HISTORY
OF THE
49TH FIGHTER WING (U)
1 JULY-31 DECEMBER 1998

NARRATIVE
VOLUME NO. 1

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Stationed at
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CHAPTER I
MISSION AND ORGANIZATION (U)

MISSION (U)

(U) The 49th Fighter Wing (FW), stationed at Holloman Air Force Base (AFB), New Mexico, supported national security objectives with its primary weapon system, the F-117A Nighthawk. Using the F-117A, the 49th employed an Air Force core competency known as Strategic Attack: "operations intended to directly achieve strategic effects by striking at the enemy's center of gravity."1

(U) Stealth technology, coupled with precision-guided munitions, brought a revolution to the strategic attack concept, as clearly demonstrated during the Gulf War. Use of the F-117A reduced the size of aircraft packages needed to strike particular targets, since stealth fighters did not require escort, defense suppression, or other support aircraft. During the first night of the Gulf War, a traditional composite package of 38 aircraft hit three aimpoints in the Basrah area of Iraq, on that same night 20 F-117As hit 37 aimpoints, greatly reducing the aircraft 'footprint'. Employing this power, the 8th and 9th Fighter Squadrons, (18 primary aircraft authorized) served as the combat flying squadrons of the 49th Fighter Wing.2

(U) Brig Gen William J. Lake served as Commander, 49th Fighter Wing, since his assumption on 15 June 1998. Providing overall command, control, direction, and

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guidance, Air Combat Command (ACC), stationed at Langley AFB, Virginia, served as the wing's major command. Twelfth Air Force, stationed at Davis-Mothan AFB, Arizona, operated as the 49th's intermediate headquarters.3

(U) Implementing ACC objectives, the 49 FW defined its mission statement through the 1998 Strategic Plan:

*Improving on over 50 year years of Forty-Niner excellence by providing:*
- Mission ready forces to meet worldwide contingencies
- The best training for our people and international aircrews
- Quality support for all base personnel, associate units, and the local community4

(U) The 49th further outlined the diversity of its mission through the unit mission description:

Support national security objectives with F-117A Stealth Fighters, HH-60G Combat Search and Rescue Helicopters, Air Transportable Hospital and Bare Base assets. Rapidly deploy worldwide to meet tasked peacetime and wartime contingencies. Train USAF aircrews in F-117A and allied aircrews in F-4F Fighter Transition and Fighter Weapons Instructor Course. Provide support to 16,000 personnel.5

(U) Serving as the host unit for Holloman AFB, the 49th Support Group provided infrastructure, security, and morale, welfare, and recreation support for over 40 tenant units, including the German Air Force Tactical Training Center, 46th Test Group, and 4th Space Surveillance Squadron. Providing structure for not only the various missions at Holloman AFB, but care for employees, dependents, and retirees, the 49th maintained an infrastructure that supported 16,000 people.6

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3 Hist (S/UO/DECL OADR), 49FW/HO, "History of the 49th Fighter Wing, Jan-Jun 98 (U)," 22 Oct 98 (information used is U).
4 Plan (U), 49FW, "1998 Strategic Plan," ca. 1998, filed as SD I-5, 49 FW History, Jan-Jun 98, Volume II.
ORGANIZATIONAL CHANGES (U)

**QDR (U)**

(U) The 1997 Department of Defense Quadrennial Defense Review (QDR) called for a broad range of reorganizations across the Air Force. Impacting the 49th Fighter Wing, these changes included a realignment of the 7th Fighter Squadron and 49th Training Squadron; and, the inactivation of the 48th Rescue Squadron.30

**F-117A Restructure (U)**

(U) Under QDR direction, the 7th Fighter Squadron would assume all F-117A flying and academic training, including those formerly performed by the 49th Training Squadron (academics, simulator, etc...). Additionally, six of the 7th's F-117s would transfer to the 9th Fighter Squadron, while retaining their fifteen T-38As. Reducing the wing's available aircraft, the QDR also required the movement of three F-117As into attrition reserve. These realignments resulted in the reduction of 174 manpower authorizations (114 7 FS, 47 49th Maintenance Squadron, six 49 Logistics Support

30 Hist (S/Decl OADR), 49FW/HO, “History of the 49th Fighter Wing, Jan-Jun 98 (U),” 22 Oct 98 (information used is U).
Squadron, four 49th Fighter Wing staff, two 49th Operations Support Squadron, one 49th Training Squadron).\footnote{Rpt (U), 49FW/MQ, "Organizational Change Request," nd, SD I-13; Table (U), 49FW/MQ, "Realigned manpower authorizations for new 7 FS," nd, SD I-14; SSS (U), 49FW/MQ, "Base operating support (BOS) reductions," 24 Feb 99, SD I-15; Email (U), TSgt B Marcum, 49FW/MQ to SSgt G Henneman, 49FW/HO, "7CTS," 22 Mar 99, SD I-16.}

(U) With the movement of the 7th's F-117As to the 9th and attrition reserve, the squadron planned for a name change. The 7th preferred to retain the name fighter squadron, but noted that if that wasn't available its next preference was 7th Fighter Training Squadron, followed by 7th Flying Training Squadron, and last 7th Combat Training Squadron. In November 1998, after much discussion, ACC informed the squadron its new name would be the 7th Combat Training Squadron (CTS). Current plans called for the organizational changes to take place on 17 June 1999, with the 9th Fighter Squadron taking over the maintenance facilities in the following weeks.\footnote{Email (U), G Hales, ACC/HO, to SSgt G Henneman, 49FW/HO, "7 FS," 2 Oct 98, SD I-17; Intvw (U) SSgt G Henneman, 49FW/HO, with Capt M Reese, 7FS/DOB, "7th Fighter Squadron Reorganization," 22 Mar 99, SD I-18.}

(U) The QDR imposed changes caused a number of concerns for wing leadership. First, moving the aircraft to the 9th, and consolidating all maintenance operations would stretch the flying day for the operational squadron. The 7th conducted its training in the morning, when the temperature and winds were low at Holloman AFB, while the 8th and 9th flew at night, aligned with their wartime mission. However, in order to keep the maintenance day reasonable, the 7th would have to train in the late afternoon hours. Even so, this lengthened flying day for the operational squadrons, stretching maintenance and maintenance supervision. Additionally, concern arose about the availability of maintenance personnel, should the 9th Fighter Squadron deploy.\footnote{Intvw (U) SSgt G Henneman, 49FW/HO, with Capt M Reese, 7FS/DOB, "7th Fighter Squadron Reorganization," 22 Mar 99, SD I-18.}

