DOCKETED USNRC

2003 FEB 25 PM 2: 30

AIRCRAFT ACCIDENT INVESTIGATION

OFFICE OF THE SECRETARY RULEMAKINGS AND ADJUDICATIONS STAFF

AUTHORITY: Under the provisions of Air Force Regulation (AFR) 110-14, the Ninth Air Force Commander appointed Major Ernest L. Norsworthy, Jr., to conduct an Aircraft Accident Investigation of the F-16C (90-0749) accident which occurred 40 nautical miles southwest of Nellis AFB, NV, on 31 May 1992. The investigation was conducted from 8 July 1992 to 20 July 1992. Technical advisors were Captain John W. Sant (Operations), Captain Dwaine K. Marshall (Maintenance), Captain Paul A. Young (Flight Surgeon), Captain Nancy A. Ignasiak (Legal), and Technical Sergeant Donald W. Brown, Jr. (Administrative Support) (Y-1, Y-2).

<u>PURPOSE</u>: An aircraft investigation is convened under AFR 110-14 to collect and preserve all relevant evidence for possible use in claims, litigation, disciplinary actions, adverse administrative proceedings, or for any other purposes deemed appropriate by competent authority. The investigation is to obtain factual information and is not intended to determine the cause of the accident. In addition, the aircraft accident investigation board cannot draw conclusions nor make recommendations. This report is available for public dissemination under the Freedom of Information Act (5 U.S.C. 552) and AFR 12-30.

SUMMARY OF FACTS

- 1. History of Flight: On 31 May 92, Captain James Bierstine, Jr., was scheduled to lead First Lieutenant Scott L. Gierat on a surface attack mission while deployed to Nellis AFB, NV. Filed under the call sign Lion 41 (Wingman Lion 42), the flight departed Nellis AFB, NV, at 1040 Pacific Daylight Time (PDT) enroute to the Air Warrior Complex (A-1, K-1, V-1, V-2). After reaching the complex, the flight established communications with the FAC, Rookie 71. While holding at the IP waiting to initiate the second attack, Lion 42 experienced smoke and fumes in the cockpit. An immediate turn toward Nellis AFB was accomplished. While enroute to Nellis AFB, the engine seized (A-1, J-1 thru J-10, V-1, V-2). After turning the aircraft toward an uninhabited area, the pilot ejected safely and the aircraft crashed and was destroyed (A-1, V-1, V-2). The crash site was 40 NM southwest of Nellis AFB, coordinates 35 degrees 57.5 minutes north latitude, 115 degrees 45.5 minutes west longitude (A-1, R-1, R-2).
- 2. <u>Mission</u>: The mission was scheduled and planned as a close air support (CAS) mission in support of Air Warrior Exercise 92-9 (K-1, V-1, V-2). The planned profile included single-ship takeoffs for a 20-second trail departure, standard FLEX departure, descent into the Air Warrior Complex, one tactical attack dropping all six inert MK-82s, followed by multiple simulated tactical attacks where no ordnance was dropped, then return to Nellis AFB for landing (V-1, V-2).

