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Warfighting Resources and the Need for Operational Planning

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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15.Abstract: In the future, commanders at the operational level will face fighting an air operation with less resources. As the Gulf War reveals in many of its statistics, there are a number of ways this could happen. Current resource reductions might impact, as could weather, attrition, enemy actions and other things. Therefore, a commander must avoid policies that limit available resources. One such poor policy is the Omnibus agreement, which establishes a poor precedent for the management of resources in a resource-limited environment. This policy makes no sense either as a way to manage resources, or from the perspective of good warfighting doctrine. Remarkably, many of the principles in Marine Corps doctrine argue against the Omnibus Agreement. Obviously, there is an inherent conflict between the resource needs of operational and tactical level commanders which must be resolved to effectively manage resources and win wars. This conflict can only be effectively resolved with good operational planning. This planning eliminates confusion and prioritizes efforts. In future wars, such guidance is absolutely essential as resources become less.

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Abstract of
WARFIGHTING RESOURCES AND THE NEED FOR
OPERATIONAL PLANNING

In the future, combatant commanders at the operational level will face fighting an air operation with less air resources. As the Gulf War reveals in many of its statistics, there are a number of ways this could happen. If the current reduction in military forces doesn't create the situation by default then the realities of war might do so through weather impacts, attrition, or other ways. Therefore, it is absolutely necessary that the commander avoid any policies that can limit available air resources. Unfortunately, the Gulf War established some poor precedents for the management of resources. The one policy of greatest impact on resource availability is the Omnibus Agreement, which is still a lingering issue. Unfortunately, this policy seemed to spawn copycat movements during the war. These practices make no sense either in terms of the management of the resources or in the application of good resources-limited warfighting doctrine. Remarkably, the doctrine of the Marine Corps argues against the types of practices espoused in the Omnibus Agreement. However, the same doctrine upholds the need for maximum force at the tactical level. Thus, there is an inherent conflict to minimize for effective warfighting, particularly as the total available resources become less. Given this, it becomes absolutely essential to have good "operational planning." This helps eliminate confusion over resource allocation and builds consensus support for a combined effort. The lack of a plan, as seen in the Gulf War, cannot continue in a more resources-constrained world.

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1992 National Military Strategy

"... one of the essential elements of our national military strategy is the ability to rapidly assemble the forces needed to win -- the concept of applying **decisive force to overwhelm** our adversaries ... " (emphasis added) [1]

1995 National Military Strategy

" In any application of force ... We intend to commit **sufficient force** to achieve [our] objectives in a prompt and decisive manner." (emphasis added) [2]

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1. U. S. Joint Chiefs of Staff, National Military Strategy of the United States (Washington: Jan 1992), p. 10.
2. U. S. Joint Chiefs of Staff, National Military Strategy of the United States (Washington: Feb 1995), p. 13.

Introduction

This paper is about the realities of war for a theater Commander in Chief (CINC) or his Joint Task Force Commander (CJTF). The thesis of this air power paper is simple: It is increasingly likely that a theater commander will face more severe resource limitations than those experienced in the Persian Gulf War.[1] In addition, our Cold War heredity has added some additional limits for the CINC/CJTF. Casually accepting these limitations runs against good warfighting doctrine. Given this, a commander must preplan his operational approach to these resource limits. A formalized operational plan is necessary!

Today, it is quite common for military commentators to use the experiences of the Persian Gulf War as a basis for their discussion. This paper follows such an approach for it has validity. Many authors truthfully note that the Gulf War is unique because the American foe had a grossly wrong mental construct of American military power and a militarily incompetent leader.[2] Others note that during the war American military muscle had fully developed strength and endurance.[3] This last point has great importance for any CINC/CJTF since these conditions are no longer true. This paper will demonstrate this, ask some poignant questions, reach some conclusions and make recommendations about the future use of some Gulf War procedures.

The Persian Gulf War: A Special Case?

Nearly everyone knows the Gulf War chronology. After the Iraqi Armed Forces (IAF) invaded Kuwait, the United States and its coalition partners built up forces for a half-year. When the

coalition finally attacked, they did so proactively on their own timeline. Following a successful 39 day air operation, the coalition ground forces took only 100 hours to reach a declared victory. In all, America lost only 145 men and women to combat action.[4] These results are truly unprecedented.

A Unique Experience. A few statistics show that the Gulf War was different. These statistics exist in all areas: planning, operations, logistics, combat support and more. Here are some brief comparative examples.

Combat aircraft loss rate. (Figure 1). Desert Storm had an outstanding aircraft loss rate. The aircraft loss rate per sortie was 1819 to one. Compare this to the North Vietnam experience of only 383 sorties per loss.

Weather. (Figure 2) In the Gulf air operation, weather had a minimal impact. Weather caused only one-half of one percent of all cancellations. Additionally, only 40% of the days had any weather related attack sortie changes at all!

Logistics. After the war, experts determined, "Supply support exceeded both peacetime standards and wartime projections."[5] A number of examples support this conclusion. There was not even a single Central Command Air Force Component (CENTAF) sortie canceled due to a lack of munitions.[6] Equally remarkable during the 43 day air war, air-to-air tanking occurred 43,000 times delivering 107 million gallons.[7] Aircraft fully mission capable rates approximated their peacetime averages. (see Figure 3)

Operations. The aircraft buildup was most impressive as shown in Figures 4 and 5. The net result was positive. On the first day of the "air campaign" the number of available striking aircraft was 1200 versus the 700 planned.[8] This capacity permitted over 35,000 sorties to deliver 69,000 short tons of munitions on the enemy.[9] (Figure 6)

Excess Capability. Clearly, many pertinent areas of the air war in the Gulf had excess capabilities. The excesses allowed easy resolution or compromise of some highly contentious resource management issues. Unfortunately, future CINCs/CJTFs will not have the same excesses and easy solutions for a number of reasons.

Sheer Attack Numbers. A CINC/CJTF could easily find himself in a deficit. A smart, aggressive enemy is highly likely to attack early in a deployment plan. If the war starts four months early; for example, the fighter and attack aircraft forces begin their fight 150 to 200 aircraft short. (See Figure 4) An early start also seriously disrupts the available aircraft distribution. Strike aircraft like the F-111, F-117, F-15E and A-6E are scarce both numerically and proportionally.

Competing worldwide demands also create this problem. Some experts, reviewing the planned force structure, question the ability of the two Major Regional Conflict (MRC) force to arm and supply two CINCs in a near-simultaneous manner.[10] Limited regional force commitments also adversely affect the possible use of a two-MRC force.[11] Either insufficient supply or excess demand can adversely affect a CINC/CJTF's options and capabilities.