(U) Another area of concern centered on the loss of the three attrition reserve aircraft that would be stored, coded, and pulled out if the wing lost an aircraft. With the
transition of three aircraft, maintenance personnel, and pilots, the 7th planned on being able to train 24 pilots per year in initial qualification training, with a maximum 27. In 1998, the 7th trained 35 pilots, and would not be able to meet that level under the post-QDR organization.\(^{34}\)

(U) General Lake addressed a number of these concerns to General Richard E. Hawley, Commander, Air Combat Command, in his October 1998 quarterly letter:

We have studied the requirements in detail and conclude the maintenance side will be short six authorizations to meet FTU [formal training unit] operations with both operational squadrons deployed. This is in theory. In reality, we are short 32 positions. Six is based upon the assumption of 100 percent authorized manning. In a good day, we are 80 percent. We have never been manned 100 percent. Nor do we have the augmentation opportunities with the closed F-117 community....Airframes also are selected based upon mission capabilities and LO [low observable] qualities, leaving the less desirables remaining. We are still scrubbing the pilot data and PAA [primary aircraft authorized], but it appears that six PAA will not meet historical pilot production or UTE [utilization] rates.\(^{35}\)

(U) On 2 December 1998, General Hawley responded:

I understand your concerns with the reduction in the F-117 FTU, but we are unable to fulfill your request for additional training aircraft authorizations. The attrition assumptions used for QDR FTU reduction are still valid, and the F-117 attrition rates will force the Air Force to deal with the attrition shortfall within the FYDP [five year defense plan]. The prudent course of action is to deal with it now. We have to establish a sustainable baseline fleet for this vital weapon system....The XP, DO, and LG [Plans, Director of Operations, Logistics] evaluation is that there are sufficient flying hours and maintenance manpower already available at the wing to meet the mission. The F-117 pilot manning needs to be reduced by six BMC [basic mission capable] positions with a total of 10 FTU IPs [instructor pilots] (including the 7 CTS CC/DO).\(^{36}\)

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\(^{34}\) Intvw (U) SSgt G Henneman, 49FW/HO, with Capt M Reese, 7FS/DOB, "7th Fighter Squadron Reorganization," 22 Mar 99, SD I-18.

\(^{35}\) Ltr (U), 49FW/CC to ACC/CC, [Quarterly Update] 5 Oct 98, SD I-2.

\(^{36}\) Memo (U), ACC/CC to 49FW/CC, "49 FW QDR Package (7FS), 2 Dec 98, SD I-19.
(U) Despite the commanders statements, local leadership still had concerns about the upcoming changes. Capt Marc E. Reese of the 7th Fighter Squadron noted "...we will make it work, we always do. But, is it really going to work or not, or will they have to come up with another plan later on remains to be seen."37 Lt Col Andrew W. Papp, 7th Fighter Squadron Commander emphasized this, stating, "While we will make it work, it is not in the best interest of the 7th Fighter Squadron, the 49th Fighter Wing, or the United States Air Force....it is difficult to implement and will reduce our ability to produce F-117 pilots."38

(U) With the inactivation of the 49th Training Squadron, and realignment of the 7th, the following chart illustrates the proposed organizational structure, with the number of personnel assigned to each section.

CHART I-1
Proposed Structure (U)39

![Proposed Structure Diagram]

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37 Intvw (U) SSgt G Henneman, 49FW/HO, with Capt M Reese, 7FS/DOB, "7th Fighter Squadron Reorganization," 22 Mar 99, SD I-18.

38 Telecon (U), Lt Col A Papp, 7FS/CC, with SSgt G Henneman, 49FW/HO, 22 Mar 99.

39 Chart (U), 49FW/MQ, "Proposed Structure," nd.

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CHAPTER II
OPERATIONS AND TRAINING (U)

(U) The 49th Operations Group, commanded by Col Kevin W. Smith, encompassed the flying combat missions of the 49th Fighter Wing, providing for the operations and training of assigned personnel. The group stated its various missions through their unit mission description:

Supports national security objectives with mission ready F-117A stealth fighters and HH-60G combat rescue helicopters. Rapidly mobilizes and deploys worldwide to meet peacetime and wartime contingencies. Trains US and allied aircrews in F-117A, T-38A, and F-4F qualification, instructor, and weapons instructor courses. Manages all airfield and ranges, and facilitates German Tactical Training Center operations.¹

(U) Employing air power, the 8th and 9th Fighter Squadrons served as the active combat units with the F-117A, the Air Force’s first stealth fighter, capable of exploiting low observable technologies coupled with precision guided munitions. The 7th Fighter Squadron, 20th Fighter Squadron, and 49th Training Squadron provided training in the F-117A, T-38A, and F-4F. Conducting combat search and rescue (CSAR) operations, the 48th Rescue Squadron used its HH-60G Pave Hawk helicopters in local rescues and global CSAR missions.²

¹ Rpt (U), 49FW. “Approved Unit Mission Descriptions.” nd. SD I-5
² Ibid.
PILOT TRAINING (U)

(U) Since the 49th Fighter Wing operated the F-117A in a 'closed community' the wing provided all initial, currency, and instructor pilot training for the F-117A. Additionally, the 49th performed training in the T-38A, used as a 'chase plane' for training pilots in the single-seat F-117. The 20th Fighter Squadron provided flight training for the German pilots in the F-4F, while the 49th Training Squadron conducted classroom instruction.\(^\text{15}\)

(U) Due to the unique challenges presented in flying the F-117, pilots coming into the program had to meet several requirements, including the rank of captain or above, and 500 hours of flight time in another fighter, attack, reconnaissance, or strategic

\(^{13}\) Rpts (S/DECL OADR 14 Jan 99), 49FW/SORTS, [SORTS Reports (U),] Jul-Dec 99, SD II-1.

\(^{14}\) Ibid.