- 3. <u>Briefing and Pre-flight</u>: Captain Bierstine and First Lieutenant Gierat arrived for duty between 0730 and 0800 hours. According to their testimony, both crew members had adequate crew rest (V-1, V-2). Both members of the flight participated in the mission planning the day prior. Captain Bierstine paid particular attention to the CAS scenario. The briefing began at 0830 local and was comprehensive, and both flight members reported clear understanding of the planned events and their own responsibilities. Ground operations, taxi, and pre-takeoff procedures were conducted without significant events (K-1, V-1, V-2). Weather was VFR and there were no significant NOTAMS (V-1, V-2, W-1).
- 4. Flight: Lion 41 took off at approximately 1040 PDT and flew the FLEX departure maintaining VMC the entire sortie (K-1, V-1, V-2). The flight descended and established communications with the FAC, Rookie 71. The flight flew to initial point (IP) TANGO where Rookie 71 passed the first "9-Line" to Lion 41 who then accomplished a fighter-to-fighter brief. On the first attack all ordnance was successfully dropped by both Lion 41 and 42. The flight returned to the IP and began holding awaiting another "9-Line" from Rookie 71. While established in holding at 1,000' - 1,500' AGL, Lion 42 experienced smoke and fumes in the cockpit and called "knock-it-off" on the radio. Lion 41 told Lion 42 to check 40 degrees left to put Nellis AFB on the nose and start a climb (V-1, V-2). After accomplishing the appropriate checklist procedures for smoke and fumes in the cockpit, the smoke subsided (V-1, V-2, 0-51). Continuing to climb toward Nellis AFB, Lion 42 observed the oil pressure drop to 20 psi, then 10 psi, then 5 psi. Lion 42 observed the oil pressure rise to 60 psi and then heard a loud bang. Lion 42 observed the engine indications winding down and the RPM gauge decreasing to zero. Lion 42 attempted one airstart to no avail (V-1). Realizing the engine had seized, he made the decision to abandon the aircraft over an unpopulated area. He stated his intentions and ejected at approximately 1100 PDT. He landed safely in an unpopulated desert area and established radio contact with Lion 41. Lion 41 located his position and with the aid of Rookie 41, an A-10 who diverted to the crash scene, guided a police helicopter to the downed pilot's position for recovery (V-1, V-2, V-5).
- 5. <u>Impact</u>: The aircraft impacted on government property in an unpopulated area 40 nautical miles southwest of Nellis AFB, NV (A-1, P-2, V-1, V-2). The aircraft was destroyed upon impact. Wreckage was spread along an approximate southerly heading (R-1). No parts were salvageable (A-1, J-1, M-1).
- 6. <u>Ejection Seat</u>: A controlled ejection was initiated at approximately 6,100 MSL and 200 KIAS. The ejection seat functioned normally (V-1, V-2, 0-54).
- 7. <u>Personal and Survival Equipment</u>: All inspections of the MP's personal equipment and aircraft survival equipment were current. All equipment functioned properly (0-54, V-1, V-2, U-1).

14. Operations Personnel and Supervision: The mission was conducted under the authority of the 363 FW, 17 FS, order number 224 (K-1). The briefing was conducted by Captain James Bierstine, Jr., using the 363 FW Briefing Guide and the Air Warrior Inflight Guide. The briefing was thorough and complete and all supervisory actions were accomplished (K-1, V-1, V-2).

15. Pilot Qualifications:

a. 1Lt Gierat was current and fully qualified to conduct the mission (T-4, G-7). His flying experience is as follows (G-1 thru G-7):

AIRCRAFT	<u>HOURS</u>		
F-16	256.4		
AT-38	29.1		

b. 30/60/90/Day Summary:

30 Day - 13 Sorties/19.4 Hours

60 Day - <u>28</u> Sorties/47.9 Hours

90 Day - <u>47</u> Sorties/79.2 Hours

Average - 18.6 Sorties/26.4 Hours

- 16. <u>Medical</u>: 1Lt Scott L. Gierat was medically qualified for flight duties at the time of the accident. A review of his medical records showed that he was in excellent health prior to the mishap. The toxicology report was performed on 4 Jun 92, by the toxicologist for the Armed Forces Institute of Pathology. All results were negative (X-2-1). 1Lt Gierat sustained minimal injuries upon ejection. Only small scratches and general myalgas were present. He was grounded only administratively for six days after the incident (X-1).
- 17. Navigation Aids and Facilities: All applicable navigation aids and facilities were operational (V-1, V-2).
- 18. <u>Weather</u>: The Nellis AFB weather at the time of the accident was 10,000' scattered (SCT), 20,000' thin scattered, 25,000' thin scattered, visibility 40 miles, winds from the south at 10 knots (W-1).

19. <u>Directives and Publications:</u>

- a. Directives and publications applicable to the mishap were:
 - (1) AFR 60-16, General Flight Rules
 - (2) TACR 55-116, F-16 Pilot Operational Procedures

Ä
2
型
55
20
M
Ω
⊊
>
ਕ
Ĭ
₹
Ω.
9
>
88
Ħ
¥

Clerk E. Shindurlin	11-11	Other Joint	Intervenor	Applicant	Staff	The mader of PTS
r ling	Witness	WITHDRAWN	REJECTED	RECEIVED -	DENTIFIED	