

~~SECRET~~

RCS: HAF-HO (S) 7101

UNCLASSIFIED

HISTORY
OF THE
49TH FIGHTER WING (U)
1 JULY – 31 DECEMBER 1999

NARRATIVE
VOLUME NO. I

Assigned to
Twelfth Air Force, Air Combat Command

Stationed at
Holloman Air Force Base, New Mexico

by:
MSgt William P. Alexander
TSgt Gregory Henneman

MARC E. ROGERS
Colonel, USAF
Commander

DATE SIGNED _____
OFFICE OF ORIGIN: 49 FW/HO

DERIVED FROM: Multiple Sources
DECLASSIFY ON: X4

~~THIS DOCUMENT CONTAINS~~
US ONLY INFORMATION

~~“If declassified, review the document
to ensure material is not FOUO and
exempt under AFI 37-131 before
making a public release/PV”~~

COPY OF 3

UNCLASSIFIED ~~SECRET~~

UNCLASSIFIED

CHAPTER I

MISSION AND ORGANIZATION (U)

MISSION (U)

(U) In the latter 1990s, the Department of Defense (DoD) employed its military powers in numerous real world situations. Predominantly, these missions included the enforcement of United Nations' resolutions, controlling tyrannical powers (i.e. Operation Southern Watch in Southwest Asia and Operation Noble Anvil in the Former Republics of Yugoslavia), and meeting the United States own strategic interests. Although the populace of the United States supported these operations, pressure increased to expediently complete the mission with minimal casualties. Working within these parameters, the DoD called on the United States Air Force to strike high value targets with its precision guided munitions. Targeting the highest value targets in the highest threat locations, the Air Force utilized its low observable (stealth) technology platforms.¹

(U) Employing and training with the Air Force's first fighter capable of exploiting low observable technologies, the 49th Fighter Wing (FW) stationed at Holloman Air Force Base (AFB) "...supported national security objectives as directed by the Joint Chiefs of Staff with the F-117A *Nighthawk*."² Coupled with the 'stealth'

¹ Extract (U), ACC, "Strategic and Master Plan, FY2000," ca Oct 99, SD I-4.

² Rpt (U), 49FW, "49th Fighter Wing Mission," nd, SD I-5.

UNCLASSIFIED

technology and precision munitions, the F-117A used sophisticated navigation and an automated mission planning system to increase the *Nighthawk's* combat capability.³

(U) In addition to F-117 operations, the 49th Fighter Wing trained German Air Force aircrews in the F-4F *Phantom II* and used the T-38A *Talon* as a companion trainer for the single seat F-117A. The wing's diversified mission included the 49th Materiel Maintenance Group, which maintained and deployed 'bare base' assets (Harvest Eagle/Harvest Falcon) in global contingencies. Furthermore, the 49th Medical Group sustained one of the Air Force's 29 air transportable hospitals.⁴

(U) The 49th Fighter Wing served as host unit for Holloman Air Force Base. Fulfilling this mission, the 49th Support Group provided "...engineering, communications, security, personnel, and services support"⁵ for the wing and 24 tenant units located on Holloman, including the German Air Force, 46th Test Group, 4th Space Surveillance Squadron, Detachment 1, 82d Aerial Target Squadron, and Balloon Operations Center.⁶

(U) Since assuming command on 15 June 1998, Brig Gen William J. Lake served as Commander, 49th Fighter Wing. Air Combat Command, the 49th Fighter Wing's major command, provided overall command, direction, and leadership; Twelfth Air Force served as the wing's intermediary headquarters.⁷

(U) Encapsulating the aforementioned missions, the Air Force, Air Combat Command, and the 49th Fighter Wing operated under the following mission statements:⁸

³ Fact Sheet (U), USAF/PA, "F-117A Nighthawk," ca. 96, SD I-6.

⁴ Rpt (U), 49FW, "49th Fighter Wing Mission," nd, SD I-5.

⁵ Fact Sheet (U), 49FW/PA, "49th Support Group, ca. 99, SD I-7.

⁶ *Ibid.*

⁷ Extract (U), ACC, "Strategic and Master Plan, FY2000," ca Oct 99, SD I-4.

⁸ Rpt (U), 49FW, "49th Fighter Wing Mission," nd, SD I-5; Extract (U), ACC, "Strategic and Master Plan, FY2000," ca Oct 99, SD I-4.

Air Force Vision Statement

Air Force people building the world's most respected air and space force... Global Power and Reach for America

Air Combat Command Mission Statement

Air Combat Command professionals providing the world's best combat air forces...delivering rapid, decisive and sustainable airpower...anytime, anywhere.

49th Fighter Wing Mission Statement

Maintaining over 50 years of 49er excellence by providing:

- Mission-Ready Forces and Equipment to Meet Worldwide Contingencies
- The Best Training For Our People and International Aircrews
- Quality Support For All Base Personnel, Associate Units, and the Local Community

Twelfth Air Force Initiatives (U)

N/R

⁹ Memo (U), 12 AF/CC, "Combat First Impressions," 10 Oct 99, SD I-8.

NR

N/R

Expeditionary Aerospace Force (U)

N/R

(U) As the sole home of the F-117A, the 49th Fighter Wing was not identified as a lead AEF wing. Rather, when needed, the 49th would augment a crisis AEW with its 'stealth' fighter capability. When the 366th Wing stood by on its 90-day period of

¹² Brfg (U), 49FW, "12 AF Initiatives," 8 Mar 00, SD I-11.

¹³ Ppr (U), HQ AF/XOPE, "Expeditionary Aerospace Force," 26 May 99, SD I-12.

¹⁴ *Ibid.*

¹⁵ Pplan (U), ACC/XPX, "Expeditionary Aerospace Force Implementation," 30 Sep 99, SD I-13.

¹⁶ Brfg (U), USAF, "Expeditionary Aerospace Force," nd, SD I-14.

responsibility, the 49th's 8th Fighter Squadron maintained readiness to deploy. Likewise, if the crisis wing was called upon during the 4th Fighter Wing's period, the 49th's 9th Fighter Squadron would deploy.¹⁷

Plans (U)

[

]

[

]

¹⁷ Pplan (U), ACC/XPX, "Expeditionary Aerospace Force Implementation," 30 Sep 99, SDI-15.

¹⁸ (U) C-Day represents the beginning of operations. Therefore, C+10 equates to ten days after the start of operations.

[

]

┌

┐

└

┘

UNCLASSIFIED

~~SECRET/US ONLY~~

┌

┐

└

┘

USCINCPAC OPlan 5027 (U)

┌

┐

PACOM

└

┘

┌

┐

└

┘

PACOM

┌

┘

~~SECRET/US ONLY~~

UNCLASSIFIED



PACOM



DOC Statements (U)

None
(no response)

N/R



PACOM



~~SECRET//NOFORN ONLY~~

Airshow support (U)

(U) An important mission for the 49th Fighter Wing is supporting airshows around the United States. During a normal year, the F-117A would appear at over 100 airshows either as a static display or flyover. During the summer months the demand required the assigned fighter squadrons of the 49th Fighter Wing to deploy aircraft and support personnel to the East Coast in support of the numerous airshows in that region. The fighter squadrons rotated three pilots and 30 support personnel to support this additional tasking.⁶²

(U) To relieve the pressure on the 49FW, Headquarters Air Combat Command developed a scheduling policy that balanced the requests for the F-117A, funding limitations, and operational tempo. The new policy limited the F-117As to no more than 120 events per airshow season, which primarily ran from March to November. According to the new policy static displays would consist of 60 percent of the events with 33 percent being flyovers. The remaining seven- percent would support high visibility events.⁶³

(U) With the deployment of two fighter squadrons to Operation Noble Anvil, the 49th Fighter Wing could not support any scheduled airshows until late July. During the first half of July the 49FW cancelled its participation in 17 airshows. From 24 July 1999 to 13 November 1999, the 49FW provided F-117As to 54 airshows including two aircraft for the Royal International Air Tattoo 1999 at Royal Air Force (RAF) Fairford, United Kingdom, and three aircraft for the Operation Allied Force Appreciation Event at

⁶² Hist (S/DECL OADR dated 6 Jan 00), 49FW/HO, "History of the 49 Fighter Wing, Jan-Jul 99 [Chapter 1]," (information used is U).

⁶³ *Ibid.*

Andrew Air Force Base, Maryland. Of the 54 airshows, 32 or 59.2 percent of the events consisted of static displays with 22 (40.8%) being flybys.⁶⁴

⁶⁴ Chart (U), 49OSS/OSOS, "Airshow Schedule," ca 1 Jul 99, SD I-35; Msg (U), HQ ACC to 28 BW/CC et al., "Oper/Royal International Air Tattoo (U)," 201836Z Jul 99, SD I-36; Msg (U), HQ ACC to 1FW/CC et al., "Operation Allied Force Appreciation Event (U)," 122338Z Sep 99, SD I-37.

CHAPTER II

OPERATIONS AND TRAINING (U)

(U) The 49th Operations Group composed the flying missions of the 49th Fighter Wing. In their mission statement, the group summarizes its responsibilities, “The 49th Operation Group supports national security objectives, as directed by the Joint Chiefs of Staff by utilizing F-117 stealth fighters, and in training US Air Force and allied aircrews¹ in F-117, T-38, and F-4 transition, instructor, and allied weapons instructor courses.”²

(U) As the only home of the F-117As, the 7th Combat Training Squadron conducted all United States Air Force pilot training in the stealth fighter. Employing the combat power, the 8th and 9th Fighter Squadrons served as the operational flying squadrons. Working in concert with the German Air Force Tactical Training Center, the 20th Fighter Squadron utilized F-4s to provide training to German Air Force pilots in weapons course instruction.³

(U) The following pages outline the 1999 goals of the 49th Operations Group.

¹ (U) The group trains allied aircrews in the F-4, not the F-117A.

² Rpt (U), 49 OG, “49th Operations Group,” ca 1999, SD II-1.