A smaller overall force compounds this problem even without further budgetary reductions. (Figure 7) Forecast forces sacrifice some specific capabilities present in the Gulf War force. Lost forever are the F-111 and A-6 forces. (Figure 8) A CINC/CJTF faces some difficult choices given the capability distribution of any future force even if multi-role aircraft modernization compensates for force structure losses to a degree.

Support force capability. What holds true for the attacking forces also applies to the supporting forces. A CINC/CJTF has a very difficult time managing his aerial tanker and electronic warfare (EW) assets.[12] In the Gulf War case it appears the theater was awash in refueling assets. However, the reality was something different.[13] During the war, the Navy routinely and for good cause complained about the availability of Air Force tankers. Navy fighter/attack aircraft could only range their assigned targets in large numbers with Air Force tanker support. If relying solely on their own organic refueling assets, the Navy contribution to the air war would have been two-thirds less.[14]

Limited EW aircraft availability creates serious problems too. The Air Force and Marine Corps discussed the use of EA-6B and EF-111 aircraft at length during the war, "... because of the lack of assets."[15] Without proper management this issue would have certainly resulted in fewer sorties into Iraq as surely as flying fewer attackers.[16]

Attrition. EW aircraft sorties reduce combat attrition and save resources! Unfortunately, forecasts of attrition are fraught with uncertainty. As Figure 1 shows, there was no

correlation between the Vietnam and Gulf Wars. Israeli experiences in their 1967 and 1973 wars show exactly the same thing, except that their trend was in exactly the opposite direction of the American experience.[17] Thus, the problem with attrition is that it makes resource retention planning quite inexact.

Weather effects. Gulf War weather was comparatively good if compared to other possible theaters. It is also true that, "The Persian Gulf weather was indeed unusually poor . . . about twice as unusual as normal."[18] The weather limited the ability of key U.S. visual targeting aircraft like the A-10 and non-radar targeting systems like the F-117 during the first days of the air war.[19] Continued poor weather or a different climate reduces the number of sorties. The result is less ability to fight. (Figure 9)

Ground logistics support. High aircraft fully mission capable rates do not necessarily mean a CINC/CJTF can logistically fight a war. Flying an aircraft on a sortie is not purely a function of that aircraft's maintenance status. For example, ordnance might limit tasking capability. This did occur in the Gulf War. CENTAF supply levels were well short of their requirements for some key munitions such as Cluster Bomb Units.[20] In addition, the Navy did run short of needed weapons. Fortunately they were backfilled from CENTAF stores. Despite this effort, however, the Navy lacked munitions for some critical missions and "turn[ed] down some war-winning targets."[21]

Resources: a Predominant Constraint. To summarize, there are multiple ways reduced asset availability affects CINC/CJTF planning and execution. Though hidden in the excesses of the Gulf War,

these limitations affected operations even under optimal conditions. Given this, it would be foolish for a future commander to assume an unconstrained warfighting environment. In reality, the factors just addressed always conspire to reduce the total combat air power of a CINC/CJTF.

Non-Resource Related Constraints

Unfortunately, current force utilization ideas also limit the CINC/CJTF. American warfighting policies did not evolve while American warfighting power decreased from the Cold War surplus to the present. The most obvious out-of-date policy is the 1986 Omnibus Agreement that currently governs the use of Marine Tactical Aviation (TACAIR). (Attachment 1) Unfortunately, this agreement has spawned copycat attempts that mimic it, exacerbating resource limitations on the CINC/CJTF.

Warfighting Doctrine and Resource Constraints. Restrictions on the use of air forces make no sense! Warfighting doctrine designed for resources-constrained forces argues against such policies. Remarkably, the doctrine of the Marine Corps outlines these lessons best. Chapter Four of FMFM-1, Warfighting, prescribes a series of doctrinal ideas designed to give, "... an inferior force ... decisive superiority."[22]

The Key Advantages. FMFM-1 describes some of the key advantages of these principles. The manual states, "It is through maneuver ... that an inferior force can achieve decisive superiority at the necessary time and place." FMFM-1 also states, "...when *decisive* opportunity arrives, we must exploit it fully and aggressively, committing every ounce of combat power ...."

Finally, FMFM-1 states a commander must establish, "a focus of effort." This means, *"...this is how I will achieve a decision; everything else is secondary."* Using these rules, "... we can succeed against a numerically superior foe ..." even if, "... we can no longer presume a numerical advantage." As such, the doctrine provides an excellent foundation for the use of air power in a resources-limited context.

Operational Level Applicability. The guidance of FMFM-1 applies, "... equally to the Marine expeditionary force commander and the fire team leader." This statement clearly declares that the doctrine applies at both the tactical and tactical-operational levels of war. From this, obvious questions arise. If the philosophy applies to a Marine Air Ground Task Force (MAGTF) commander, does it apply to a CINC/CJTF? Would a MAGTF commander change his doctrine at the operational level? Is resources-limited doctrine constant or variable between the levels of war?

A Cognitive Disconnect. FMFM-1 implies its resources-limited warfighting doctrine remains constant. Good warfighters always employ it. Any CINC/CJTF would use his last "ounce of combat power" to achieve his operational objectives. Even a Marine CINC/CJTF would use TACAIR if necessary, to achieve his predominant operational goal even if it is not a Marine tactical objective. If so, why does the Omnibus Agreement seemingly imply he wouldn't?

Omnibus Agreement Realities. To answer that question, one must separate Omnibus Agreement illusion from Omnibus Agreement reality. While the tone of the Omnibus Agreement seems to separate Marine TACAIR from all other air forces available to the CINC/CJTF,

this is only illusion. In reality, the Omnibus Agreement is simply a speed bump that any CINC/CJTF must cross to use all his joint air assets.[23] It is little more than unnecessary obstruction. If a CINC/CJTF determines "higher priority missions" exist then TACAIR will work for the CJTF. Former Marine Corps Commandant, General Paul X. Kelly, stated this in his White Paper No. 4-86. TACAIR will serve the CINC/CJTF's needs if called upon, he said.[24]

The True Implication. The Marine Corps and the CINC/CJTF must understand the critical implications of what General Kelly was saying especially in the context of a resources-constrained environment. No longer can a MAGTF assuredly plan on getting 73% of its ordnance delivered by organic Marine TACAIR.[25] Instead, a MAGTF might lose 73% or more of its organic TACAIR to other missions, even in a theater with a Marine CINC/CJTF. Victory has high but necessary costs to pay for success.

The Gulf War was Not Reality. The excess capacity in the Gulf War precluded the need to play by resources-limited groundrules for victory. In a sense, the use of airpower in the Gulf was a regressive exercise. There were only minor resource reasons to operate as a fully integrated force or to prioritize tactical operations. The surpluses lessened the philosophical conflicts.