\(^{15}\) Msg (U), ACC/DO to 49WG/CC et al, "F-117A Transition/Requalification Training Course," 041628Z Sep 98, SD II-3; Msg (U), ACC/DO to 49WG/CC et al, "F-117A Formal Training Unit (FTU) Instructor Pilot Upgrade, Change 1 Training Course," 211441Z Sep 98, SD II-4; Msg (U), ACC/DO to 49WG/CC et al, "F-4 USAF/GAF Weapons Instructor Course," 041817Z Nov 98, SD II-5.
reconnaissance aircraft. From July–December 1998, 13 pilots graduated the F-117 formal training unit (FTU) upgrade course, and four pilots graduated the F-117 instructor pilot program. Eleven pilots graduated the T-38 companion trainer program, instructor upgrade course. 16

(U) The 20th Fighter Squadron graduated 18 Germans pilots during this period, six fighter weapons instructor course and 12 basic (B-) course. Additionally, eight pilots received instructor pilot training in the F-4F. 17

Ready Aircrew Program (U)

(U) On 1 July 1998, ACC began its second year of measuring pilot training through the Ready Aircrew Program (RAP). Designed to better identify the impact of flying hour cuts upon combat capability, specifically focusing on pilot training, the RAP replaced the previously used Graduated Combat Capability (GCC) program in 1997. The GCC focused on events instead of mission, was easily manipulated, and did not accurately report aircrew readiness. On the other hand, the RAP focused more on training requirements and reporting procedures, improving overall aircrew training. The RAP “provided baseline training requirements for units’ use in developing a realistic training program tailored to unit specific requirements.” 18

(U) After completing initial and mission qualification training, crew members were assigned to either a basic mission capable (BMC) or combat mission ready (CMR) position. The majority of pilots fell into the CMR category—the wing’s front-line fighter pilots. Pilots who held wing supervision or staff positions trained to a BMC level. The table below illustrates the annual sortie requirements for the 49th Fighter Wing’s weapon

17 Ibid.
18 Brfg (U), ACC/DOTO, “Ready Aircrew Program,” nd, (filed as SD II-11, 49th Fighter Wing History, Jan-Jun 98.)
systems. A complete listing of training requirements, event requirements, and special taskings is provided in Appendix U.¹⁹

Table II-1
Ready Aircrew Program Requirements
1 July 1998-30 June 1999 (U)²⁰

<table>
<thead>
<tr>
<th>Training Requirements</th>
<th>BMC (INEX/EXP)</th>
<th>CMR (INEX/EXP)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F-117A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Sortie Requm’t</td>
<td>72/60</td>
<td>94/82</td>
</tr>
<tr>
<td>Surface Attack Tactics-Day</td>
<td>44/32</td>
<td>56/47</td>
</tr>
<tr>
<td>Surface Attack Tactics-Night</td>
<td>8/8</td>
<td>28/25</td>
</tr>
<tr>
<td>Commander Option</td>
<td>20/20</td>
<td>10/10</td>
</tr>
<tr>
<td><strong>HH-60G</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Sortie Requm’t</td>
<td>24/19</td>
<td>40/32</td>
</tr>
<tr>
<td>Combat Skills Sortie</td>
<td>7/5</td>
<td>30/24</td>
</tr>
<tr>
<td>CFT</td>
<td>-</td>
<td>2/2</td>
</tr>
<tr>
<td>Commander Option</td>
<td>17/14</td>
<td>8/6</td>
</tr>
<tr>
<td><strong>T-38A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Maximum</td>
<td>Minimum</td>
</tr>
<tr>
<td>T-38 Instructor Pilots</td>
<td>As required by Programmed Flying Training (PFT)</td>
<td>60</td>
</tr>
<tr>
<td>Formal F-117 Instructor Pilots</td>
<td>As Required by PFT</td>
<td>60</td>
</tr>
<tr>
<td>F-117 Chase Instructor Pilots/Supervisors/ Stan/Eval Flight Examiner</td>
<td>72</td>
<td>48</td>
</tr>
<tr>
<td>Basic-Dual Qualified</td>
<td>72</td>
<td>48</td>
</tr>
</tbody>
</table>

¹⁹ Memo (U), ACC/DOTO, “Ready Aircrew Program,” nd, SD II-6.


* (U) T-38 training requirements listed are those specific to the F-117A training mission, as prescribed in ACCL 11-T-38A, Chapter 5.
Since the RAP program ran from July-June, the end of this history, in December, marked the halfway point of the training program. The 49th Fighter Wing and its flying squadrons were on line with the RAP. As of 31 December 1998, the 7th Fighter Squadron completed 52 percent of its tasked RAP sorties, the 8th Fighter Squadron completed 47 percent, the 9th Fighter Squadron completed 48 percent, and the 48th Rescue Squadron flew 41 percent. Additionally, each of the F-117 fighter squadrons, and the 48th Rescue Squadron completed more than 50 percent of its RAP events. For a complete list of the RAP status, see Appendix V.\(^{21}\)

**Pilot Manning (U)**

Similar to the majority of Air Force flying units, the 49th had a shortage of pilots. This was compounded by the fact that the F-117A required experienced pilots (captains and above), and the need for F-4 and T-38 instructor pilots. The chart on the following page illustrates the pilot manning level for each squadron.\(^{22}\)

\(^{21}\) Brfg (U), 49FW/OG, “Status of Flying Training Board,” 15 Jan 1999, \textit{SD II-8}.

\(^{22}\) Email (U), Maj P Fazenbaker, 49OSS/OSTT, to SSgt G Henneman, 49FW/HO, “RAP and History,” 2 Feb 99, \textit{SD II-2}.  

\textit{UNCLASSIFIED}
Airspace/Range Restrictions (U)

(U) One area that concerned both training and operations was airspace and range restrictions. Holloman AFB bordered parts of White Sands Missile Range (WSMR), which conducted a variety of research and test operations, both from national and international militaries. Also, WSMR encompassed many of the ranges used by wing and associate unit aircraft. Specifically, one area that concerned 49th Fighter Wing leadership was testing of the Israeli Tactical High Energy Laser (THEL), which required the deconflicting of schedules between the 49th and WSMR. Although wing leadership signed a memorandum of agreement with WSMR and THEL personnel, range availability continued to be a concern. Col Kevin W. Smith, 49th Operations Group Commander noted, “One item we need to keep an eye on is loss of range availability due to future foreign experimental testing, where foreign testing takes priority over our training. As

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the German Tactical Training Center (TTC) starts its second phase of Tornado operations, loss of range space could rapidly become a dissatisfier for them and us."