³ *Ibid.*

TABLE II-1

49th OPERATIONS GROUP 1999 GOALS (U)⁴***COMBAT READINESS & POWER PROJECTION: CONTINUE TO IMPROVE OUR ABILITY TO MEET ANY WORLD WIDE TASKING BY MODERNIZING, EQUIPPING AND TRAINING TO PUT BOMBS ON TARGET, ON TIME, WHENEVER AND WHEREVER NEEDED***

- SCORE EXCELLENT OR ABOVE ON ALL PHASE I AND PHASE II EXERCISES/ORE'S
- STRIVE FOR TRAINING ALL PERSONNEL TO FULLY QUALIFIED STATUS IN MINIMUM TIME
- MAINTAIN F-117A AIRCRAFT AT 80% MC RATE
- KEEP F-117A AIRCRAFT ABORT RATE BELOW 6%
- ACHIEVE F-117A WEAPONS RELEASE RELIABILITY OF 99% AND A HIT RATE OF 90%
- PUT BOMBS ON TARGET WITHIN 2 SECONDS OF ASSIGNED TOT
- 100% OF ALL TASKED AIRCRAFT GENERATED WITHIN PROGRAMMED TIMELINE
- SAFE, EFFICIENT, AND ON-TIME DEPLOYMENTS WITH ZERO ACCIDENTS OR INCIDENTS
- 100% OF TASKED AIRCRAFT/FORCES REGENERATED FOR COMBAT WITHIN TIME LIMITS
- NO CLASS A/B OPERATOR/MAINTENANCE FACTOR MISHAPS

TAKING CARE OF OUR PEOPLE: FOSTER THE HIGHEST QUALITY OF LIFE FOR ALL OUR PEOPLE

- USE SENIOR LEADERSHIP AND IMMEDIATE SUPERVISOR MENTORING TO LEAD BY EXAMPLE AND DEMONSTRATE CORE VALUES
- PROMOTE WELLNESS AND FITNESS PROGRAMS
- PROVIDE SUPPORT TO OUR AIR FORCE FAMILIES ESPECIALLY DURING DEPLOYMENTS AND HARDSHIPS
- ENHANCE THE WORKPLACE THROUGH FACILITY AND ENVIRONMENT IMPROVEMENTS
- RECOGNIZE OUTSTANDING PERFORMERS THROUGH A TAILORED AWARDS PROGRAM
- PROMOTE DETAILED AND FREQUENT PERFORMANCE FEEDBACK TO ENHANCE INDIVIDUAL PERFORMANCE AND JOB SATISFACTION
- INSTILL SAFETY AS A WAY OF LIFE BOTH ON AND OFF DUTY
- INGRAIN AND ENFORCE THE USE OF ALL SAFETY AND PERSONAL PROTECTIVE EQUIPMENT

⁴ Rpt (U), 49 OG, "49th Operations Group," ca 1999, SD II-1.

- PROMOTE EDUCATIONAL DEVELOPMENT FOR OUR PEOPLE AND INCREASE PARTICIPATION BY 10 %
- RETAIN 75% OF ALL AFSCs ON ACTIVE DUTY
- RECOGNIZE HONORABLE SERVICE TO COUNTRY BY ENSURING APPROPRIATE END OF SERVICE AWARDS

MODERNIZE: AGGRESSIVELY MODERNIZE OUR COMBAT ASSETS, SUPPORT ASSETS, AND WAY OF DOING BUSINESS.

- COMPLETE WSMR, CHEROKEE, AND HOLLOMAN RAPCON CONSOLIDATION
- SECURE HIGHER HEADQUARTERS SUPPORT FOR WST MODERNIZATION ROADMAP
- REDUCE PERSONNEL AND EQUIPMENT MISHAPS BY 50% THROUGH EDUCATION, TRAINING, AND SUPERVISION
- FURTHER INTEGRATE LOCOMM INTO OUR PLANNING AND TACTICS
- EXPAND THE HORIZONS OF L.O. DEPLOYMENT THROUGH INNOVATION, TACTICS, AND FULL PARTICIPATION IN SPIRIT-HAWK 99
- SEAMLESS TRANSITION OF THE 7 FS AND IT'S FTU MISSION INTO THE 9 FS
- FURTHER ENHANCE F-117 LETHALITY AND SURVIVABILITY BY MAXIMIZING EFFECTIVENESS AND SUPPORT ASSETS
- CAPITALIZE ON ADPE AND 8MM RECORDING TO IMPROVE FLIGHT TRAINING EFFICIENCY
- ENCOURAGE A CULTURE OF CONTINUOUS IMPROVEMENT THROUGH ACTIVE ASAP AND SAFETY DAY PROGRAMS

REDUCE THE COST OF DOING BUSINESS: ELIMINATE WASTE WHILE FACILITATING QUALITY PRACTICES AND INITIATIVES

- ACHIEVE EXCELLENCE IN ALL WE DO
- ACTIVELY SEEK COST CUTTING OPPORTUNITIES THROUGH OUTSOURCING AND GOALS AT EACH ECHELON OF COMMAND
- FURTHER REFINE QPMs INTO MEANINGFUL, MISSION RELATED, PROCESS AND RESULTS ORIENTED QUALITY PERFORMANCE MEASURES
- CONDUCT DETAILED LONG RANGE PLANNING TO GUIDE UNITS WITH RESOURCE APPLICATION
- ENCOURAGE INNOVATIVE THINKING THROUGH INDIVIDUAL AND TEAM RECOGNITION
- OPTIMIZE THE NUMBER OF F-117 PILOTS ASSIGNED TO THE WING, AND REDUCE JOBS WHICH SADDLE PERSONNEL WITH UNNECESSARY ANCILLARY DUTIES

INTERNATIONAL PROGRAMS: PROVIDE WORLD CLASS FORMAL COURSE ACADEMIC AND FLYING TRAINING FOR OUR INTERNATIONAL PARTNERS

- MAINTAIN AN F-4F ACADEMIC QUALITY RATING OF 4 ON A FIVE POINT SCALE
- MAINTAIN 99% F-4F SIMULATOR MISSION CAPABLE RATE

- CONTINUOUSLY IMPROVE GERMAN AIR FORCE FLIGHT TRAINING SYLLABI, LESSON PLANS, AND MISSION SCENARIOS
- CLOSELY COORDINATE OPS SCHEDULING AND MAINTENANCE CONTRACTING EFFORTS TO ACHIEVE AN AIRCRAFT MC RATE AT OR ABOVE 84% AND AN ABORT RATE OF LESS THAN 5%
- MAINTAIN PFT SCHEDULING EFFECTIVENESS AT OR ABOVE 80%
- ENHANCE F-4F AND TORNADO MISSION EMPLOYMENT TRAINING
- FACILITATE A SAFE, EXPEDITIOUS GAF II EXPANSION PROGRAM WHILE SIMULTANEOUSLY MINIMIZING IMPACT ON OTHER WING OPERATIONS

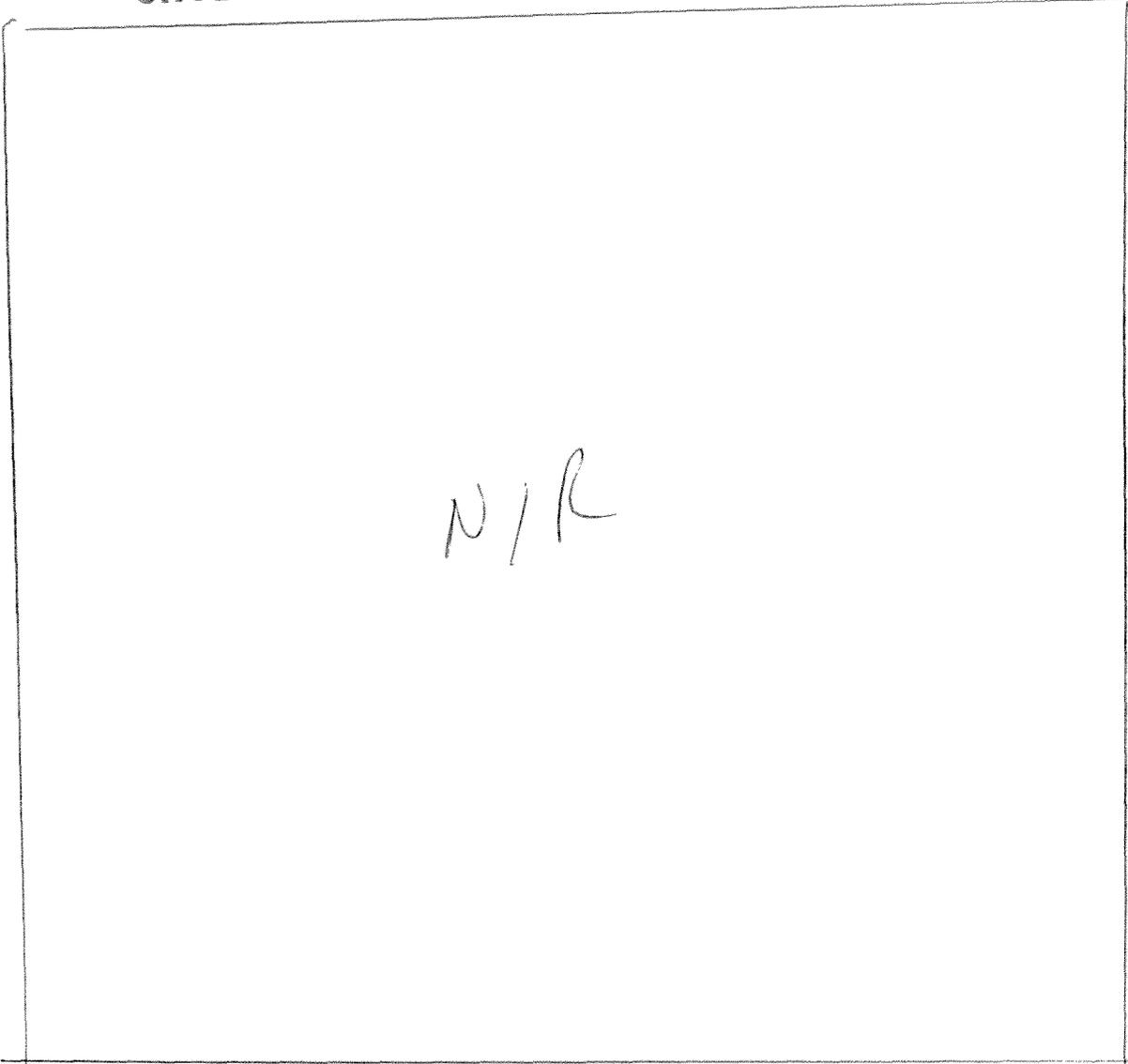
COMMUNITY PARTNERSHIP: PROMOTE PUBLIC AWARENESS, COMMUNITY INVOLVEMENT, SOCIAL RESPONSIBILITY, AND PARTNERSHIP WITH HOLLOMAN AND LOCAL COMMUNITIES

- INCREASE COMMUNITY AWARENESS OF HOLLOMAN'S PURPOSE THROUGH AIRSHOWS, OPEN HOUSE EVENTS, AND STATIC DISPLAYS
- ENCOURAGE PERSONNEL TO SUPPORT LOCAL COMMUNITY CHARITABLE CAUSES AND WORTHWHILE SOCIAL PROGRAMS
- REDUCE ALCOHOL RELATED INCIDENTS BY 50%
- INCREASE AWARENESS AND EDUCATE OUR PERSONNEL ON ENVIRONMENTAL PROTECTION STANDARDS, PROCEDURES, AND PRECAUTIONS
- CONTINUE TO REDUCE HAZARDOUS WASTE AND THE COST OF HAZARDOUS MATERIAL USAGE THROUGH ALTERNATIVES SUCH AS INNOVATION, SUBSTITUTION, AND REPLACEMENT
- STRIVE FOR FLAWLESS ENVIRONMENTAL INSPECTION RESULTS ON EACH INSPECTION

Status of Resources and Training System (U)

N/R

⁵ Brfg (U), ACC AOS/AOCR, "SORTS," 16 June 98, filed as SD II-3, in 49 FW History, Jan-Jun 98.