Reasons for Concern

Disturbing Precedents. The Gulf War is regressive in another way. In a time-warp back to pre-Goldwater-Nichols Cold War days, an illusionary interpretation of the Omnibus Agreement modified the true nature of 1990s warfare. Disturbing quotations from General Moore, the Marine Commander in the Gulf, refute the understanding

of General Kelly and reflect the illusionary Omnibus interpretation of a TACAIR force that is not fully supporting operational needs.

> What I did ... was write an ATO [Air Tasking Order] that would give me enough0 flexibility.... So I might write an enormous amount of sorties, ... and I might cancel an awful lot of those. This way I didn't have to play around with the process....
>
> What I didn't want to do was use up assets early. I wasn't going to get too tangled up in the first two phases of the air war....[26]

Two Reasons to Absolutely Prohibit These Policies. Future CINC/CJTFs face problems if these policies become valid joint procedures. The joint system must avoid institutionalizing these policies for two primary reasons. First, they aggravate the resource problem. Second, they defy good doctrine for resources-limited war. In synthesis, a CINC/CJTF can not place ***all*** *warfighting resources against the* ***highest priority*** *operational need* under General Moore's approach. Only by rejecting the compromise arrangements inherent in the Omnibus Agreement can the CINC/CJTF be assured he will have flexibility for the **whole** operational mission.

A Third Reason: Operations Above Tactics. There is an additional reason for prohibitive action. If the CINC/CJTF permits General Moore's arguements to win, he is allowing a subordinate commander to place *forecast* tactical problems above the potential operational needs. This process inverts a necessary warfighting practice of placing operational necessity over tactical need and may cause the loss of an operation or campaign. An operational commander must prioritize his tactical victories, draws and defeats to insure operational and strategic victory. This prioritization is critical.

Copycat Trends. Other air asset "owners" in the Gulf made the same mistake of placing their tactical needs first. Complaints surfaced over the use of "special operations" AC-130Hs tasked by the Joint Force Air Component Commander (JFACC).[27] Support for other tasks squanders important special operations capability according to some warfighters. The loss of one AC-130H in a Close Air Support (CAS) role validated this fear to a degree. However, one instance of fatal misapplication does not invalidate the rule of operational primacy.

Naval aviators also complained. They were, "... concerned that independent naval operations were threatened ... because the carriers' missions were tasked by the JFACC..."[28] Again, these words expressed valid tactical and operational concerns. However, the unique nature of the theater made these issues mute. In the Gulf War, fleet defense was not as high a priority as it often is because of where the carriers were stationed. In other circumstances, potential conflicts between "landward" and "seaward" operations could exist too. Simultaneous support for both land and maritime operations might occur. A future Navy force may find itself resources-limited in its own right through over-tasking, just like any land-based force.[29]

The Possible Solutions to the Problem

Despite all these tactical and operational concerns there are strong resource and doctrinal reasons for operational control of theater air assets. It is also true that valid tactical concerns exist for subordinate commanders. If the best warfighting solution supports both these valid positions, how does one do this?

Right and Wrong Solutions. Simply stated, the answer cannot be an ambiguous compromise like the Omnibus Agreement nor can the answer deny tactical needs. The Omnibus Agreement is a falsehood as stated previously. Likewise, airpower is essential at both the operational *and* tactical levels. The best way to assure that both sides get the support they need is rather unglamorous; namely, good operational planning.[30]

Gulf War lacked a formal plan. The Gulf War lacked an operational employment plan for air resources.[31] How the air effort succeeded in spite of the lack of a formalized plan is most amazing. Excess capability contributed to a great degree and may be the only reason for success. This is a disturbing prospect.

One cannot say that there wasn't any planning. There was a strategic-operational level plan derived from OPLAN 1002. There was also a "strawman" operational plan--which unfortunately was only in the minds of the planners. The Air Tasking Order (ATO) and the Master Attack Plan (MAP) reflected these ideas. The MAP was a daily derivation of ATO results merged with the "strawman" expectations and the guidance of the CINC and the JFACC.[32] This process lacked a formalized, coordinated methodology and resulted in the Air Force stating that planning after the first seventy-two hours of the air war was "notional."[33]

The Impacts. There were serious impacts from this lack of a formalized operational plan even in the resource unconstrained environment of the Gulf War. Resources were not optimally used. Ground commanders complained constantly about the plan and the way resources were distributed.[34] General Schwarzkopf had to

personally intervene in resource apportionment and allocation disputes.[35] Some supporting commands did not have the planning and execution information they needed to fully support the air war.[36] These are only three examples of an even longer list--in a relatively well orchestrated war.

The Key Point. The lack of a formalized plan aggravated even the optimal wartime situation of the Gulf. If General Schwarzkopf applied his laissez faire approach in a more resources-constrained war greater adverse impacts would occur. The minor difficulties experienced would amplify and these difficulties would dilute available combat power. Optimal use of resources is not possible following General Moore's example. A lack of unity of effort results at the operational level. In contrast, a coordinated, formalized planning process lessens these problems. General Schwarzkopf would have done better using this approach even given his resource wealth. With planning, subordinate commanders understand the problems faced by the CINC/CJTF. They understand that their active resource support pays operational warfighting dividends. While planning will not eliminate all the problems, it is clearly the best way to get all parties involved in crafting and executing the best solution.

In Summary

The United States has probably fought its last resource unconstrained war. If the programmed force reductions don't create a resources-limited theater, then other realities of war may do so. Hard resource choices at the operational and tactical levels face future CINCs and CJTFs. Many of the operational level options have

adverse impacts at the tactical level. Tactical commanders must realize their problem is not the controlling one. They must understand that operational commanders must master the puzzle of resource limits to win. Proven warfighting doctrine dictates this policy as well as a fully joint effort between forces. In a resources-limited world, a poor idea like the Omnibus Agreement does not address the correct issues nor provide the necessary solutions. Integrated use of resources is the best way to handle these problems. This can only be done through a formalized operational planning effort that is responsive to the needs of both the operational and tactical levels.

NOTES

1. Edward H. Houle, "JFACC--The Sequel," Marine Corps Gazette, May 1993, p. 88.

2. R. F. Dunn, VADM USN (Ret), "After the Storm," Proceedings, June 1991, p. 60; Michael J. Dugan., "First Lessons of Victory," U. S. News and World Report, 18 March 1991, p. 5.

3. Richard Mackenzie, "A Conversation with Chuck Horner," Air Force Magazine, June 1991, p 60; United States Air Force Department, Gulf War Air Power Survey, Vol II, Part 1 (Washington: 1993), pp. 53-82.