FLYING HOUR PROGRAM (U)

(U) The 49th Fighter Wing, in concert with Air Combat Command direction, used the flying hour program to meet its ready aircrew program requirements. Air Combat Command calculated the flying hour program, based on manning, training requirements, and average sortie durations. Although flying wings had ‘fact-of-life’ issues that could prevent them from completing the flying hour program, General Richard E. Hawley, Air Combat Command Commander stated that “...units must ensure they program to the RAP training requirements and avoid programming to logistics or other limiting factors.” However, General Hawley went on to direct, “...I do not expect units to go to extraordinary measures in an effort to execute their annual programs...we will not do this on the backs of our people. When building your monthly and weekly contracts, I expect you to fully factor the very shortfalls I’m asking you to ignore in planning your annual program.”

FY 1998 (U)

(U) In the last fiscal quarter of 1998, the 49th Fighter Wing continued to manage its flying hour program. Personnel from the 49th Operations Support Squadron’s Scheduling Division worked hand-in-hand with ACC’s Flying Hour Division to ensure sufficient sorties were scheduled for the RAP and adjust for deployments and other issues. Within the F-117 program, the largest adjustments came from the unanticipated Southwest Asia deployment, from November-June 1998. Thus, ACC moved 1,200

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26 Ibid.
sorties and 1,832 hours from the operations program to cover the real world contingency. In the same manner, the command moved 209 sorties and 263.1 hours from HH-60 operations to cover deployments to Kuwait and Turkey. Otherwise, ACC issued only minor program changes. In all, the command made eight program changes in FY 1998.27

(U) As the FY 1998 program ended, the 49th Fighter Wing successfully met all flying hour commitments. Lt Col A. J. Jackson, 49th Operation Support Squadron stated, “It’s been a tough year for flying sorties. The 20th had their switch over [from the F-4E to F-4F], the 48th Rescue Squadron deployed numerous times, the F-117 squadrons even deployed a few times...that made it a very challenging year...and we were still able to zero out.” The table below outlines the sorties and hours originally programmed, adjusted, and flown in FY 1998.28

Table II-2
FY 1998 Flying Hour Program (U)29

<table>
<thead>
<tr>
<th>Weapon System</th>
<th>Mission</th>
<th>Original Program Sorties/Hours</th>
<th>Adjusted Program Sorties/Hours (Updated Plan)</th>
<th>Actual Flown Sorties/Hours (as of 30 Sep 98)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-38A</td>
<td>TNG</td>
<td>3,241/4,084.0</td>
<td>3,243/4,084.5</td>
<td>3,243/4,101.1</td>
</tr>
<tr>
<td>HH-60G</td>
<td>OPS</td>
<td>620/1,681.0</td>
<td>782/1,110.3</td>
<td>767/1,120.3</td>
</tr>
<tr>
<td>HH-60G</td>
<td>SWA</td>
<td>123/344.0</td>
<td>332/607.1</td>
<td>335/595.5</td>
</tr>
<tr>
<td>F-4F</td>
<td>TNG</td>
<td>3,761/4,513.2</td>
<td>3,740/4,545.5</td>
<td>3,761/4,515.4</td>
</tr>
<tr>
<td>F-117A</td>
<td>OPS</td>
<td>6,401/10,875.0</td>
<td>4,562/7,796.4</td>
<td>4,562/7,795.4</td>
</tr>
<tr>
<td>F-117A</td>
<td>SWA</td>
<td>0/0</td>
<td>1,200/1,832</td>
<td>1,225/1,858.1</td>
</tr>
<tr>
<td>F-117A</td>
<td>TNG</td>
<td>1,300/2,002.0</td>
<td>1,250/2,020.0</td>
<td>1,250/2,013.8</td>
</tr>
</tbody>
</table>

27 Msg (U), ACC/DO to 49FW/CC et al, “FY 98 Flying Hour Program Changes-Package 5,” 071758Z Jul 98, SD II-11; Msg (U), ACC/DO to 1FW/CC et al, “FY 98 Flying Hour Program Changes- Package 6,” 071512Z Aug 98, SD II-12; Msg (U), ACC/DOT to 49FW/CC et al, “FY 98 Flying Hour Program Changes-Package 7,” 091434Z Sep 98, SD II-13; Msg (U), ACC/DO to 4WG/CC et al, “FY 98 Flying Hour Program Changes-Package 8,” 281455Z Sep 98, SD II-14.


29 Msg (U), ACC/DO to 4WG/CC et al, “FY 98 Flying Hour Program Changes-Package 8,” 281455Z Sep 98, SD II-14; Rpt (U), 49OSS/OSOS, [FY 98 Flying Hour Program] ca Nov 98, SD II-16.

UNCLASSIFIED
FY 1999 (U)

(Up) While the 49th Fighter Wing flew its FY 1998 program, preparations began for FY 1999. On 2 September 1998, ACC issued the contract allocation for FY 1999. Under this contract, which did not make allocations for deployments, the F-117 operations program maintained numbers similar to the previous year: 6,303 sorties, 10,715 hours, with a 1.7 hours average sortie duration and a 14.59 hourly utilization rate (UTE). Under the training program, ACC contracted the F-117s to fly 1,300 sorties for 2,002 hours, an average sortie duration of 1.54 and 13.13 UTE rate.

(Up) Over the first three months of the FY 1999 program, ACC issued two changes. The first change incorporated requests from the wing's after the original contract allocation. For the 49th Fighter Wing, this change provided for the 48th Rescue Squadron's Operation Northern Watch deployment, and reduced the sorties and hours for the German Air Force's F-4F training program. On 30 December 1998, ACC issued the second program change, moving 18 sorties and 144 hours from the F-117 operations to Southwest Asia mission. The table on the following page outlines the sorties and hours originally programmed, adjusted, and flown as of 31 December 1998.

30 (Up) The UTE rate was determined by the number of sorties per aircraft, per month.