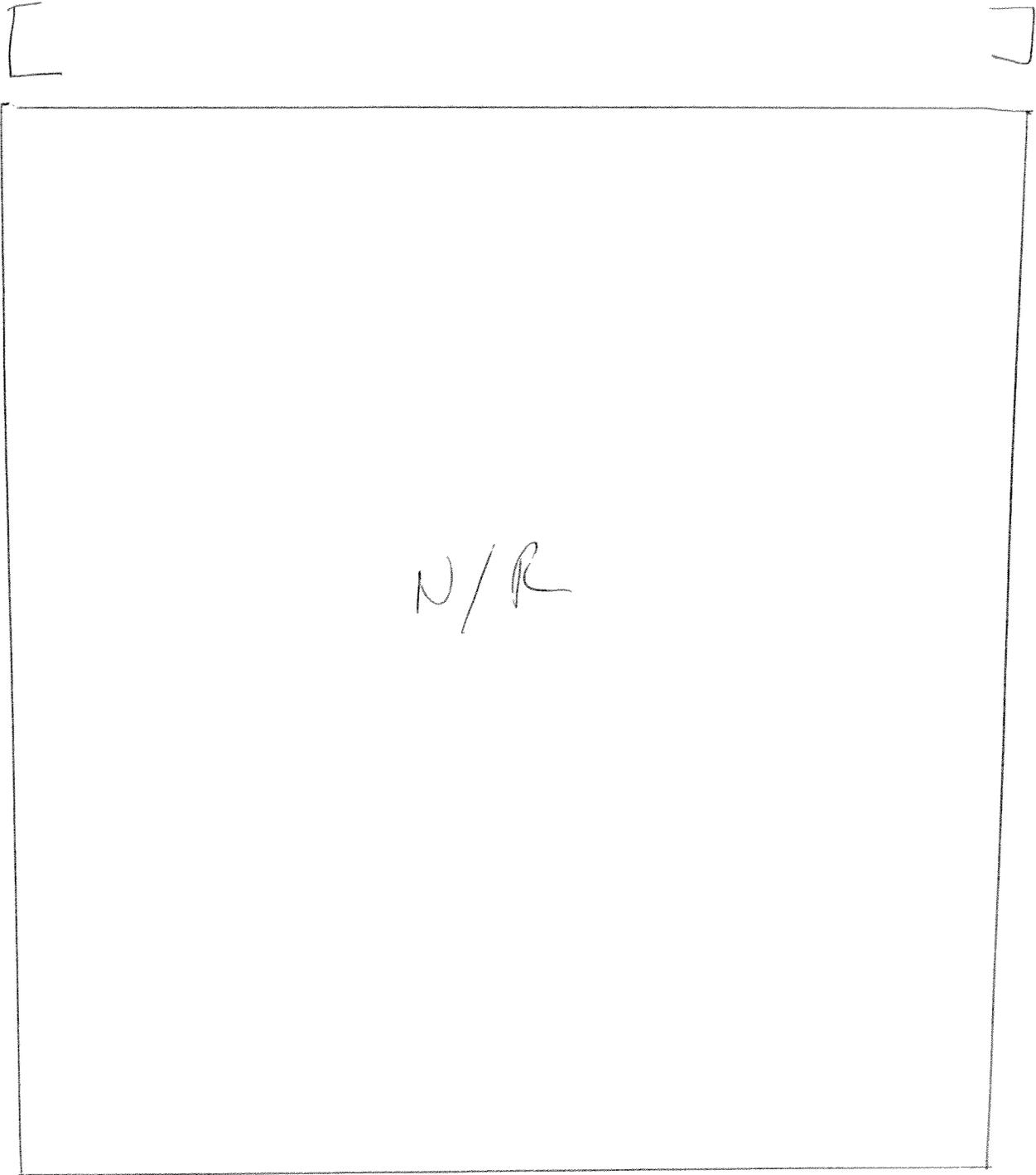


N/R



⁶ Brfg (U), ACC AOS/AOCR, "SORTS," 16 June 98, filed as SD II-3, in 49 FW History, Jan-Jun 98.

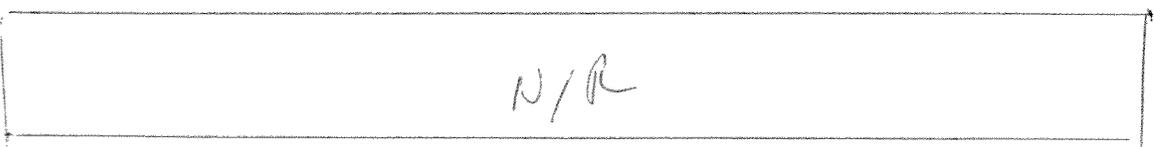
⁷ Msg (U), HQ ACC/XO to 1FW/CC et al, "SORTS Reporting Accuracy," 302112Z Nov 99, SD II-2.



[Handwritten scribbles]



N/R



?

PILOT TRAINING (U)

(U) In addition to employing combat airpower, the 49th Fighter Wing trained its pilots in a variety of aircraft at all levels. This training included all US Air Force F-117A training, from initial to instructor-level. With the single-seat nature of the F-117, the 49th used the T-38A as a 'chase plane' in training missions. Preparing for this mission, the 7th Combat Training Squadron conducted pilot training in the T-38. Furthermore, the 20th Fighter Squadron trained German Air Force crews in the F-4F through the basic (B-) course and fighter weapons instructor course.¹⁴ From July-December 1999, the wing graduated the following pilots:

TABLE II-2
Graduated Pilots (U)¹⁵

Course	Number of Students
F-117 Transition/Requalification Training Course	10
F-117 Instructor Pilot/Formal Training Unit	2
T-38 Companion Trainer Program	15
T-38 Companion Trainer Program Instructor Pilot	3
F-4 B-Course Pilots	6
F-4 B-Course Weapon System Officers	3
F-4 Instructor Course	
Instructor Pilot	1
Instructor Weapon System Officers	1
Weapons Instructor Course Pilots	4
Weapons Instructor Course Weapon System Officers	4

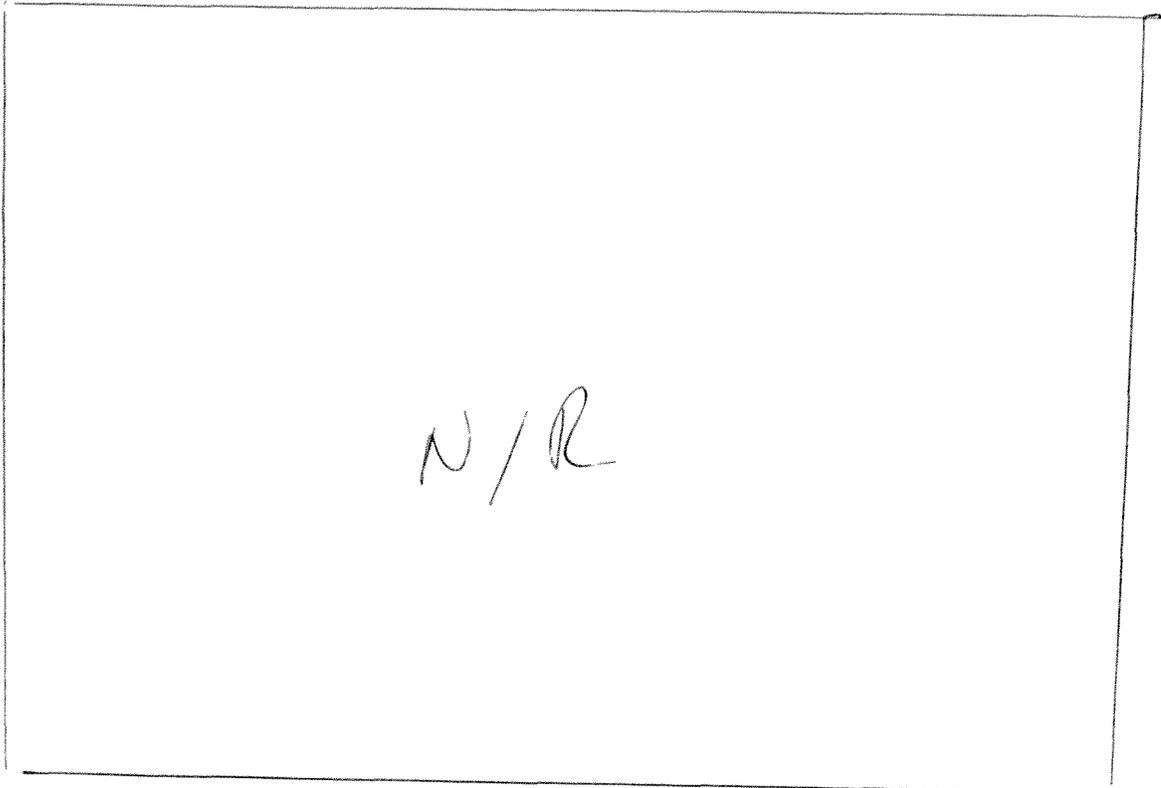
(U) In July 1999, Detachment 4, Air Combat Command Training Support Squadron published an updated version of the 'F-117A Flying Criterion Referenced Objectives.' Basically, the publication listed the 36 training objectives and minimum standards a pilot had to successfully complete to progress through the F-117

¹⁴ Memo (U), Det 4, ACC TRSS/CC to ACC TRSS/CC, "Formal Training Courseware Index." 9 Jul 99, SD II-4; Memo (U), Det 4, ACC TRSS/CC to ACC TRSS/CC, "Formal Training Courseware Index." 21 Oct 99, SD II-5; Memo (U), Det 4, ACC TRSS/CC to ACC/XOF, "F-117A Formal Training Unit Instructor Pilot Upgrade, F117AIOXXA, Graduate Evaluation Report." 10 Sep 99, SD II-6.