4. United States Air Force Department, Gulf War Air Power Survey, Vol III, Part 2 (Washington: 1993), p. 129.

5. United States Air Force Department, Gulf War Air Power Survey, Vol III, Part 1 (Washington: 1993), p. 259.

6. Ibid., p. 258.

7. Ibid., pp. 200-201.

8. United States Air Force Department, Gulf War Air Power Survey, Vol II, Part 2 (Washington: 1993), p. 269; Jeffery E. Stambaugh., "JFACC, Key to Organizing Your Air Assets for Victory," Paramaters, Summer 1994, p. 101. The terminology, "air campaign" was in common usage during the war even if it may not be technically correct. More correct terminology is an "air operation."

9. United States Air Force Department, Gulf War Air Power Survey, Vol III, Part 1 (Washington: 1993), p. 386; United States Air Force Department, Gulf War Air Power Survey, Vol II, Part 2 (Washington: 1993), p. 341.

10. Kim R. Holmes, ed., A Safe and Prosperous America: A U.S. Foreign and Defense Policy Blueprint, (Washington, DC: The Heritiage Foundation, 1993), p. 54.

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12. Dana J. Johnson and James A. Winnefeld, "Unity of Control: Joint Air Operations in the Gulf," Joint Forces Quarterly, Summer 1993, p. 97.

13. Lyle G. Bien, "From the Strike Cell," Proceedings, June 1991, pp. 58; United States Air Force Department, Gulf War Air Power Survey, Vol III, Part 1 (Washington: 1993), pp. 197-219.

14. Riley D. Mixson, "Where We Must Do Better," Proceedings, August 1991, p. 38.

15. Royal N. Moore, "Marine Air: There When Needed, Proceedings, November 1991, p. 68.

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17. Eliot A. Cohen and John Gooch, Military Misfortunes, (New York: The Free Press, 1990), p. 129.

18. United States Air Force Department, Gulf War Air Power Survey, Vol III, Part 2 (Washington: 1993), p. 87.

19. Ibid., pp. 96-98.

20. United States Air Force Department, Gulf War Air Power Survey, Vol III, Part 1 (Washington: 1993), pp. 251-257.

21. Mixson, p. 38. The [ed] is added to the quote.

22. The information and quotes in this and the five subsequent paragraphs is from U. S. Marine Corps, Warfighting, FMFM-1 (Washington: 1989), pp. 58-77. The italics is in the original while the underlining has been added for emphasis.

23. Stambaugh, pp. 102-104.

24. Dwight R. Motz, "JFACC: The Joint Air Control 'Cold War' Continues..." Marine Corps Gazette, January 1993, p. 68.

25. Thomas Linn, "Who Really Needs Marine TAC Air?" Proceedings, October 1992, p. 42.

26. These two quotes are from Moore, p. 68.

27. Michael R. Gordon and General Bernard E. Trainor, The Generals' War; The Inside Story of the Conflict in the Gulf, (New York: Little, Brown and Co.), p. 284.

28. United States Air Force Department, Gulf War Air Power Survey, Vol II, Part 1 (Washington: 1993), p. 335.

29. The thoughts behind the operational and tactical uses of Naval Air in this paragraph came from an interview with Colonel Charles E. Hicks, USAF, Faculty, Joint Military Operations Department, Naval War College, Newport, RI: 25 April 1995.

30. The general ideas in this section espousing operational planning came from an interview with Dr. Milan N. Vego, Professor of Joint Military Operations, Naval War College, Newport, RI: 1 April 1995.

31. Ibid.; United States Air Force Department, Gulf War Air Power Survey, Vol II, Part 1 (Washington: 1993), p. 257.

32. United States Air Force Department, Gulf War Air Power Survey, Vol I, Part 1 (Washington: 1993), p. 187 and p. 230.

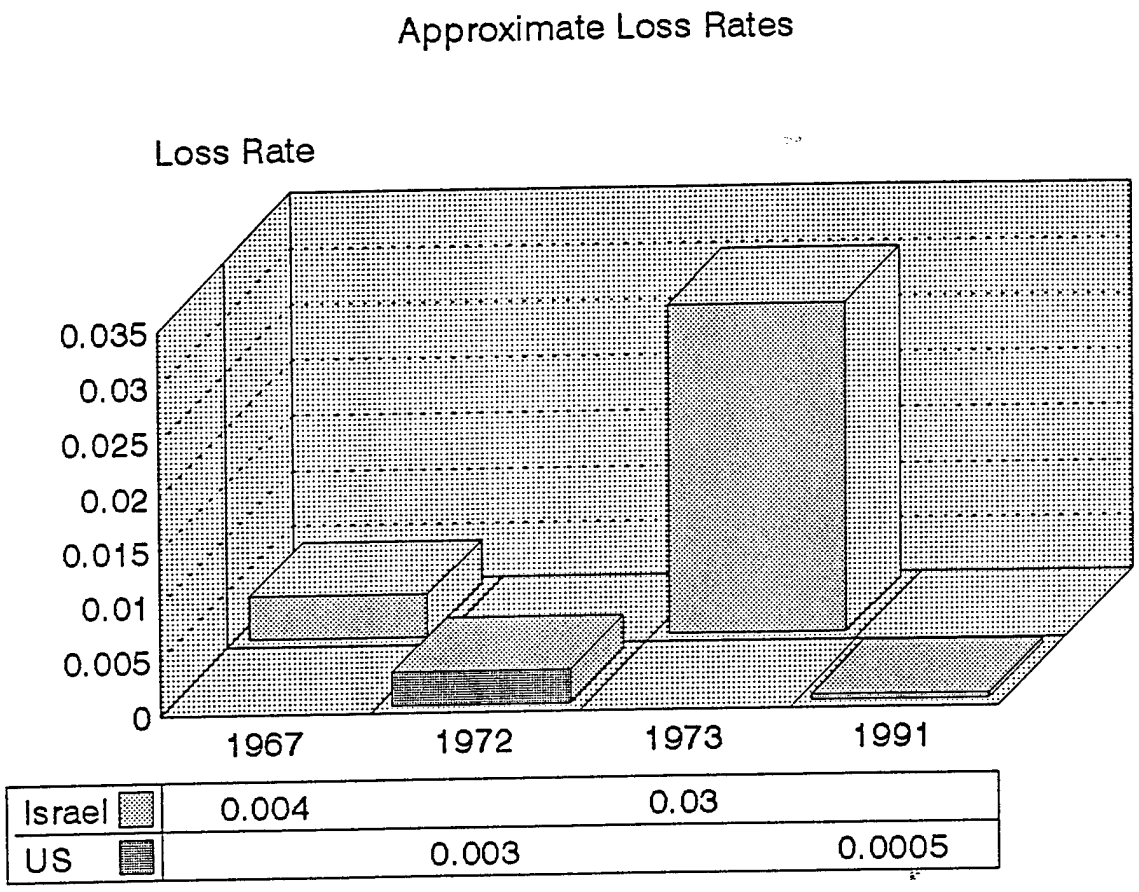
33. Ibid., p. 232.