Table II-3
FY 1999 Flying Hour Program (U)\textsuperscript{13}

<table>
<thead>
<tr>
<th>Weapon System</th>
<th>Mission</th>
<th>Original Program Sorties/Hours</th>
<th>Adjusted Program Sorties/Hours (Updated Plan)</th>
<th>Actual Flown Sorties/Hours (as of 31 Dec 98)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-38A TNG</td>
<td></td>
<td>2,999/3,779.0</td>
<td>2,999/3,779.0</td>
<td>739/932.1</td>
</tr>
<tr>
<td>HH-60G OPS</td>
<td></td>
<td>343/960.0</td>
<td>275/340.0</td>
<td>126/258.4</td>
</tr>
<tr>
<td>HH-60G SWA</td>
<td></td>
<td>0/0</td>
<td>60/150.0</td>
<td>89/125.1</td>
</tr>
<tr>
<td>F-4F TNG</td>
<td></td>
<td>3,672/4,590.0</td>
<td>3,585/4,303.2</td>
<td>818/996.9</td>
</tr>
<tr>
<td>F-117A OPS</td>
<td></td>
<td>6,303/10,715.0</td>
<td>6,284/10,571.0</td>
<td>1,334/2,252.0</td>
</tr>
<tr>
<td>F-117A SWA</td>
<td></td>
<td>0/0</td>
<td>18/144.0</td>
<td>18/144.0</td>
</tr>
<tr>
<td>F-117A TNG</td>
<td></td>
<td>1,300/2,002.0</td>
<td>1,300/2,002.0</td>
<td>341/544.9</td>
</tr>
</tbody>
</table>

DEPLOYMENTS (U)

(U) Responding to real world commitments and providing realistic training, the 49th Fighter Wing deployed its operational and support forces to locations around the globe, ranging from Turkey to Nevada, from Saudi Arabia to China. Although the deployment of aircraft in response to real world situations received the greatest notoriety, support squadrons also fulfilled numerous taskings. For example, the 49th Security Forces Squadron deployed personnel for Operations Joint Guard, Joint Forge, and Southern Watch. Taskings continued despite undermanning at the home station, which resulted in additional workloads for personnel not deployed.\textsuperscript{34}

(U) Air Force leaders closely monitored deployment levels and the resulting stresses on assigned personnel and their families. This factor became known as operations tempo. While some deployments, specifically real world missions, were ‘fact-

\textsuperscript{33} See Note Above; Msg (U), ACC/DO to AIG 7152/CC et al, “ACC Flying Hour Program- FY99 Contract Allocation,” 022104Z Sep 98, SD II-20; Rpt (U), 49OSS/OROS, [FY 99 Flying Hour Program] ca Feb 99, SD II-21.

\textsuperscript{34} Charts (U), 49OSS/OROS, [Deployment Charts] nd, SD II-22, Rpts (U), 49FW, [Misc. Trip Reports] Jul-Dec 98, SD II-23.
of-life’ realities, Air Force leadership reviewed contingencies within their control for necessity. For example, in October 1998, Air Combat Command canceled its Gunsmoke competition, after a number of forces received tasking in response to Kosovo operations.35

**Mobility Footprint Reduction (U)**

(U) The 49th Fighter Wing began an initiative to reduce its mobility footprint. Using the lessons learned from F-117A deployments to Southwest Asia from 1996-1998, the 49th Logistics Support Squadron sought to match the Air Force and Air Combat Command’s vision of leaner, faster, less airlift intensive deployments.36

(U) Lockheed Martin’s Skunkworks program worked with the 49th to reduce the amount of support and parts needed for deployment. The ring laser gyro navigational improvement program (RNIP) reduced the equipment needed for the F-117, lessening the parts needed for deployment. In addition to the RNIP, the 49th and Lockheed worked to convert any three-level maintenance component to two-level maintenance.37

(U) As a result of the mobility changes, the 49th reduced the footprint for an 18-ship package from 19 to 14 C-141 equivalents, with aspirations for further reductions in support equipment. Also, the 49th Logistics Support Squadron designed even smaller, tailored packages for eight and 12 ship packages, in line with air expeditionary force concepts.38

(U) Improving home station and deployed logistics support, the 49th created a Logistics Readiness Center, designed as the single F-117A logistics information point, tracking all mission-impaired capability awaiting parts (MICAP), mobility readiness spare packages, support equipment, personnel, engines, and return of repairables. The

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36 Ltr (U), 49FW/CC to ACC/CC, [Quarterly Letter] 12 Jan 99, SD I-2.
37 Ibid.
38 Ibid.
logistics center worked with Air Combat Command’s Supply Support Operations to reduce the number of days for resupply and retrograde. Since the creation of this center, resulting in the monitoring of logistics, the F-117A averaged three days for MICAPs, five days for replenishment, and six days for retrograde. 39

**F-117 Deployments (U)**

(U) Three times, within in a three month period, national leadership called upon the 49th Fighter Wing’s F-117As to prepare to deploy in support of operations in Southwest Asia and the Balkans. Each time the 49th stood ready, with jets and personnel prepared to respond. However, the threat of military intervention, including the use of the stealth fighter, or the use of in place theater forces met national objectives. Nonetheless, the 49th Fighter Wing stood ready at each call.

**Kosovo (U)**

(U) Since the establishment of Operations Provide Promise and Deny Flight in 1993, the United States, with its North Atlantic Treaty Organization (NATO) allies worked to establish peace in the ethnically diverse Former Republics of Yugoslavia. While successful peace came about in Bosnia-Herzegovina and Croatia, fighting began in February 1998 between the ethnically Albanian providence of Kosovo, and centuries-old rival, Serbia. This new fighting resulted in the deaths of over 2,000 people and homelessness for over 300,000 refugees. With the harsh Yugoslavian winter approaching, Western powers feared the death of thousands more, especially the refugees who were without food and housing. Led by the United States, NATO allies called upon Serbian President Slobodan Milosevic to withdraw his forces from Kosovo, or face airstrikes. 40

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With national media attention given to the possible military operation, the 49th Fighter Wing issued the following statement, on 9 October, to respond to numerous media queries:

The 49th Fighter Wing’s F-117 Nighthawk stealth fighter has been identified as being part of a force of 260 United States military aircraft committed to support possible NATO operations in the Federal Republic of Yugoslavia. No aircraft have been moved at this time. The 49th Fighter Wing is prepared to deploy its F-117 assets anywhere on very short notice when tasked.  

As political talks continued between NATO and Serbian leaders, the possible deployment was continuously delayed.