¹⁵ Email (U), Lt Col D Surowitz, 20FS/ADO, to SSgt G Henneman, 49FW/HO, "Pilot Training/History," 9 Feb 00, SD II-7; Email (U), Capt K Tatum, 7CTS/DOT, to SSgt G Henneman, 49FW/HO, "Pilot Training/History," 9 Feb 00, SD II-8.

Transition/Requalification course. These tasks encompassed all F-117 flying operations and associate criterion.¹⁶

Ready Aircrew Program (U)



(U) Locally, the 49th Operations Group changed the way it completed mission qualification training (MQT), the pilot training required to go from initial training to combat mission ready status. The 7th Combat Training Squadron took over the management of MQT training from the 8th and 9th Fighter Squadrons, allowing the

¹⁶ Syllabus (U), Det 4, ACC TRSS/CC, "Criterion Referenced Objectives, F-117A Transition/Requalification Training Course," Jul 99, SD II-9; Msg (U), ACC/XO to 49WG/CC, "F-117A Transition/Qualification Training Course," 151608Z Jul 99, SD II-10.

¹⁷ Rpt (U), ACC/DOTO, "A Primer for Ready Aircrew Program," nd, SD II-11; Memo (U), ACC/XOTF, "RAP," nd, SD II-12; Brfg (U), ACC/XO, "Ready Aircrew Program," nd, SD II-13.

¹⁸ AFI II-2F-117 (U), "F-117 Aircrew Training," 1 Oct 98, SD II-14.

¹⁹ *Ibid.*

combat squadrons to focus solely on continuation training.²⁰ The following tables illustrate the annual sortie requirements for the F-117A and T-38A.

Table II-3
F-117A Ready Aircrew Program Requirements
1 October 1999-30 Sep 2000 (U)²¹

	BMC	CMR
	Inexperienced/Experienced	Inexperienced/Experienced
Annual Sortie Req't	72/60	94/82
Day-Surface Air Attack	64/52	66/57
Night-Surface Air Attack	8/8	28/25
Events		
Laser Guided Bomb Delivery	Qualification	80/60
Coordinated Attacks	3/3	4/4
Full Scale Weapons Delivery/ Heavy Weight Laser Guided Bomb	2/2	4/4
Scored Time Over Target	9/6	12/8
Air to Air Refueling	6/6	8/6
Trail Departures	6/6	12/12
Countermeasures/Offset Deliveries	9/9	14/12
Downward Looking Infrared Only Deliveries	6/3	8/4
Have Quick	9/9	12/12
Secure Voice	9/9	12/12
Flag Event	0/0	1/1
Joint Maritime Operations (AIR)	0/0	1/1

²⁰ Email (U), Maj P Fazenbaker, 49OSS/OSTT, to SSgt G Henneman, 49FW/HO, "RAP," 31 Jan 00, SD II-15.

²¹ Msg (U), ACC/XOF to 49OG/CC, et al, "F-117 Ready Aircrew Program (RAP)," 240935Z Sep 99, SD II-16.

Table II-4
T-38A Ready Aircrew Program Requirements
1 October 1999-30 Sep 2000 (U)²²

Sortie Requirements	INEX/EXP
T-38A	
Annual Sortie Requirements	
Instructor Pilot	72/68
First Pilot	36
Mission Pilot	26/22

(U) At the close of fiscal year 1999, the 49th Fighter Wing recovered from pilot training shortfalls incurred during Operation Noble Anvil, and completed 100 percent of all requirements, except for two pilots. One pilot was 11 sorties short and the other five sorties short, both attributed to the real world combat operation. In his overall evaluation, Col John A. Snider, 49th Operations Group Commander, stated "Overall, recovery from deployment and employment in contingency has proceeded smoothly. We are currently ensuring our readiness to support Air Expeditionary Forces in the future."²³

Pilot Manning (U)

(U) The chart below depicts the pilot manning level for the 49th Fighter Wing, a continual item of concern for the wing and the Air Force in general. Notably, the 20th Fighter Squadron appeared heavily overmanned in both pilot and weapons officers. In actuality, the 20th underwent a transition from primarily USAF pilots to GAF instructor pilots.²⁴

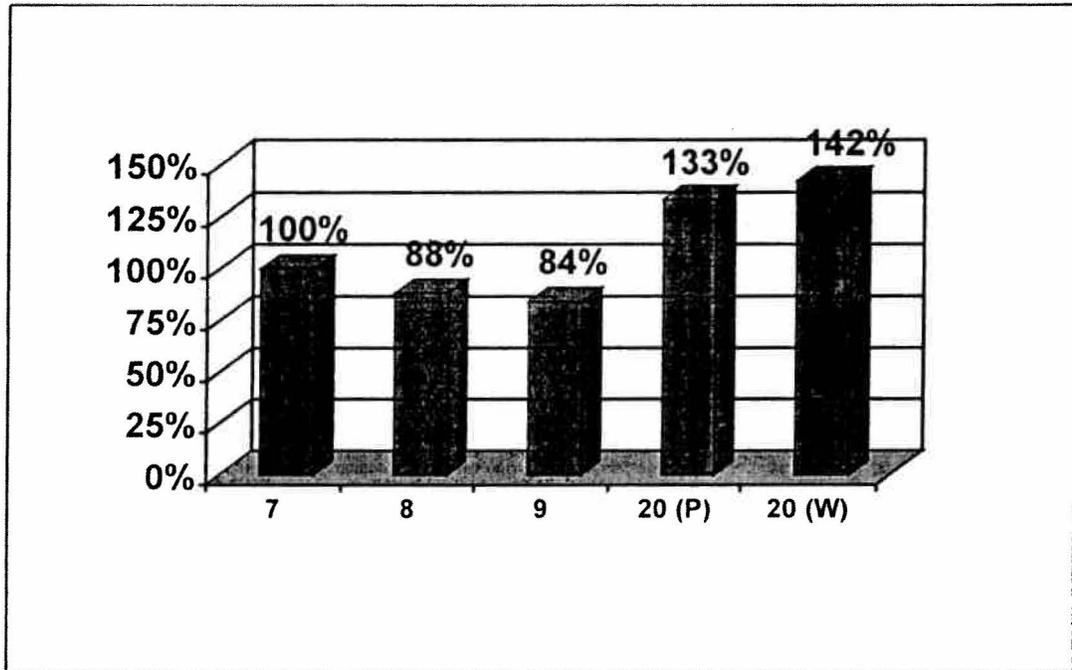
²² Extract (U), AFI II-2T, "T-38 and AT-38 Aircrew Training," 1 Mar 99, filed as SD II-15 in 49 FW Hist, Jan-Jun 99.

²³ Memo (U). 49OG/CC to ACC/DOT, "49OG RAP Shortfalls," 29 Oct 99, SD II-17.

²⁴ Email (U). Maj P Fazenbaker, 49OSS/OSTT, to SSgt G Henneman, 49FW/HO, "RAP," 2 Feb 00, SD II-18.

(U) Following a number of separations and retirements, both the 8th and 9th Fighter Squadrons fell below 90 percent pilot manning. Wing leaders hoped that projected incoming personnel would stabilize the fighter pilot manning throughout the course of 2000.²⁵

Chart II-1
Percentage of assigned vs. authorized pilots (U)²⁶



FLYING HOUR PROGRAM (U)

(U) In line with pilot training requirements outlined in the ready aircrew program, ACC monitored its operational fiscal commitments through the flying hour program. The command factored mission taskings, aircrew training requirements, unit equipment, alert commitments, aircrew ratio, and staff requirements in issuing its flying hour allotments. Changed in 1997, the goal of the flying hour program was not to fulfill

²⁵ Email (U), Maj P Fazenbaker, 49OSS/OSTT, to SSgt G Henneman, 49FW/HO, "RAP," 2 Feb 00, SD II-18.

²⁶ Brfg (U), 49FW/OG, "Status of Flying Training Board," ca. Jan 00, SD II-19.

the flying hour allocations, but for the flying hour program to serve as a tool to meet pilot training objectives. As stated in ACC Instruction 11-103, *Management Reports and Guidance for Flying Hour Program*: "Unit commanders will not attempt to "zero out" their annual flying hour program at the end of the fiscal year. The last flying day of the year should be planned and flown as a normal flying day and should not be truncated solely because the annual flying hour contract has been satisfied."²⁷

FY 99 (U)

(U) From 1 July-30 September 1999, the 49th Fighter Wing continued to execute the fiscal year (FY) 1999 flying hour program. With the 8th and 9th Fighter Squadrons return from Operation Allied Force/Noble Anvil, the 49th Fighter Wing followed its scheduled flying hour program. However, because of maintenance problems resulting from military action during Operation Allied Force the F-117A operations failed to meet its sortie goal. The following table records the original sorties and hours scheduled, the adjusted plan, and sorties actual flown for fiscal year 1999.²⁸

Table II-5
FY 1999 Flying Hour Program (U)²⁹

Weapon System	Mission	Original Program Sorties/Hours	Adjusted Program Sorties/Hours	Actual Flown Sorties/Hours (as of 30 Sep 99)
T-38A	TNG	3,241/4,084.0	2,999/3,779	2,786/3,505.7
F-4F	TNG	3,825/4,590	3,585/4,302	3,621/4,331.0
F-117A	OPS	6,303/10,715	5,780/9,769.3	4,711/7,808.4
F-117A	TNG	1,300/2,002	1,300/2,002	1,008/1,606.7
F-117A	AEF	0/0	572/716	1,041/3,166.9

²⁷ Msg (U), HQ ACC to 2BW et al, "End of Year Flying," 092136Z Aug 99, SD II-20; Extract, ACCI 11-103 (U), "Management Reports and Guidance for Flying Hour Program," 16 Sep 98, SD II-21.

²⁸ Persco (U). MSgt E Martinez, 49OSS/OSOS with MSgt W Alexander, 49FW/HO, 21 Apr 00.

²⁹ Tables (U). 49OSS/OSOS, "Flying Hour Program." ca Oct 99. SD II-22.