34. Ibid., p. 230-260; Richard B. H. Lewis, "JFACC: Problems Associated With Battlefield Preparation in Desert Storm, " Airpower Journal, Spring 1994, p. 21; Gordon and Trainor, p. 330; Johnson and Winnefeld, pp. 94-98.

35. H. Norman Schwartzkopf, It Doesn't Take A Hero, (New York: Bantam Books, 1992), p. 320.

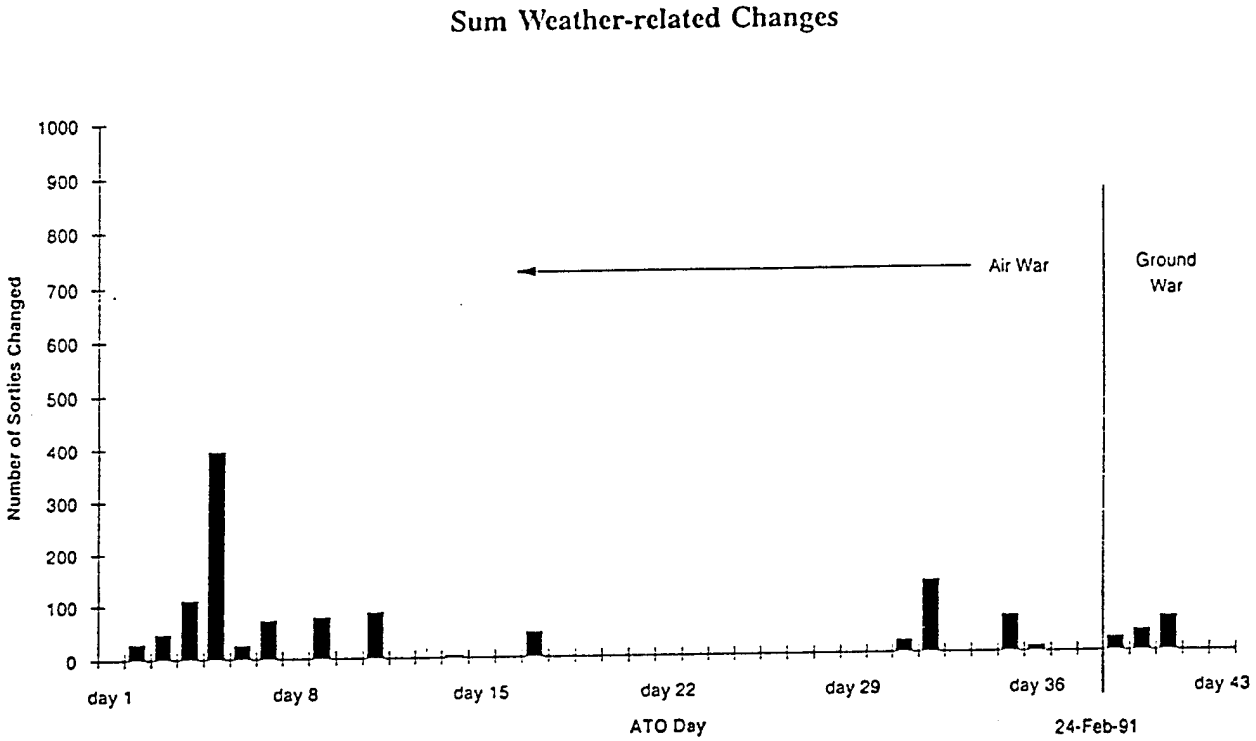
36. United States Air Force Department, Gulf War Air Power Survey, Vol I, Part 2 (Washington: 1993), pp. 292-293.

Figure 1



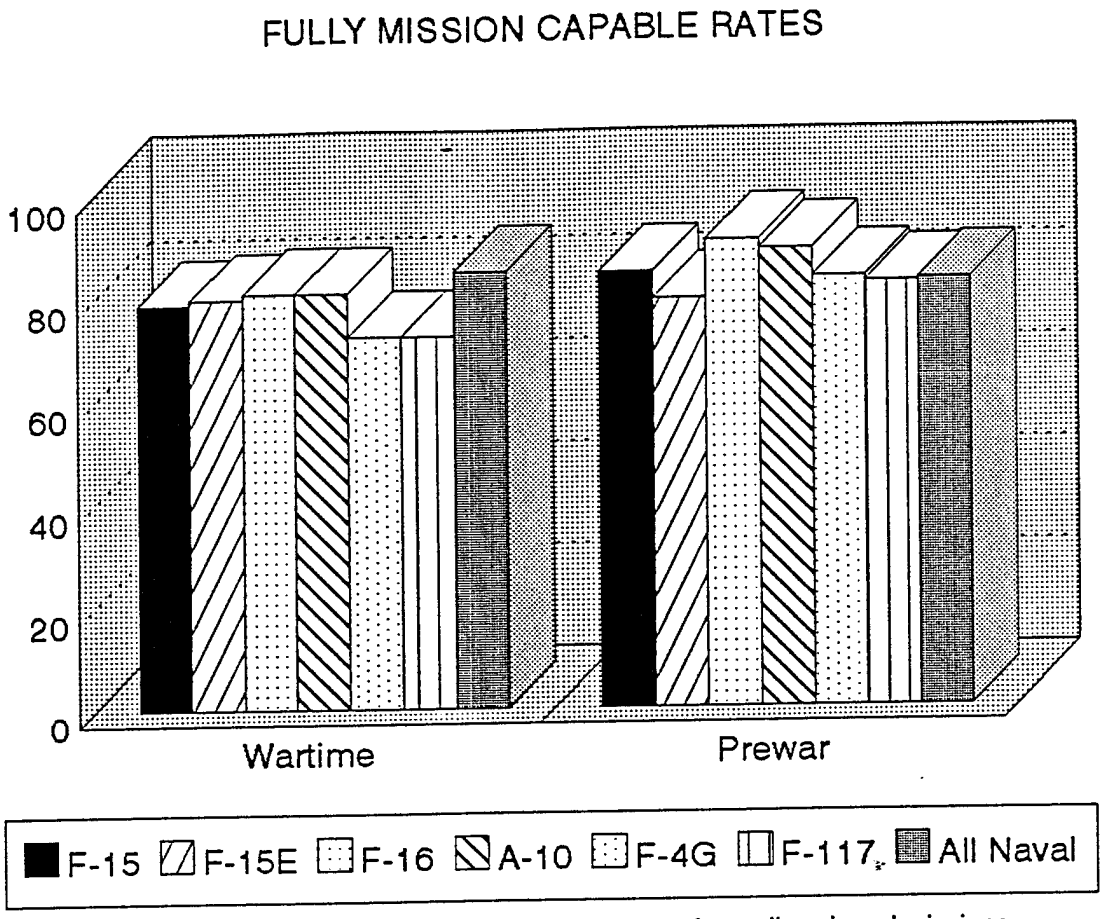
United States Air Force Department, Gulf War Air Power Survey, Vol. II, Part 2, (Washington: 1993), p. 116; M. J. Armitage and R. A. Mason, Air Power in the Nuclear Age, (Chicago: Univ of Ill., 1993), p. 127; Moshe Dayan, Story of My Life, (New York: Wm Morrow, 1976), p. 480.

