF	Non-Fatal	Landing Accident
1177.	July 17, 1956	F-100C	USAF	Non-Fatal	Afterburner Failure (Thunderbirds)
1178.	July 11, 1956	F-100C	USAF	Non-Fatal	Engine Failure and Fire (Oil Loss)
1179.	May 31, 1956	F-100C	USAF	Non-Fatal	Engine Failure (Overrun)
1180.	April 17, 1956	F-100C	USAF	Fatal	High-Speed LOC on Takeoff-Overrun
1181.	April 14, 1956	F-100C	USAF	Non-Fatal	Fire Aft of the Cockpit-Flight Controls Failure
1182.	March 10, 1956	F-100C	USAF	Non-Fatal	Undershoot
1183.	January 10, 1956	F-100C	USAF	Fatal	LOC-Sabre Dance (Filmed)
1184.	November 20, 1955	F-100C	USAF	Non-Fatal	Landing Accident (Damaged)
1185.	October 14, 1955	F-100C	USAF	Fatal	Engine Fire (Hot Air Leak)
1186.	September 5, 1955	F-100A	USAF	Non-Fatal	Flameout-Fuel Syst. Malfunction-Undershoot
1187.	August 25, 1955	F-100A	USAF	Fatal	In-Flight Fire Forward Compressor Section
1188.	August 17, 1955	F-100C	USAF	Non-Fatal	Total Engine Oil Loss (AND)

#	Date	Version	Operator	Severity	Probable Cause and Remarks
1189.	August 12, 1955	F-100A	USAF	Non-Fatal	Fuel System Failure (Flameout)
1190.	August 10, 1955	F-100C	USAF	Non-Fatal	LOC at Altitude-Spin (Adverse Yaw)
1191.	July 28, 1955	F-100A	USAF	Non-Fatal	Drag Chute Failure-Utility Loss-Overrun
1192.	July 7, 1955	F-100A	USAF	Non-Fatal	LOC-Spin (Bob Hoover)
1193.	June 23, 1955	F-100A	USAF	Non-Fatal	Afterburner Failure-Explosion-(Pig Tails)
1194.	June 23, 1955	F-100A	USAF	Non-Fatal	LOC-Maneuvering
1195.	June 18, 1955	RF-100A	USAF	Unknown	Unknown
1196.	March 12, 1955	F-100C	USAF	Fatal	Unknown (Thunderbirds)
1197.	February 26, 1955	F-100A	USAF	Non-Fatal	Flight Controls Failure (Hydraulic)
1198.	November 9, 1954	F-100A	USAF	Non-Fatal	Flight Controls Failure (Hydraulic)
1199.	November 8, 1954	F-100A	USAF	Fatal	LOC-In-Flight Break-Up (RAF Pilot)
1200.	October 27, 1954	F-100A	USAF	Non-Fatal	Engine Failure-Emergency Landing (AND)
1201.	October 14, 1954	F-100A	USAF	Fatal	Unknown
1202.	October 12, 1954	F-100A	USAF	Fatal	LOC-In-Flight Break-Up (George Welch)
1203.	September 11, 1954	F-100A	USAF	Non-Fatal	LOC
1204.	September 8, 1954	F-100A	USAF	Non-Fatal	Engine/Hydraulic/Brake Failure (S. Crossfield)
1205.	1954	F-100A	USAF	Fatal	LOC
1206.	April 7, 1954	YF-100A	USAF	Non-Fatal	Hard Landing