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42 Email (U), Col A Dichter, 49FW/CV, to 49FW/ALL Holloman Commanders, “Rumor Control, 49 FW Involvement in NATO Operations, Kosovo,” 9 Oct 98, SD II-32; Msg (U), ACC/BSD to 2BW/CC et al, “MSGID/GENADMIN/HQ ACC BSD,” 102006Z Oct 98, SD II-33.

43 Intvw (S/DECL 22 Feb 09), SSgt G Henneman, 49FW/HO, with Col A Dichter, 49FW/CV, 22 Feb 99, SD II-34.
By the end of October, NATO announced it would not strike Serbian forces, but maintained that it remained ready to respond. On 28 October, NATO General Javier Solana stated, "We have taken a decision not to act today. We have decided to maintain the activation order for limited air operations."\(^{44}\)

**Desert Thunder (U)**

(U) On 5 November 1998, the United Nations Security Council voted unanimously to condemn Iraq and demand the resumption of halted weapons inspections. However, the Iraqi government replied that it would not allow the inspections, and the United Nations began withdrawing its inspectors on 7 November. International pressure built behind the movement to strike Iraqi targets, if they failed to comply. As such, the United States and United Kingdom planned to increase their forces in the region.\(^{45}\)

(U) On 13 November, the 49th Fighter Wing received an air tasking order to deploy 14 F-117As from Holloman AFB to Moron AB, Spain, and then 12 F-117s would continue on to Al Jaber, Kuwait, with an arrival in theater of 17 November. Keeping with local tradition, this tasking came two days before a scheduled phase-two operational readiness exercise. This marked the third consecutive time the wing shortened or canceled a phase-two exercise due to real world commitments. Wing personnel joked that Saddam Hussein must have a copy of the local schedule of events, and planned his altercations around the exercises.\(^{46}\)

(U) After awaiting clearance to deploy, 10 F-117As (including two airborne spares) departed Holloman AFB on 15 November. Six of the 10 aircraft arrived at Moron, with two returning to Holloman due to a tanker problem. However, the enroute

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\(^{44}\) "NATO Won’t Strike Kosovo," *Washington Times*, p1, 28 Oct 98, SD II-35.

\(^{45}\) Rpt (U), CNN, “Timeline-Pressure Points,” ca Dec 98, SD II-36; AFNews “ACC Units head to Southwest Asia, 13 Nov 98, SD II-37; “Fightin’ 49ers deploy again to Gulf Region,” *Sunburst*, 13 Nov 98, SD II-38.

\(^{46}\) Msg (U), ACC AOS/AODX to 49FW/CC, “Coronet East 917 Air Tasking Order,” 131340Z Nov 98, SD II-39; Email (U), Lt Col D Stewart, 49FW/XP, to 49FW All Commanders, “Coronet Gold Rush 98-04,” 12 Nov 98, SD II-40; Ltr (U), 49FW/CC to ACC/CC, [Quarterly Letter] 12 Jan 99, SD I-2.
stop at Moron Air Base, Spain, became more than the scheduled overnight. Almost simultaneous with the black jets landing in Spain, Saddam Hussein agreed to UN demands, allowing the inspectors back into Iraq. However, the United States warned that if agreements failed again, armed forces stood ready to act. After more than a week in Spain, four F-117s returned to Holloman on 20 November after a one-night stopover at Langley AFB, Virginia; the last two F-117s returned home on 25 November, the day before Thanksgiving. 47

**Desert Fox (U)**

(U) After Iraq was given a month-long opportunity to demonstrate its compliance with United Nations resolutions, Chief United Nations Weapons Inspector, Richard Butler, issued a report stating that Iraq had failed to live up to its promise of cooperation. As a result, US military leadership began plans for Operation Desert Fox, strikes against Iraqi military targets. President William J. Clinton stated, “In halting our air strikes in November, I gave Saddam Hussein a chance, not a license.” 48


49 Msg (S/DECL 12 Dec 08), ACC/BSD to 12 AF’CC et al. [Prepare to Deploy Order (U)],” 121850Z Dec 98, SD II-47.
(U) As stated, this air tasking and deployment order came in the midst of a phase-two exercise. The exercise was halted, and Lt Col Matthew N. Erichsen, Mission Director, was told that he would be the enroute support team (ESTA) commander. At 1500L, on 17 December, Colonel Erichsen gathered the 28 personnel comprising the ESTA team, briefed them on the status and ground rules, and told them to return for a 1700L deployment briefing. At the 1700L briefing, the team was informed they were in a sterile environment, could not leave, and would be departing in six hours. Since many of the team members had only been identified hours before the meeting, they were not packed or prepared to go, Colonel Erichsen stated, “I looked around and said ‘we haven’t even told our wives we are leaving yet, and we have a plane tonight?’ I said no way, give us our briefing, let us out of here so we can get our stuff from home, no one had any baggage.”

Many of the ESTA team members, previously exercise players, worked for 36 hours, “they came off turning a jet to fly, to prepping a jet to go to war, and, oh by the way, you have been picked to be support at Moron.”

(U) Later that night, at 2300L, the ESTA team departed Holloman AFB, stopped en route at McGuire AFB, New Jersey, changed planes, and continued on to

50 Msg (S/DECL 17 Dec 08), ACC AOS/AODX to 49 FW/CC, “Coronet East 124 Air Tasking Order, Desert Fox (U),” 170348Z Dec 98, SD II-48.

51 Msg (S/DECL 17 Dec 08), ACC/BSD to 12AF/CC et al, [Deployment Order (U)], 170400Z Dec 98, SD II-49.

52 Intvw (U), SSgt G Henneman, 49FW/HO, with Lt Col M Erichsen, 49OSS/OSTX, 8 Jan 98, SD II-50; Rpt (U), Lt Col M Erichsen, 49OSS/OSTX, “Trip Report Operation Desert Fox, 17-24 Dec 98,” ca Jan 99. SD II-51

53 See Note Above.
Moron AB, Spain. In Spain, the team prepared for the reception of the F-117s; however, on 19 December Colonel Erichsen received news that the F-117 portion of the deployment had been canceled, and began working to get his people back before Christmas. After two days of travel and delays, the ESTA team returned to Holloman on the morning of 24 December.\(^5\)

Looking back on the deployment, and the time at Moron AB, Col Erichsen stated “We could have used more general purpose type guys, such as someone forklift qualified. The limited base there might have the people to do it, but they are doing other things...If you could bring that with you, it would help.”\(^5\)

\(^{5}\) Intvw (U), SSgt G Henneman, 49FW/HO, with Lt Col M Erichsen, 49OSS/OSTX, 8 Jan 98, SD II-50; Rpt (U), Lt Col M Erichsen, 49OSS/OSTX, “Trip Report Operation Desert Fox, 17-24 Dec 98,” ca Jan 99, SD II-51.