FY 00 (U)

(U) While the 49th Fighter Wing executed the Fiscal year 1999 flying hour program, plans continued to finalize the fiscal year 2000 program. Under the original plan, the F-117 operations planned for 6,636 sorties for 11,282 hours. This was increased to 6,934 sorties for 11,939.1 hours, an average sortie duration of 1.7 hours. The table below shows the original plan, the adjusted plan, and the actual sorties flown through 31 December 1999.³⁰

Table II-6
FY 2000 Flying Hour Program (U)³¹

Weapon System	Mission	Original Program Sorties/Hours	Adjusted Program Sorties/Hours	Actual Flown Sorties/Hours (as of 31 Dec 99)
T-38A	TNG	2,999/3,779.0	3,183/4,028.5	771/977.6
F-4F	TNG	3,650/4,563.0	3,500/4,200.0	863/1,117.2
F-117A	OPS	6,636/11,282.0	6,934/11,939.1	1,713/3,031.9
F-117A	TNG	844/1,300.0	352/478.7	93/137.0

Deployments/Exercises (U)

(U) The 49th Fighter Wing continued to deploy its aircraft, equipment and personnel in support of global operations. From July-December 1999, the Security Forces Squadron (SFS) deployed 113 personnel in support of Operations SOUTHERN WATCH, DESERT STORM and ALLIED FORCE. Demands on the 49 SFS were so great, while having to provide security for the F-117As and Holloman AFB, that the squadron continued the "Ready Program." Under this program, personnel outside Security Forces received training and manned security forces position at Holloman AFB.

³⁰ Tables (U), 49OSS/OSOS, "Flying Hour Program," 14 Apr 00, SD II-23.

During August 1999, manning for SFS improved and personnel assigned to the "Ready Program" were released back to their squadrons. Wing personnel spent a total of 26,517 'mandays' deployed from July-December 1999. Major exercises and deployments supported by the 49 FW are discussed in the following pages.³²

Spirit Hawk 99 (U)

(U) Under the lead of the 366 Fighter Wing (FW) and with great support from the AWC, a third of the 49 FW's pilots participated in Spirit Hawk 99. The 8th Fighter Squadron (FS) deployed nine F-117As and 149 support personnel to Mountain Home Air Force Base (AFB), Idaho, from 2-16 October 1999 for Exercise Spirit Hawk 99. This exercise trained air expeditionary wing personnel to plan and execute integrated low observable and conventional aircraft strike packages and to provide the air expeditionary wing the opportunity to train together and integrate into a comprehensive composite force. Within F-117A operations, the aim of the 49 FW was to practice and refine integration tactics with conventional packages against a robust threat.³³

(U) Despite flying out of Mountain Home AFB, the F-117As assigned to Spirit Hawk 99 utilized the Nellis AFB test range complex for its flying missions. The 49th Fighter Wing flew a total of 32 sorties, losing only one sortie because of maintenance. Spirit Hawk 99 was the best peacetime training yet for stealth pilots with many security challenges that had previously hampered integrated training, and was successful in acquainting most other participants with stealth mission planning and execution considerations. More importantly, the exercise helped implement stealth aircraft with conventional aircraft strike packages. Unfortunately, despite the best efforts

³¹ Tables (U), 49OSS/OSOS, "Flying Hour Program," ca Oct 99, SD II-22.

³² Rpt (U), "49th Security Forces Squadron, Third Quarter of 1999," nd, SD II-24; Rpt (U), "49th Security Forces Squadron, Fourth Quarter of 1999," nd, SD II-25; Email (U), SSgt Gregory Henneman, 49 FW/HO, to MSgt William Alexander, 49 FW/HO, "History Stats," 14 Feb 00, SD II-26.

³³ Memo (U), Maj Larry Guichard, 49 OSS to 49 OG/CC, "RED FLAG 00-1.1 After Action Report," 28 Oct 99, SD II-27; Msg (U), HQ ACC/XOT to 366 WG/CC et al, "Spirit Hawk (SH II) Final Planning Conference." 221930Z Mar 99, SD II-28.

of the 49 FW, Spirit Hawk 99 was the only integrated training exercise scheduled in fiscal year (FY) 00.³⁴

EFX 99 (U)

(U) From 28 August-4 September 1999, the 7th Combat Training Squadron (CTS) deployed four F-117As and 30 maintenance personnel to Nellis AFB, Nevada for EFX 99. This exercise tested the concept of inflight retasking, with the *Nighthawks* being the first aircraft to be retasked. Inflight retasking called for the 7 CTS aircraft to take off without having designated targets, with the targets being provided after departure. After receiving the information, the aircraft would conduct their mission strikes.³⁵

(U) According to Major Kokora, 7th Combat Training Squadron, the four F-117As conducted eight sorties, dropping eight munitions on eight separate targets. The 7 CTS achieved a 100 percent hit rate on assigned targets for the exercise. Major Kokora described the exercise as a complete success.³⁶

20th Fighter Squadron Deployments (U)

B-Course Syllabus (U)

N/R

³⁴ Memo (U), Maj Larry Guichard, 49 OSS to 49 OG/CC, "RED FLAG 00-1.1 After Action Report," 28 Oct 99, SD II-27; Msg (U), HQ ACC/XOT to 366 WG/CC et al, "Spirit Hawk (SH II) Final Planning Conference," 221930Z Mar 99, SD II-28.

³⁵ MFR (U), 49 FW/HO. "Conversation with Maj Steven Kokora," 10 Jan 00, SD II-29.

³⁶ *Ibid*

³⁷ Memo (U), Capt Christopher Mallory, 20 FS, to 49 OG/CC, "Portland Deployment Trip Report," 27 Oct 99, SD II-30.

CHAPTER V

MISCELLANEOUS ACTIVITIES (U)

AIRCRAFT MAINTENANCE (U)

F-117 (U)

(U) As the sole home of the F-117A, the 49th Fighter Wing was called upon to generate sorties ranging from real world operations, such as Operation Allied Force, to local training at Holloman Air Force Base. Germane to this operation, the 49th Operations and Logistics Groups maintained a fleet of mission ready aircraft, available to fill DOC taskings and meet all home station requirements.¹

(U) From July-December 1999, the maintenance operation supported more than 3,600 sorties flown by the wing. Although sufficient aircraft were available to meet operational and training requirements, the F-117A mission capable (MC) rate steadily fell from 86 percent in July to 72.6 percent in December. This marked the lowest rate since December 1994. Over the same time period, the total non mission capable maintenance (TNMCM) rate rose from 12.5 percent in July to 25.5 percent in December 1999.²

(U) Four major contributing factors led to the fall of the MC rate. First, during Operation Allied Force, the F-117As flew a longer sortie duration than typical at home

¹ Rpts (U), 49LG, [Monthly Summaries] Jul-Dec 99, SD V-1.

² Brfg (U), ACC/XR, "Logistics Quality Performance Measures, Fighter Aircraft," Dec 99, SD V-2.

station. Although the wing completed a number of phase inspections before deployment, the hours flown while deployed resulted in needed phase inspections when the aircraft returned. Most aircraft in the Air Force inventory had one overall phase inspection required at a certain interval. However, the F-117 had two, the complete phase inspection and the exhaust system maintenance, tailpipe/heat-shield inspection – both required at 600 hours. Furthermore, a transition duct between the motor and the tailpipe required inspection every 300 hours. Adding to the number of required phase inspections, the wing's pilot manning increased, which resulted in a higher sortie utilization (UTE) rate.³

(U) With the increased workload, available manpower decreased. Under the quadrennial defense review realignment of the fighter squadrons, relocating the 7th Fighter Squadron's (redesignated 7th Combat Training Squadron) F-117s to the 9th Fighter Squadron, the wing lost more than 100 maintenance authorizations. Compounding the problem, the 49th had 67 percent manning in five-skill level maintainers and 270 percent manning in three-skill levels. Not only did this result in an inexperienced force, but created a training bottleneck. Furthermore, the Air Force tied F-117 maintenance AFSCs [Air Force Specialty Codes] with F-16 mechanics. An inbound seven-level person could have spent their career with the F-16 and take up to a year to receive adequate training in the F-117. On the other hand, by the time a three-level became a proficient seven-level, they often moved to an F-16 base.⁴ Addressing this issue in his quarterly letter to the Air Combat Command Commander, General Lake noted:

...the QDR reduction of over 100 F-117 maintenance personnel took effect this quarter. Having been advised to sit and color on this action, we continue to search for innovative efficiencies to make up for this budget-driven action. We are emphasizing training to move our abundant 3-levels up to fill the critical 5-level shortages. In the meantime, as anticipated, we are seeing adverse trends in FMC [fully mission capable] rates, 4 and 8 hour fix rates, and repeat/recur rates. We could see significant help if we could hang on to our maintainers rather than train them and send them off

³ Interview (U) TSgt G Henneman, 49FW/HO, with CMSgt D Drake and Lt Col T Ryan, 49OG/CM, 6 Mar 00, SD V-3.

⁴ *Ibid.*

to Korea to fill F-16 billets. Training, retraining, and returning previous F-117 maintainers are the best bets for arresting these trends.⁵

(U) Simultaneous to the increased phase inspections, higher UTE rate, and reduced manning, the 49th experienced its seasonal fuel problems. Historically, with temperature fluctuations from October through December, the F-117 fleet had more fuel leaks, resulting in more maintenance time. These four cumulative problems led to the reduced MC rate and other performance indicators.⁶

TSPR (U)

(U) On 1 October 1998, the Lockheed Martin Skunk Works program signed an eight-year, \$1.8 billion total system performance reliability (TSPR) contract. This program took over when the F-117 support depot at McClellan AFB, California closed. Under the contract, TSPR provided support for program management, engineering technical assistance, depot activities, logistics, spare parts, and field support to the 49th Fighter Wing. Although able to reduce its size because of TSPR, the system program office (SPO) continued to retain overall program direction, requirements determination, contract management, financial execution, and product acceptance.⁷

(U) In its first year, TSPR received a grade of 'Excellent' from a review board composed of 49th Fighter Wing, SPO, Air Combat Command, 410th Test Squadron, and Defense Contract Management Command personnel. As such, Lockheed Martin received a 98 percent award fee for fiscal year 1999.⁸

(U) CMSgt Douglas D. Drake, 49th Operations Group Maintenance Chief, explained his view of TSPR's impact on the wing:

⁵ Ltr (U), 49FW/CC to ACC/CC, 7 Jan 00, SD V-4.

⁶ Interview (U) TSgt G Henneman, 49FW/HO, with CMSgt D Drake and Lt Col T Ryan, 49OG/CM, 6 Mar 00, SD V-3.

⁷ Press Release (U), Lockheed Martin, "Lockheed Martin Skunk Works Successfully Completes First Year of F-117 Total System Performance Reliability," 3 Dec 99, SD V-5.