Figure 2



United States Air Force Department, Gulf War Air Power Survey, Vol I, Part 2 (Washington: 1993) p. 226.

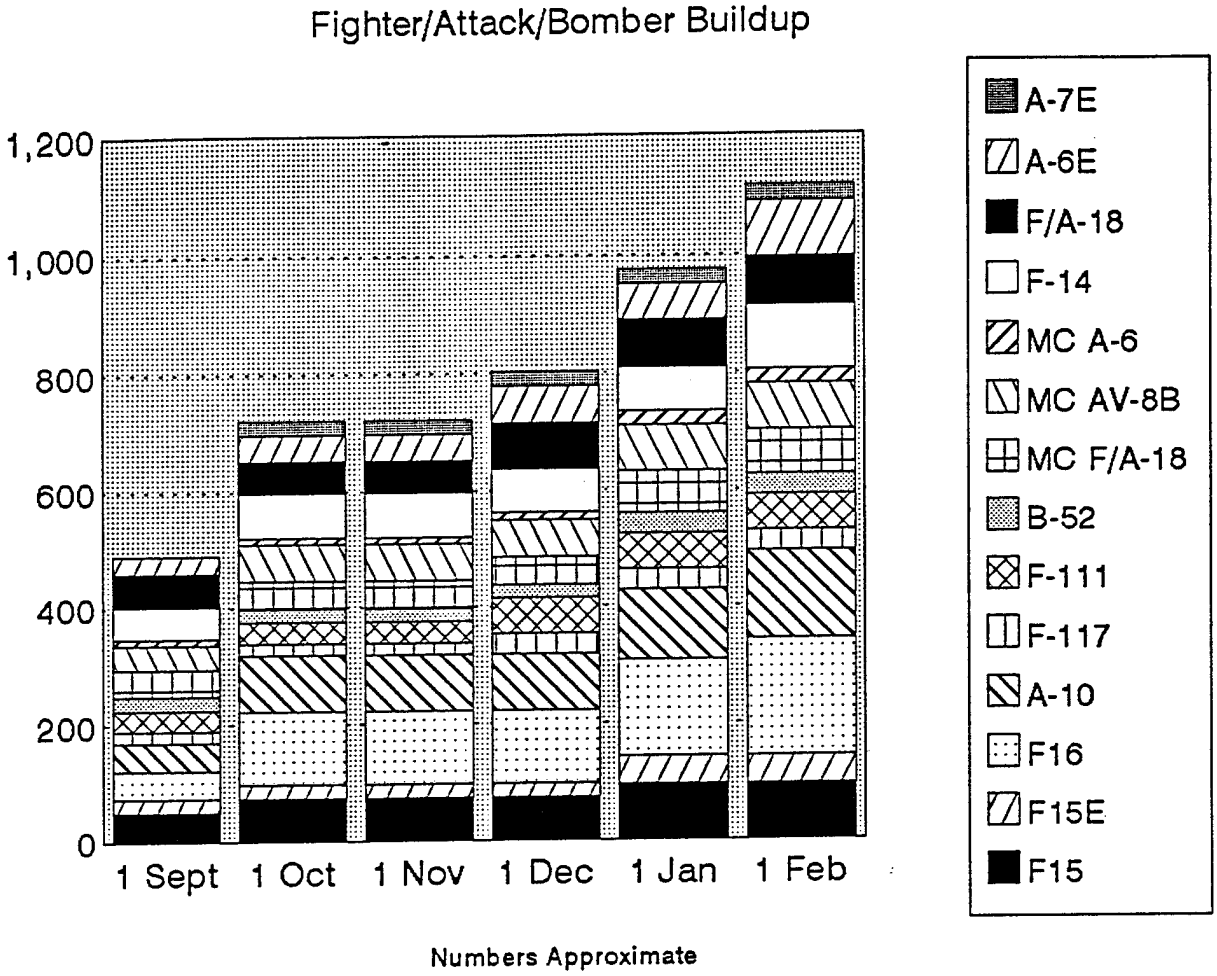
Figure 3



USAF definition: Portion of all aircraft that can perform all assigned missions
Navy/Marine Corps definition may vary

United States Air Force Department, Gulf War Air Power Survey, Vol III, Part 1 (Washington: 1993) pp. 348-355.