\(^{5}\) See Note Above.

space demonstration portion of the exercise. Two F-117As participated in practice
demonstrations on 15 and 16 September; however, only one flew the actual
demonstration mission on 18 September due to a static inverter failure. Additionally, the
one F-117A that did fly in the final mission was unable to hit its target due to “...the
notorious north Florida weather.”58 While in the area, the 7th displayed one F-117A at
Duke Field [part of the Eglin AFB range complex] for congressional distinguished
visitors and other dignitaries.59

(U) Squadron leadership saw this exercise as an opportunity to set guidelines
for future air power demonstrations. Capt Chris S. Babbidge, 7th Fighter Squadron EFX
Project Officer recommended that 3,000 feet above ground altitude should be used as the
“...minimum altitude for deliveries due to fusing, weather, realistic target identification,
and safety of flight concerns.”60 Releasing weapons at below 3,000 feet, as done during
the EFX, could “...expose the wingman to the leaders frag.”61

(U) Despite the one ground abort and poor weather, Captain Babbidge
described the mission as a success. Captain Babbidge summed up the exercise, “Part of
the mission of Air Force is to show the public, show the community, show the civilian
leadership in the country what our capabilities are, and we did that.”62

Mission Employment (U)

(U) In order to build understanding of low observable techniques and tactics,
the 9th Fighter Squadron deployed three F-117As and 23 personnel to Nellis AFB,
Nevada in support of the United States Air Force’s Weapons School. Following a week

58 Memo (U), 7FS/DOW to 7FS/DO, “EFX After Action Report,” 23 Sep 98, SD
II-53; Email (U), Capt C Babbidge, 7FS/DO, to SSgt G Henneman, 49FW/HO, “EFX,”
15 Oct 98, SD II-56.

59 See Note Above.

60 See Note Above.

61 See Note Above

62 K Boehler, “Screamin’ Demons take part in EFX 98,” Sunburst, 2 Oct 98, SD
II-55.
of academic instruction, the 9th employed its F-117As from 27 November-4 December 1998. Not only did this exercise build the students low observable knowledge, but gave 9th Fighter Squadron’s less experienced pilots the opportunity to participate as part of a large force in an increased threat environment.\footnote{Rpt (U), 9 FS, “Mission Employment Exercise,” ca Dec 98, SD II-57.}

(U) During this exercise, the 9th flew 13 of 14 tasked sorties, losing one for a ground abort due to a fuel leak. Sorties flown included offensive counter air and strategic attack missions. Also, during the mission employment, a B-2 representative teamed with the F-117 pilots to demonstrate proper integration of the two low observable assets.\footnote{Ibid.}

(U) The biggest obstacle during the exercise was acquiring needed imagery from the weapons school intelligence students. Mission planners spent a majority of their time educating the students, explaining the need for clear imagery, and the ability of the F-117 to hit precise DMPI targets. The poor imagery, coupled with bad coordinates, resulted in the F-117s missing two of the 14 tasked targets. Also, two targets were not hit due to weather. In the end, the F-117s hit 10 of 14 targets. Despite the missed targets, squadron leadership described the exercise as a success.\footnote{Ibid.}
(U) From July-December 1998, the 49th Fighter Wing maintained its fleet of F-117As, HH-60Gs, F-4Fs, and T-38As within Air Combat Command standards.

**F-117 (U)**

(U) Over the course of 1998, the mission capable (MC) rate for the F-117A steadily rose, exceeding the 80 percent standard from September-December (the December MC rate was 84.9 percent). In addition to the MC rate, the stealth fighter exceeded command standards for abort rate, total non mission capable for maintenance and supply, and cannibalization rate (in 1998 the 49th averaged a cannibalization rate of 1.8, below the command standard of 5.0). While many other Air Force weapons systems suffered below average rates and supply shortages, the F-117 met or exceeded all maintenance standards. Wing analysts noted that this was due to the fact that the F-117 operated within a 'closed loop' system. As the sole home of the F-117s, the 49th did not have to compete with other bases for parts, and worked hand-in-hand with the depot at Palmdale and Lockheed Martin to ensure the best F-117 performance.¹

(U) In addition to maintaining the F-117 for daily operations and training missions, the 49th worked with Lockheed Martin to upgrade the aircraft fleet. These

upgrades included the ring laser gyro navigational improvement program, low observable communications antenna, and low volatile organic compound paint. Improving mission planning capability, on 20 November 1998, ACC approved the use of upgraded software for the Air Force Mission Support System, F-117A mission planning system to version 2.1.2, and Bonn Corporation’s TAP module, version 6.3, was certified for use to route F-117s into and out of target areas.2

(U) The F-117A was the only Air Force weapon system to use the F-404 engine. Over this period, the 49th Maintenance Squadron exceeded the required spare level of six engines, as demonstrated in the chart below.

CHART III-1
Engine Spare Level (U)3

(U) On the morning of 25 August 1998, Brig Gen William J. Lake, 49th Fighter Wing Commander, landed an F-117A (serial number 84-0827, 8th Fighter Squadron) on the Holloman runway. Although outward appearances indicated another routine landing, the end of the flight marked the 150,000th flight hour for the F-117. Following the flight, a ceremony was held to commemorate the event, which General

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2 Msg (U), ACC/DOT to 49OG/CC et al. [System Certifications] 201759Z Nov 98, SD III-4; Email (U), Maj B Kappes, 49OG/OGV, to SSgt G Henneman, 49FW/HO, “Aircraft Maintenance and the History,” 4 Mar 99. SD III-5.