⁸ *Ibid.*

We get a better quality product, especially when the jets go out to Palmdale, [California] for modifications. In the past, the jet would show up from there and we would send them feedback. Now, they have someone come here every time an aircraft shows up, go over the jet with us, and see if we have any problems with it...Because we are a small community, it sets up a good partnership. There is a lot of pride. We know the folks out there and there are usually a couple calls a day going back and forth. If we have an aircraft or engineering problem, something that develops during phase...we can go to the engineer and get an answer within 24 hours.... It works well, and at this point, they have been very responsive.⁹

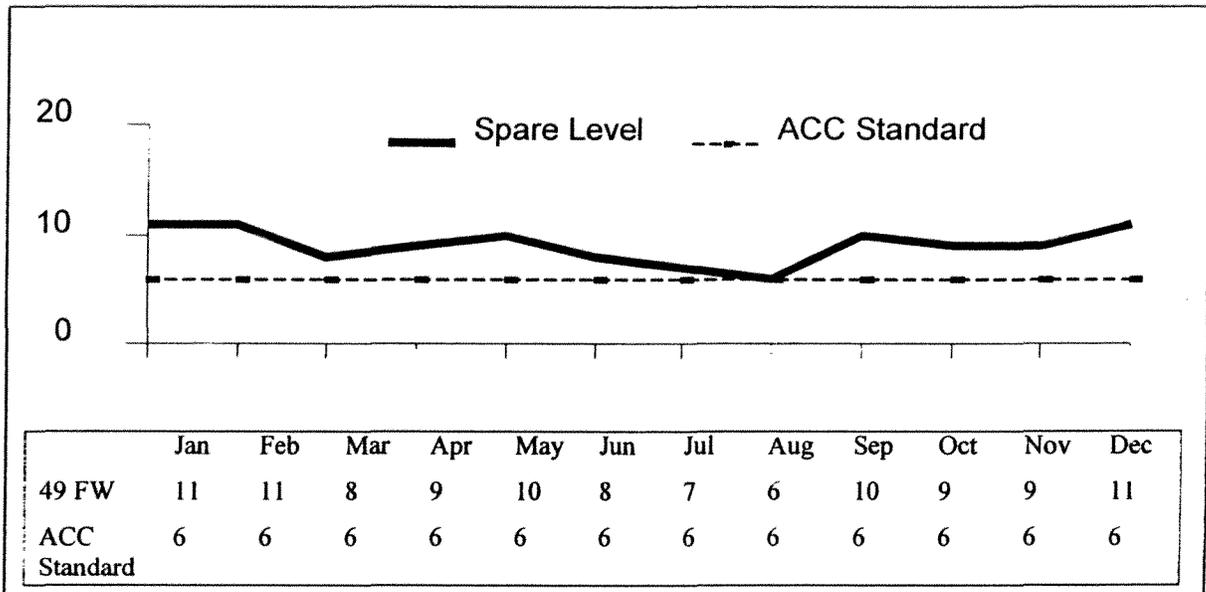
Engines (U)

(U) The 49th Maintenance Squadron managed the F-117A's F-404 engine program, the only F-404s in the United States Air Force. After aircraft #790 experienced an engine fire on 19 May 1999, the Propulsion Flight inspected installed engine plates. This created an increased workload for engine maintenance personnel, who had to generate engines to match the aforementioned increased flying schedule, inspect the engine plates, put them back together, and test them in the test cells.¹⁰ Nonetheless, in 1999, the 49th surpassed the Air Combat Command standard for spare engines, illustrated in the chart below:

⁹ Interview (U) TSgt G Henneman, 49FW/HO, with CMSgt D Drake and Lt Col T Ryan, 49OG/CM, 6 Mar 00, SD V-3.

¹⁰ *Ibid.*

Chart V-1
1999 Engine Spare Level (U)¹¹



Gold Flag (U)

(U) The 49th Logistics Group continued to search for innovative methods of saving money through Air Combat Command’s Gold Flag program. Manned by six people (five electronic technicians and one supply), the office annually generated savings in excess of \$1 million per year.¹²

(U) Savings were broken down into two categories: cost savings and cost avoidance. Under cost savings, Gold Flag members fixed items that would normally have been disposed. On the other hand, cost avoidance centered on repairing broken or unserviceable items and returning them to the supply system. In FY 1999, Gold Flag created \$262,127 in cost savings and \$1,538,809 in cost avoidance. Over the first three months of FY 2000, the office generated \$24,536 in cost savings and \$105,354 in cost

¹¹ Brfg (U), ACC/XR, “Logistics Quality Performance Measures, Fighter Aircraft,” Dec 99, SD V-2.

¹² A1C C Uhles, “49 LG members seeing gold in old parts,” Sunburst, SD V-6.

avoidance. Money generated by the Gold Flag program remained in the 49th Logistics Group to fund needed programs.¹³

(U) In addition to creating financial savings, the Gold Flag office sought to answer mission-impaired capability awaiting parts (MICAP) items. During FY 1999, Gold Flag resolved 14 MICAPS, in the first three months of FY 2000 four MICAPS.¹⁴

F-117 Upgrades (U)

(U) Over the 17-year history of the F-117 program, the Air Force and Lockheed Martin continually worked to upgrade the Air Force's first low observable fighter capable of exploiting 'stealth' technologies.

(U) In November 1999, Lockheed Martin completed the F-117 ring laser gyro navigational improvement program (RNIP). Aircraft #837 received the last RNIP upgrade, which improved the F-117's navigational capability and decreased the amount of aerospace ground equipment and personnel needed to prepare an aircraft.¹⁵

(U) While deployed during Operation Allied Force, deployed fighters received a new mission planning system, the same system used in the B-2 stealth bomber. This mobile, van based system used to create the electronic order of battle, operated two to three times faster than the older system.¹⁶

(U) Other ongoing and projected upgrades included an improved braking system with new carbon breaks and a digital break control box. Weapons wise, the 49th looked toward upgrading its weapons programs. The first weapon in this program was the EGBU-27. Also, an upgrade to the infrared acquisition designation (IRADS) program would allow F-117 pilots to 'look' through clouds, greatly increasing the aircraft's capability. However, this modification was expected to take a long time, as

¹³ Brfg (U), 49LG, "IREP, Nov-Dec 99," ca. Jan 99, SD V-7; Brfg (U), 49LG, "IREP, Aug-Oct 99," ca. Nov 99, SD V-8.

¹⁴ See Note Above.

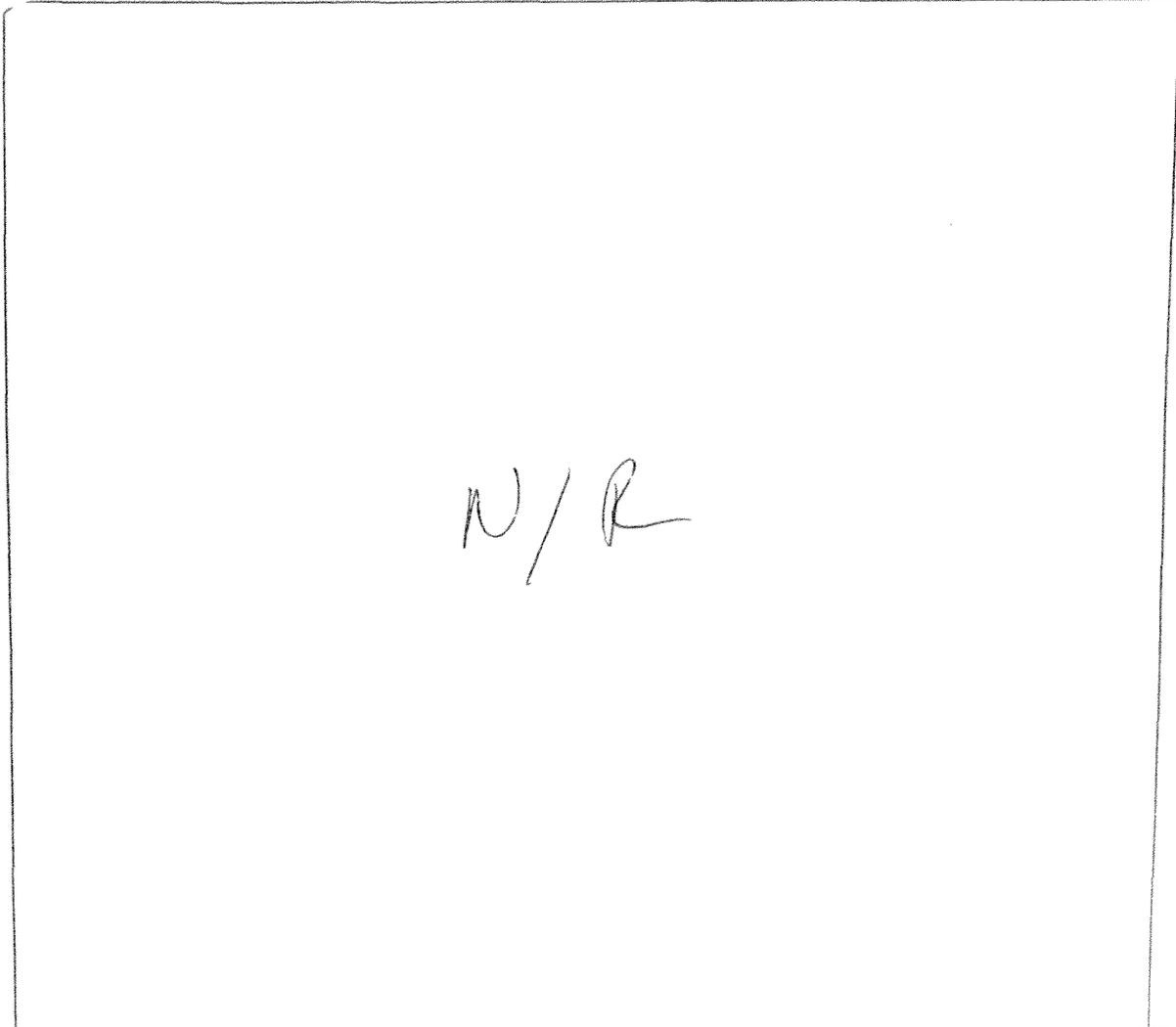
¹⁵ Interview (U) TSgt G Henneman, 49FW/HO, with CMSgt D Drake and Lt Col T Ryan, 49OG/CM, 6 Mar 00, SD V-3.

¹⁶ *Ibid*; 1Lt S Mosley-Day, "F-117 SPO delivers upgrade in 32 days during strikes," Sunburst, 9 Jul 99, SD V-9.

only four IRADS were produced per month, and installation on one F-117 took two weeks.¹⁷

F-4/T-38 (U)

*Red
classification*



¹⁷ Interview (U) TSgt G Henneman, 49FW/HO, with CMSgt D Drake and Lt Col T Ryan, 49OG/CM, 6 Mar 00, SD V-3.

¹⁸ B Pepper, 49FW/PA, "Air Force Awards Dyncorp New T-38, F-4 Contract," Sunburst, 3 Sep 99, SD V-58.