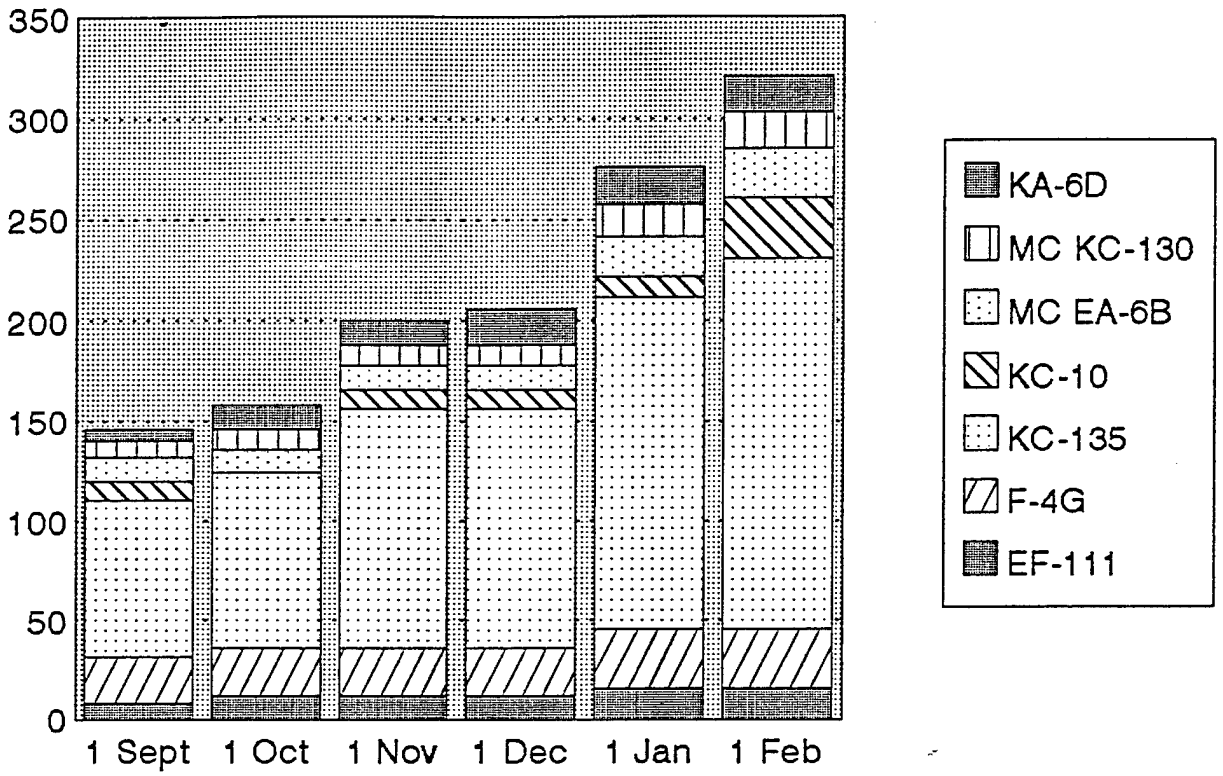
Figure 4



United States Air Force Department, Gulf War Air Power Survey, Vol III, Part 1 (Washington: 1993) pp. 116-137.

Figure 5

Electronic Warfare/Tanker Support Buildup

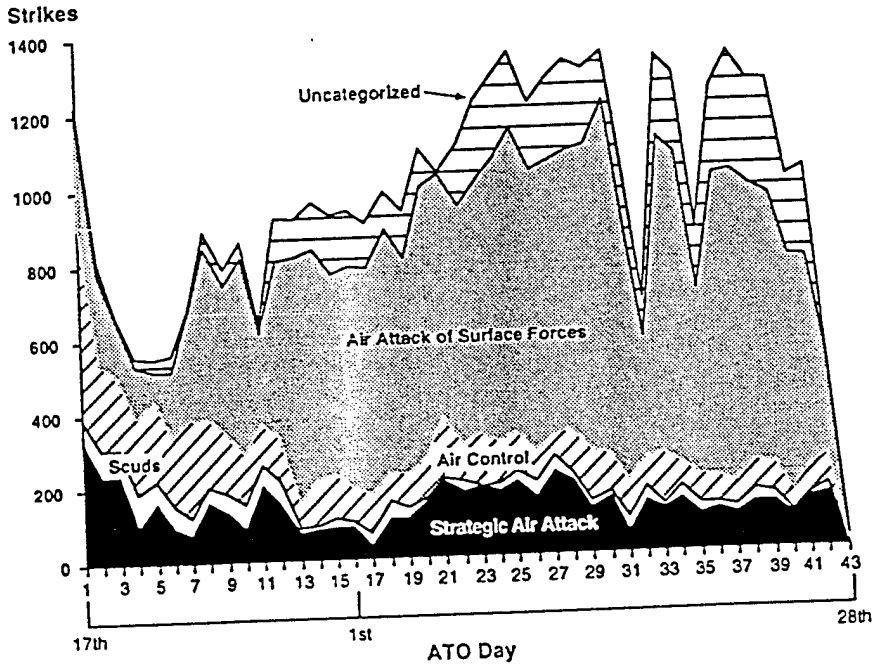


Numbers Approximate

United States Air Force Department, Gulf War Air Power Survey, Vol III, Part 1 (Washington: 1993) pp. 116-137.