3 Chart (U), 49FW, “F404 Engine Status,” nd.
Lake dedicated to Brig Gen James S. Allen, the first operational commander of an F-117 unit (4450th Tactical Fighter Group), who died two days before this historic flight.\(^4\)

**LOCAT (U)**

(U) Air Combat Command’s Logistics and Operations Consulting and Assistance Team (LOCAT) team visited the 49th Fighter Wing from 14-18 September 1998, evaluating logistics and operational areas. The team assessed six issues (engine management branch, CAMS [consolidated aircraft maintenance system] documentation by life support, CAMS utilization, MAJCOM mandatory course training, CAMS training subsystem, duty positions outside of AFSC), identified eight action items (F-117 drag chute time change documentation, F-117 TCTO [time compliance technical order] process/kit availability, CAMS computer based training, test and evaluation munitions management, security clearances for maintenance schedulers, serial number tracked parts in CAMS, global command and control system training, and total non mission capable supply (TNMCS) calculation for TSPR [Total System Performance Responsibility] assets), and recognized eight kudos (operations and maintenance scheduling, 48th Rescue Squadron’s inactivation plan, consolidation of maintenance, supply, and transportation quality assurance functions, UTC footprint reduction, and 8th Fighter Squadron career development course program).\(^5\)

(U) Among the new action items, the LOCAT team noted that effective 1 October 1998, the 49th began operating under a TSPR agreement with Lockheed, tying Lockheed to an agreed upon TNMCS rate for provided assets. However, since not all F-117 parts came directly from Lockheed (some came from the Defense Logistics Agency and Air Force Material Command), the wing needed a separate system to measure the Lockheed TNCMS rate.\(^6\)


\(^6\) *Ibid.*
The LOCA T team recognized the 49th Fighter Wing's operations and maintenance scheduling as the “best seen to date.” Evaluators noted “...operations and maintenance schedulers work together to develop effective short and long range flying and maintenance schedulers.... This wing effort has clearly reduced turmoil in the squadrons and has contributed to the wing’s success in meeting the wing’s operational and maintenance requirements.”

SPO Relocation

The 1995 base realignment and closure actions called for the closure of McClellan AFB, California. Impacting the 49th Fighter Wing, the F-117 system program office (SPO) planned to relocate from McClellan AFB to Wright-Patterson AFB, Ohio by the end of March 1999. The SPO provided hands-on experience with the F-117A and oversaw contractor obligations. However, planners expected that this move would be transparent to wing operations.

As stated earlier, Lockheed assumed the TSPR contract on 1 October 1998. MSgt Daniel D. Bearm Superintendent, Product Improvement Management summed up this program and its impacts:

The biggest difference the entire F-117A Program is involved with in this endeavor was the Total System Program Responsibility (TSPR) contract with Lockheed Martin Skunk Works (LMSW) that started in October of 1998. The SPO is not funded or manned to have a dual level of responsibility the way McClellan AFB did. LMSW, under the TSPR contract, will be obligated to perform Technical Order Management Account responsibilities, be the performing depot for all depot level maintenance, perform equipment specialist and item manager duties, as well as engineering dispositions. These obligations were always overseen/managed by McClellan AFB in the past, and now the contractor

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8 Msg (U), SM ALC/QLA to SAF/AQ et al, “Relocation of F-117 System Program Office,” 171353Z Sep 98, SD III-9; Msg (U), SM ALC/QLA to ACC/CC et al. [SPO Movement] 211250Z Sep 98, SD III-10.
is under contract to perform to the same standards. To date, all of these functions have been accomplished well above standards and expectations.\textsuperscript{9}

**Lockheed Maintenance (U)**

(U) From 1 September-25 November 1998, contract workers from Lockheed Martin went on strike at Holloman AFB, impacting the T-38A and F-4F programs (discussed in greater detail in Chapter IV). In the absence of the regular workers, Lockheed hired replacements to continue the maintenance program. For the T-38 program, the strike brought little affect, as the aircraft met or exceeded all standards, and was able to meet all flying commitments. However, over the same period, the MC rate for the F-4F steadily dropped, from 96.0 percent in July to 74.0 percent in December (84 percent standard). In the same manner, most other F-4F maintenance indicators fell during the strike.\textsuperscript{10} Although the F-4Fs were able to fly sufficient sorties to meet the required training syllabi, they fell behind in phase inspections. Col Kevin W. Smith, 49th Operations Group Commander made the following assessments of the strike-impacted maintenance: “The T-38 is not an issue at all. It is essentially reconstituted now...F-4F daily sortie production and quality of aircraft are satisfactory...the F-4 phase is still well behind and I think it will take us months to get back up to where we were.”\textsuperscript{11}

**Gold Flag (U)**

(U) Finding creative ways to save money, Air Combat Command managed the Gold Flag program. Gold Flag identified methods to locally repair or contract the repair of items normally disposed of and new items purchased, identified as cost avoidance. Items repaired by the Gold Flag office counted as cost savings. Improving mission capability, Gold Flag resolved mission-impaired capability awaiting parts (MICAP)

\textsuperscript{9} Email (U), MSgt D Bear, 49LG/LGQP to SSgt G Henneman, 49FW/HO, “Aircraft Maintenance and the History,” 15 Mar 99, SD III-11.

\textsuperscript{10} Rpts (U), Lockheed Martin, “Unit Internal Performance Review,” Sep/Dec, SD III-12.

\textsuperscript{11} Email (U), Col K Smith, 49OG/CC to R McFadden, ACC PMS/DR et al, “IOI Lockheed Strike,” 6 Oct 98, SD III-13.
problems. MSgt Todd M. Johnson, 49th Logistics Support Squadron, noted “Gold Flag is designed to fix equipment that would otherwise be thrown away, or contracted out to be fixed, and we can usually fix the equipment for way below either replacement cost, or the cost to contract the job out.”\(^{12}\)

(U) In fiscal year 1998, the 49th Logistics Group Gold Flag program recorded over $311,000 in cost savings, $635,000 in cost avoidance, and satisfied 21 MICAPs. In the first three months of fiscal year 1999, the program marked over $16,000 in cost savings, $220,000 in cost avoidance, and resolved two MICAPS.\(^{13}\)

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\(^{12}\) A1C C Uhles, “Gold Flaggers save AF $$,” _Sunburst_, 16 Oct 98, _SD III-14_.

\(^{13}\) Brfgs (U), 49LG, “IREP,” Sep and Dec 98, _SD III-15_.

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