¹⁹ *Ibid*; Ltr (U), Brig Gen W Lake, 49FW/CC to Gen R Eberhart, ACC/CC, 17 Oct 99, SD I-3.

APPENDIX E
WEAPONS SYSTEMS INVENTORY (U)

July-December 1999

8 FS (F-117A)

	Jul	Aug	Sep	Oct	Nov	Dec
Auth	18	18	18	18	18	18
Asgnd	20	20	20	19	19	20
Poss	18	19	19	9	18	19
TDY	0	0	0	9	0	0
In Depot	2	1	1	1	1	1

9 FS (F-117A)

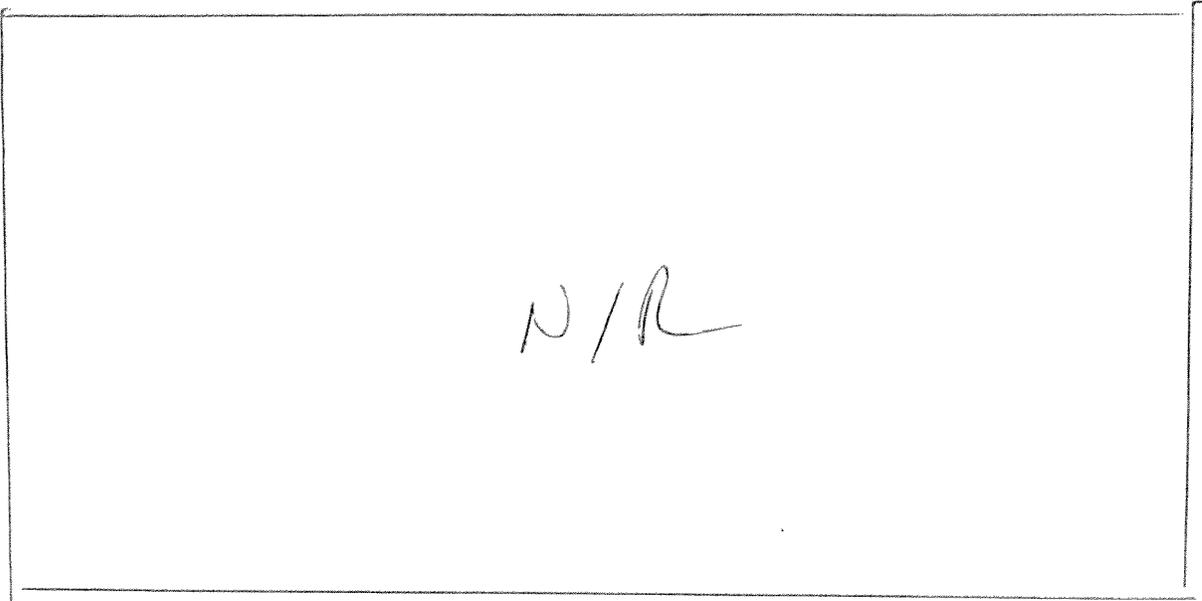
	Jul	Aug	Sep	Oct	Nov	Dec
Auth	24	24	24	24	24	24
Asgnd	28	28	28	28	28	28
Poss	26	25	24	25	26	26
TDY	0	0	0	0	0	0
In Depot	2	3	4	3	2	2

BAI (F-117A)

	Jul	Aug	Sep	Oct	Nov	Dec
Auth	2	2	2	2	2	2
Asgnd	2	2	2	2	2	2
Poss	1	1	2	2	1	1
TDY	0	0	0	0	0	0
In Depot	1	1	0	0	1	1

SOURCE: Rpt (FOUO), 49 FW, "Weekly Maintenance Plan and Flying Schedule," Jul-Dec 99, SD VI-3; Rpts (U), Lockheed Martin/DYNCORP, "Unit Internal Performance Review," Jul-Dec 99, SD VI-4.

APPENDIX E (CON'T)



Official Assignees
As of December 1999

20 FS F-4F (GAF)		7 FS T-38A	49 FW F-117/BAI	8 FS F-117A		9 FS F-117A	
AF115	AF179	0373	825	787	827	786	814
AF128	AF248	0376	790	791	829	788	820
AF129	AF261	0455		795	832	789	821
AF130	AV163	3175		799	834	794	823
AF131	AV170	4831		800	838	796	824
AF133	AV180	4833		802	842	797	826
AF134	AV200	4839		803	843	798	828
AF135	AV218	8139		804		805	830
AF140	AV221	8141		813		807	833
AF150	AV231	8150		816		808	836
AF151	AV257	8172		817		809	837
AF167		8177		818		810	839
		8185		819		811	840
		8186				812	841
		8204					

UNCLASSIFIED

~~SECRET~~

APPENDIX F
COMBAT AIRCREW INVENTORY (U)

July-December 1999

┌

┐

└

┘

~~SECRET~~

UNCLASSIFIED

**APPENDIX H
AIRCRAFT UTILIZATION (U)**

	F-117A						
	1999	JUL	AUG	SEP	OCT	NOV	DEC
FLYING HOURS							
PROGRAMMED		984.8	1086.0	1101.0	1105.7	1097.3	1118.1
FLOWN		695.0	1149.9	1073.4	1061.1	1094.8	1136.4
SORTIES							
PROGRAMMED		651	710	682	633	650	616
SCHEDULED		453	803	833	654	675	743
FLOWN		439	740	678	603	607	643
ABORTS							
AIR		1	3	6	4	4	2
GROUND		27	29	44	26	25	21
AVERAGE SORTIE DURATION		1.6	1.5	1.6	1.8	1.8	1.8
SORTIE UTILIZATION RATE		9.5	16.1	14.4	14.0	14.1	15.0

SOURCES: Rpts (U), 49FW, "Monthly Maintenance and Flying Schedule," Jul-Dec 99, SD VI-5.

UNCLASSIFIED

APPENDIX J
UNIT COMBAT RATINGS (U)

10

T

7

L

J

UNCLASSIFIED

**APPENDIX K
WEAPONS TRAINING/RANGE UTILIZATION (U)**

July 1999

McGregor Range*

Hours Requested		Primary Hours Scheduled		Primary Hours Flown		Primary User Sorties		Short Notice Cnx Hours		Weather Cnx Hours		Secondary User Sorties	
Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
0.0	0.0	0.0	0.0	0.0	0.0	0	0	0.0	0.0	0.0	0.0	0.0	0.0

Oscura Range

Hours Requested		Primary Hours Scheduled		Primary Hours Flown		Primary User Sorties		Short Notice Cnx Hours		Weather Cnx Hours		Secondary User Sorties	
Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
F-117A	1.0	0.0	1.0	0.0	1.0	0.0	1	0	0.0	0.0	0.0	0.0	0.0
F-4F	12.0	0.0	12.0	0.0	12.0	0.0	38	0	0.0	0.0	0.0	0.0	0.0

Red Rio Range

Hours Requested		Primary Hours Scheduled		Primary Hours Flown		Primary User Sorties		Short Notice Cnx Hours		Weather Cnx Hours		Secondary User Sorties	
Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
F-117A	45.8	0.0	45.8	0.0	45.8	0.0	333	0	0.0	0.0	0.0	0.0	0.0
F-4F	13.7	0.0	13.7	0.0	13.7	0.0	46	0	0.0	0.0	0.0	0.0	0.0

SOURCE: Rpts (U), 49OSS/OSOS, "Weapons Range Activity Report," Jul-Dec 99, SD VI-6; Rpt (U), 49OSS/OSOS, "Range User Summary," Jul-Dec 99, SD VI-7.

*(U) McGregor Range was only used for air-to-air sorties, which were not recorded

APPENDIX K (CON'T)

August 1999

Oscura Range

	Hours Requested		Primary Hours Schedule		Primary Hours Flown		Primary User Sorties		Short Notice Cnx Hours		Weather Cnx Hours		Secondary User Sorties	
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
	d		d		d		d		d		d		d	
F-117A	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
F-4F	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0.0	0.0	0.0	0.0	0.0	0.0

Red Rio Range

	Hours Requested		Primary Hours Schedule		Primary Hours Flown		Primary User Sorties		Short Notice Cnx Hours		Weather Cnx Hours		Secondary User Sorties	
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
	d		d		d		d		d		d		d	
F-117A	68.7	2.0	68.7	2.0	68.7	2.0	524	2	0.0	0.0	0.0	0.0	0.0	0.0

APPENDIX K (CON'T)

September 1999

Oscura Range

	Hours Requested		Primary Hours Schedule		Primary Hours Flown		Primary User Sorties		Short Notice Cnx Hours		Weather Cnx Hours		Secondary User Sorties	
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
	d	d	d	d	d	d	d	d	d	d	d	d	d	d
F-117A	1.7	0.0	1.7	0.0	1.7	0.0	2	0	0.0	0.0	0.0	0.0	0.0	0.0
F-4F	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0.0	0.0	0.0	0.0	0.0	0.0

Red Rio Range

	Hours Requested		Primary Hours Schedule		Primary Hours Flown		Primary User Sorties		Short Notice Cnx Hours		Weather Cnx Hours		Secondary User Sorties	
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
	d	d	d	d	d	d	d	d	d	d	d	d	d	d
F-117A	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0.0	0.0	0.0	0.0	0.0	0.0

APPENDIX K (CON'T)

October 1999

Oscura Range

	Hours Requested		Primary Hours Schedule		Primary Hours Flown		Primary User Sorties		Short Notice Cnx Hours		Weather Cnx Hours		Secondary User Sorties	
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
	d		d		d		d		d		d		d	
F-117A	36.0	14.1	36.0	14.1	36.0	14.1	100	23	0.0	0.0	0.0	0.0	0.0	0.0

Red Rio Range

	Hours Requested		Primary Hours Schedule		Primary Hours Flown		Primary User Sorties		Short Notice Cnx Hours		Weather Cnx Hours		Secondary User Sorties	
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
	d		d		d		d		d		d		d	
F-117A	49.4	35.2	49.4	35.2	49.4	35.2	308	198	0.0	0.0	0.0	0.0	0.0	0.0

APPENDIX K (CON'T)

November 1999

Oscura Range

	Hours Requested		Primary Hours Schedule		Primary Hours Flown		Primary User Sorties		Short Notice Cnx Hours		Weather Cnx Hours		Secondary User Sorties	
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
	d		d		d		d		d		d		d	
F-117A	29.5	7.5	29.5	7.5	28.2	7.5	65	14	1.3	0.0	0.0	0.0	0.0	0.0

Red Rio Range

	Hours Requested		Primary Hours Schedule		Primary Hours Flown		Primary User Sorties		Short Notice Cnx Hours		Weather Cnx Hours		Secondary User Sorties	
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
	d		d		d		d		d		d		d	
F-117A	44.0	45.9	44.0	45.9	41.5	43.0	250	183	5.4	0.0	0.0	0.0	0.0	0.0