Figure 6

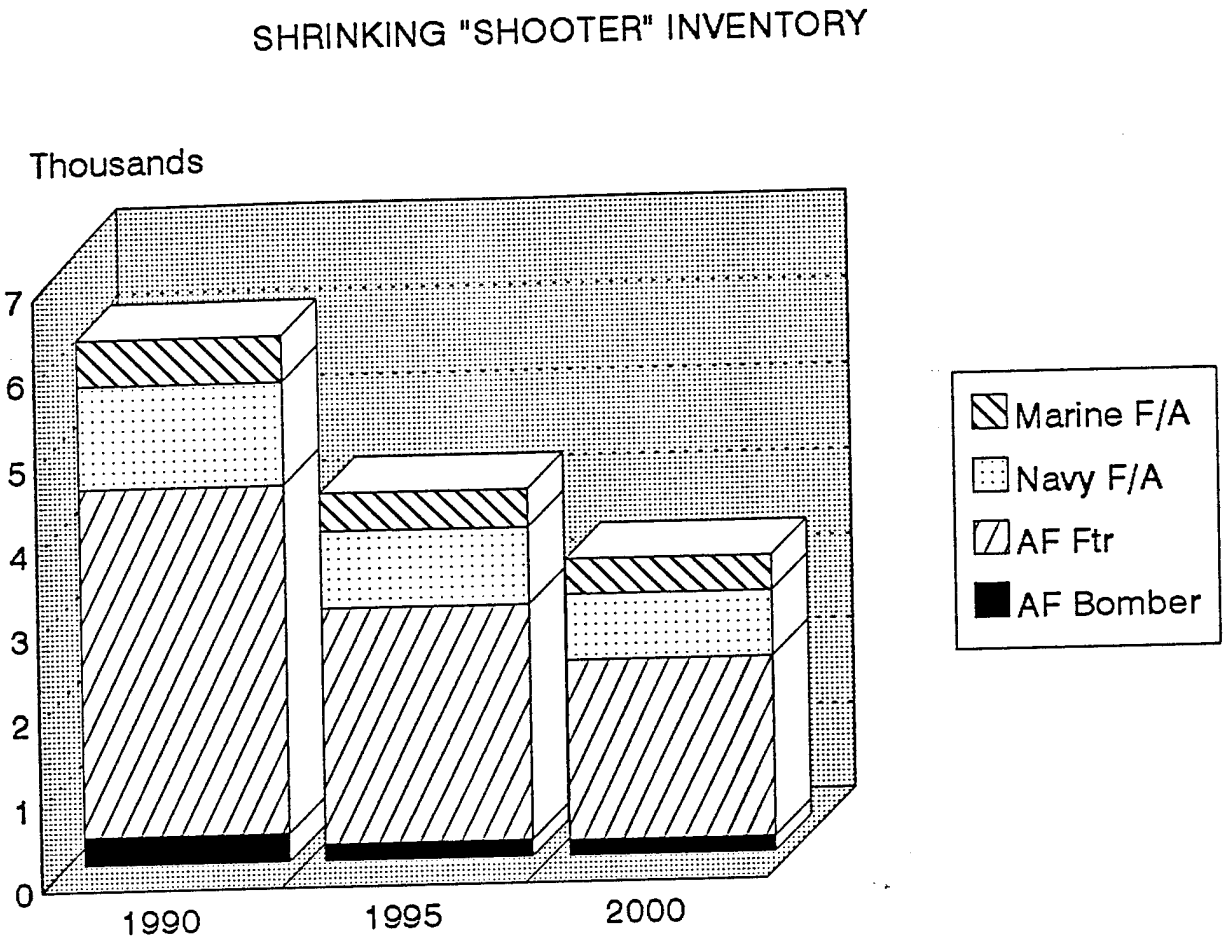
Coalition Air-to-Surface Strikes



Source: GWAPS Missions Database, 9 Dec 1992. This chart shows coalition air-to-ground strikes by day (including TLAMs, F-4Gs, and F/A-18 HARM shooters). Sorties that flew but did not deliver any ordnance (due to weather, maintenance problems, etc.) were omitted. An F-111F that dropped four GBU-12s on four separate vehicles in the KTO counted as four strikes; an F-16 delivering unguided ordnance on a single target counted as one strike. No air-to-air sorties are included. The majority of the uncategorized air-to-ground strikes (some 5600) were flown by A-10s, AV-8Bs, or Marine F/A-18s and were predominately against Iraqi ground forces in the KTO.

United States Air Force Department, Gulf War Air Power Survey, Vol II, Part 2 (Washington: 1993) p. 269.

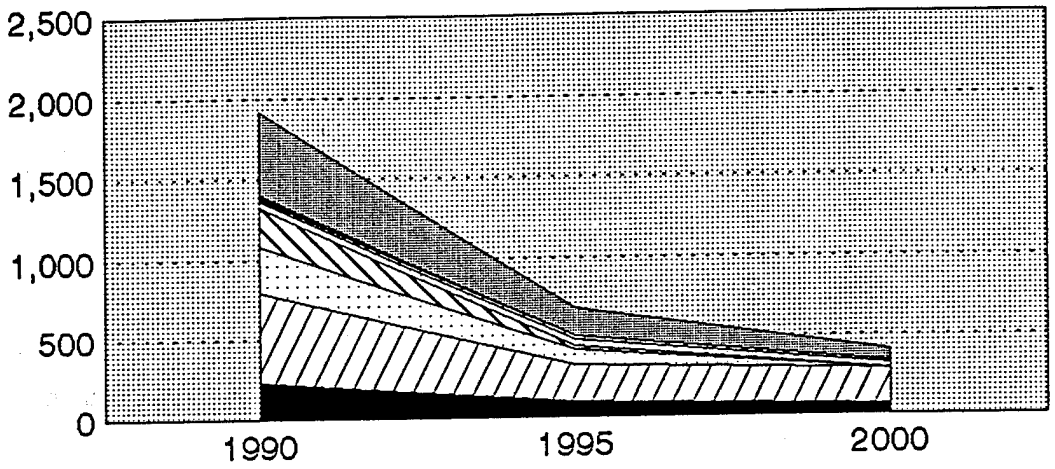
Figure 7



"McCain Calculates the Cuts," Air Force Magazine, Feb 95, pp. 55-58.

Figure 8

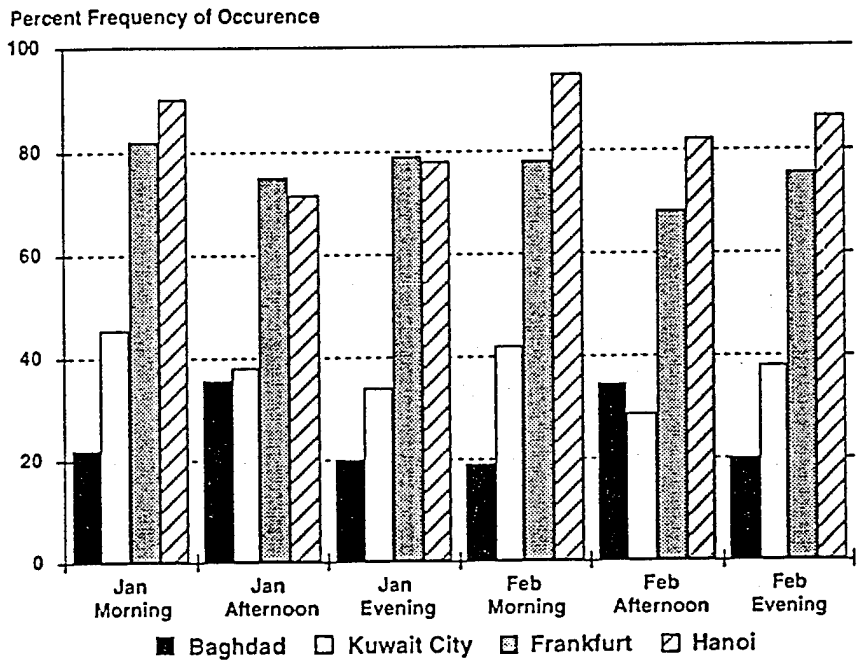
Selected Specialty Aircraft Drawdown



	1990	1995	2000
Navy Attack	511	176	68
MC TAC/FAC	10	0	0
MC Recce	8	0	0
AC-130	20	22	20
EF-111	42	40	30
RF-4	236	24	0
F-111	266	96	0
A-10	572	235	220
B-52	230	94	66

"McCain Calculates the Cuts," Air Force Magazine, Feb 95, pp. 55-58.

Figure 9



United States Air Force Department, Gulf War Air Power Survey, Vol III, Part 2 (Washington: 1993) p. 85.

Attachment 1

"OMNIBUS" AGREEMENT

The MAGTF commander will retain operational control of organic air assets. The primary mission of the MAGTF air combat element is the support of the MAGTF ground element. During joint operations, the MAGTF air assets will normally be in support of the MAGTF mission. The MAGTF commander will make sorties available to the joint force commander, for tasking through the joint force air component commander, for air defense, long-range interdiction,and long-range reconnaissance. Sorties in excess of MAGTF direct support requirement will be provided to the joint force commander for tasking through the joint force air component commander for the support of other components of the joint force or the joint force as a whole. Nothing herein shall infringe on the authority of the theater or joint force commander in the exercise of operational control, to assign missions, redirect efforts (e.g., the reapportionment and/or reallocation of any Marine Air-Ground Task Force (MAGTF) TACAIR sorties when it has been determined by the joint force commander that they are required for higher priority missions), and direct coordination among the subordinate commanders to ensure unity of effort in accomplishment of the overall mission, or to maintain integrity of the force.

U. S. Joint Chief of Staff, Unified Action Armed Forces (UNAAF), Joint Pub 00-2 (Washington: 1994), pp. GL10-GL11.

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