APPENDIX K (CON'T)

December 1999

Oscura Range

	Hours Requested		Primary Hours Schedule		Primary Hours Flown		Primary User Sorties		Short Notice Cnx Hours		Weather Cnx Hours		Secondary User Sorties	
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
	d		d		d		d		d		d		d	
F-117A	39.2	7.5	39.2	7.5	39.2	7.5	101	11	0.0	0.0	0.0	0.0	0.0	0.0

Red Rio Range

	Hours Requested		Primary Hours Schedule		Primary Hours Flown		Primary User Sorties		Short Notice Cnx Hours		Weather Cnx Hours		Secondary User Sorties	
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
	d		d		d		d		d		d		d	
F-117A	76.8	44.1	76.8	44.1	76.8	44.1	401	187	0.0	0.0	0.0	0.0	0.0	0.0

**APPENDIX L
UNIT EXERCISE PARTICIPATION (U)**

July-December 1999

<u>Unit</u>	<u>Exercise</u>	<u>Dates</u>	<u>Location</u>	<u>Aircraft</u>	<u>Deployed Sorties Sched</u>	<u>Deployed Sorties Flown</u>	<u>Personnel Deployed</u>
20 FS	Phantom Menace	15-28 Aug 99	Portland, Oregon	6 F-4Fs	74	62	54
7 CTS	EFX 99	28 Aug-4 Sep 99	Nellis AFB, NV	3 F-117As	8	8	34
8 FS	Spirit Hawk	2-16 Oct 99	Mountain Home AFB, ID	9 F-117As	33	32	149
20 FS	Nellis WIC Employment	29 Nov-15 Dec 99	Nellis AFB, NV	8 F-4s	116	119	87

SOURCE: (U) Numerous reports and messages referenced in the deployment section of Chapter II.

**APPENDIX N
MAINTENANCE INDICATORS (U)**

F-117A, FY 1999

49 F W Logistics Data

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	FY99
HOURS PROGRAMMED	1108.0	1019.1	1166.0	1123.4	1302.9	1110.4	2465.5	1335.1	1542.2	984.8	1086.0	1101.0	15344.4
HOURS FLOWN	959.6	965.6	1013.4	1182.2	1114.6	1099.7	1683.5	1049.6	918.1	695.0	1149.9	1073.4	12904.6
SORTIES PROGRAMMED	670	586	640	619	660	594	959	697	830	651	710	682	8298
SORTIES FLOWN	597	583	586	672	541	603	531	538	478	439	740	678	6986
ACC YEAR END SORTIE UTE RATE	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	14.0	15.0	16.0	13.0
ACT SORTIE UTE RATE	13.0	12.7	12.7	14.6	11.8	13.1	11.5	11.7	10.4	9.5	16.1	14.4	16.9
MO PROG SORTIE UTE RATE	14.6	12.7	13.9	13.5	14.3	12.9	20.8	15.2	18.0	14.2	15.4	14.5	20.0
SORTIES SCHEDULED	765	671	614	713	578	699	598	565	529	453	803	833	7821
TOTAL DEVIATIONS	304	166	112	94	95	135	121	58	59	71	146	213	1574
FLYING SCHED EFFECT RATE	60.3	75.3	81.8	86.8	83.6	80.7	79.8	89.7	88.8	84.3	81.8	74.4	79.9
AUTHORIZED AIRCRAFT	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	47.0	46.0
AVG POSSESSED ACFT	46.0	45.9	46.3	46.1	44.9	52.2	44.2	44.2	44.8	44.9	44.2	42.0	49.7
POSSESSED HOURS	34255.9	33074.2	34472.8	34314.3	30169.5	38835.6	31808.1	32916.7	32236.4	33431.6	32860.6	31239.5	399615.2
MC HOURS	28870.1	27165.7	29279.4	29195.7	24879.6	34278.4	25236.5	26062.1	27477.2	28738.9	26544.4	24904.1	332632.1
MC RATE	84.3	82.1	84.9	85.1	82.5	88.3	79.3	79.2	85.2	86.0	80.8	79.7	83.2
FM C HOURS	28870.1	27165.7	29279.4	29195.7	24879.6	34278.4	25236.5	26062.1	27477.2	28738.9	26544.4	24904.1	332632.1
FM C RATE	84.3	82.1	84.9	85.1	82.5	88.3	79.3	79.2	85.2	86.0	80.8	79.7	83.2
TNMCM HOURS	5020.0	5120.8	4952.8	4694.9	4840.4	3533.7	4482.7	5406.6	4456.5	4168.4	5743.8	6003.6	58424.2
TNMCM RATE	14.7	15.5	14.4	13.7	16.0	9.1	14.1	16.4	13.8	12.5	17.5	19.2	14.6
TNMCS HOURS	1050.2	1123.3	673.7	703.2	960.8	927.9	3201.1	2767.7	1148.9	751.7	1077.0	1223.1	15608.6
TNMCS RATE	3.1	3.4	2.0	2.0	3.2	2.4	10.1	8.4	3.6	2.2	3.3	3.9	3.9
NMCB HOURS	684.9	335.5	432.7	279.3	552.9	711.8	1128.1	1344.6	856.1	227.3	504.6	1111.1	8168.9
NMCB RATE	2.0	1.0	1.3	0.8	1.8	1.8	3.5	4.1	2.7	0.7	1.5	3.6	2.0
PMCM HOURS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PMCM RATE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PMCS HOURS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PMCS RATE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PMCB HOURS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
PMCB RATE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCHEDULED TNMCM HOURS	1509.2	829.6	1883.7	1889.9	1719.8	1452.7	1359.5	3000.0	1591.6	1896.8	2486.5	2639.1	22258.4
TOTAL CANN	18	3	8	3	8	38	39	30	13	6	7	15	188
CANN RATE	3.0	0.5	1.4	0.4	1.5	6.3	7.3	5.6	2.7	1.4	0.9	2.2	2.7

UNCLASSIFIED

APPENDIX N (CON'T)

F-117A, FY 1999

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	FY99
BREAKS	65	70	44	56	42	59	70	46	34	34	61	51	632
BREAK RATE	10.9	12.0	7.5	8.3	7.8	9.8	13.2	8.6	7.1	7.7	8.2	7.5	9.0
4 HOUR FIXES	38	37	27	28	25	41	27	21	15	11	28	20	318
4 HOUR FIX RATE	58.5	52.9	61.4	50.0	59.5	69.5	38.6	45.7	44.1	32.4	45.9	39.2	50.3
8 HOUR FIXES	48	53	37	38	34	50	46	34	23	22	41	31	457
8 HOUR FIX RATE	73.8	75.7	84.1	67.9	81.0	84.7	65.7	73.9	67.6	64.7	67.2	60.8	72.3
AIR ABORTS	1	2	0	4	1	0	2	6	0	1	3	6	26
AIR ABORT RATE	0.2	0.3	0.0	0.6	0.2	0.0	0.4	1.1	0.0	0.2	0.4	0.9	0.4
GROUND ABORTS	18	22	26	18	28	26	35	18	32	27	29	44	323
GROUND ABORT RATE	2.9	3.6	4.2	2.6	4.9	4.1	6.2	3.2	6.3	5.8	3.8	6.1	4.4
TOTAL ABORT RATE	3.1	4.0	4.2	3.2	5.1	4.1	6.6	4.4	6.3	6.0	4.2	7.0	4.8

UNCLASSIFIED

121

F-117, FY 2000

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	FY00
HOURS PROGRAMMED	1105.7	1097.3	1118.1										3321.1
HOURS FLOWN	1061.1	1094.8	1136.4										3292.3
SORTIES PROGRAMMED	633	650	616										1899
SORTIES FLOWN	603	607	643										1853
ACC YEAR END SORTIE UTE RATE	13.0	13.0	13.0										13.0
ACT SORTIE UTE RATE	14.0	14.1	15.0										43.1
MO PROG SORTIE UTE RATE	14.7	15.1	14.3										44.2
SORTIES SCHEDULED	654	675	743										2072
TOTAL DEVIATIONS	94	176	207										477
FLYING SCHED EFFECT RATE	85.6	73.9	72.1										77.0
AUTHORIZED AIRCRAFT	43.0	43.0	43.0										43.0
AVG POSSESSED ACFT	44.0	43.1	44.8										44.4
POSSESSED HOURS	32737.3	32067.1	33311.0										98115.4
MC HOURS	25968.8	24431.4	24167.7										74567.9
MC RATE	79.3	76.2	72.6										76.0
FM C HOURS	25968.8	24431.4	24167.7										74567.9
FM C RATE	79.3	76.2	72.6										76.0
TN M CM HOURS	5844.5	6716.5	8505.4										21066.4
TN M CM RATE	17.9	20.9	25.5										21.5
TN M CS HOURS	1567.8	1496.0	1708.6										4772.4
TN M CS RATE	4.8	4.7	5.1										4.9
N M CB HOURS	643.8	576.2	1070.7										2290.7
N M CB RATE	2.0	1.8	3.2										2.3
P M CM HOURS	0.0	0.0	1.0										1.0
P M CM RATE	0.0	0.0	0.0										0.0
P M CS HOURS	0.0	0.0	1.0										1.0
P M CS RATE	0.0	0.0	0.0										0.0
P M CB HOURS	0.0	0.0	1.0										1.0
P M CB RATE	0.0	0.0	0.0										0.0
SCHEDULED TN M CM HOURS	2802.4	2488.5	1054.9										6345.8
TOTAL CANN S	13	3	13										29
CANN RATE	2.2	0.5	2.0										1.6

UNCLASSIFIED

F-117, FY 2000

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	FY00
BREAKS	50	56	69										175
BREAK RATE	8.3	9.2	10.7										9.4
4 HOUR FIXES	29	29	26										84
4 HOUR FIX RATE	58.0	51.8	37.7										48.0
8 HOUR FIXES	39	41	39										119
8 HOUR FIX RATE	78.0	73.2	56.5										68.0
AIR ABORTS	4	4	2										10
AIR ABORT RATE	0.7	0.7	0.3										0.5
GROUND ABORTS	26	25	21										72
GROUND ABORT RATE	4.1	4.0	3.2										3.7
TOTAL ABORT RATE	4.8	4.6	3.5										4.3

SOURCES: Rpts (U), 49FW, "Monthly Maintenance and Flying Schedule," Jul-Dec 99, SD VI-5; Rpts (U), Lockheed Martin/DYNCORP, "Unit Internal Performance Review," Jul-Dec 99, SD VI-4.