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DESERT STORM: The Soviet View

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Among the many tasks which it performs, the Soviet General Staff is charged with analyzing and exploiting its own and other armies' war experiences so that the Soviet military can better cope with the challenges of future war. It has performed this task consistently and effectively since the 1920s. The General Staff has equipped the Soviet Army (and the Red Army before it) with a superb theoretical basis upon which to plan and conduct war and military operations. It is historical irony that often political and other factors have negated the benefits of the General Staff's analytical work. The General Staff's understanding of this irony has impelled it to even greater analytical efforts as technological developments accelerate the speed of change in the military realm. Likewise, it has led to increased concern on the part of the General Staff that the fruits of its analysis not be wasted by what it may view as political frivolity.

The nature and consequences of this war experience analysis was clearly apparent in the 1970s and 1980s as the Soviets analyzed the 1973 Middle Eastern War, their conflict in Afghanistan, and, most recently, the impact of high-precision weapons and systems for their combat employment on contemporary war. The recent Gulf War has intensified Soviet concerns regarding the nature of future war.

Although Soviet judgements regarding the Gulf War have often reflected a wide diversity of political views, and some have been polemical in tone and unrealistic in content, on balance Soviet observers have begun identifying important trends or tendencies which are significant and worthy of deeper analysis. Among the most disconcerting of these is the possibility that new, technologically sophisticated weaponry may negate many of the more traditional measures of military power and have a revolutionary impact both on future combined-arms concepts and on future war itself.

This study surveys initial Soviet analysis of the nature of the Gulf War and its potential impact on the nature of future war. More importantly, it provides a framework for assessing possible future developments in Soviet military thought, which must be considered as an essential context for similar changes in the West.

Desert Storm: The Soviet View (19 January-4 February)

Introduction

This paper examines the Soviet view of Operation Desert Storm and is aimed at monitoring Soviet press reports about the war. Such reports are extremely insightful and can provide a great deal of information concerning Soviet interests, priorities, and lessons learned.

The Persian Gulf and the Soviet Union

The conflict in the Persian Gulf has generated considerable interest in the Soviet Union. Taking place only a few hundred kilometers from its southern border, many Soviets are concerned about the consequences of the war spilling over into Soviet Central Asia. Other concerns have been voiced about possible nuclear, chemical, and biological contamination from the war. Finally, the war has rekindled intense debates about the nature of Soviet national security and the future direction of Soviet foreign policy."¹

Because of both its national security and domestic-political implications, the Soviet Ministry of Defense (MoD) has shown intense interest in the war. Much of the interest is professional and seeks insights into the nature of future wars, adversaries, and technology. But there are political motives involved as well. Because it will either substantiate or invalidate key aspects of Soviet military doctrine and strategy, the war will either support or undermine the legitimacy and role of the Armed Forces in Soviet society. Accordingly, the conflict in the Persian Gulf is being closely watch, analyzed, and debated by Soviet military experts in the pages of the Soviet press.

The Soviet General Staff has devoted considerable resources to monitoring allied military operations in the Persian Gulf. Soviet commentaries on allied air and ground operations, technology, training, and troop dispositions indicate that the Soviets are making wide use of both electronic monitoring systems and intelligence satellites to track allied forces.

With regard to allied forces, a number of recurring themes are evident throughout the Soviet press: the importance of preemption in allied air operations; the achievement of surprise at the tactical and operational level; the decisive role of electronic warfare and technical intelligence in achieving surprise and air supremacy; the exploitation of new technologies (especially cruise missile, stealth, and anti-missile); the large-scale use of precision guided weapons and munitions; the high degree of accuracy of air and naval strikes; the importance of forward based carrier aircraft; the inability to destroy mobile missile launchers; the mistaken belief that the war could be won through air power alone; underestimation of Iraq, its armed forces, and its ability to endure the allied onslaught.

With regard to Iraqi forces, other themes emerge: the underestimation of Western resolve and capabilities; the failure to launch a preemptive strike against the allied coalition when the opportunity was available; the failure to properly integrate and network air-defense systems; the integration of air-defense missile and artillery systems; the need for truly professional (versus political) air and air defense forces; the importance of redundant command and control systems and facilities; the importance of survivable underground complexes; the importance of survivable mobile missile launchers; the vulnerability of nuclear, biological and chemical production and storage facilities to air strikes.

These themes are of interest in that they provide a great deal of insight into those aspects of Desert Storm considered important by Soviet military specialists. In the end, Desert Storm will either substantiate or invalidate the accuracy of Soviet military thought in the contemporary period.

Week One: "The Iraqi air defense system was paralyzed..."

In one of the first published analyses of American military operations in the Persian Gulf, Major General Zhivits of the USSR Armed Forces General Staff Center for Operations and Strategic Studies commented that despite the initial allied success in their air operations, the war could drag on. In a 19 January interview in *Izvestiya*, Zhivits observed that by using the element of surprise, the United States had almost completely taken out Iraq's air defense system and command and control system, disrupting the operations of Iraqi ground forces.² Additionally, the U.S. had gained total air superiority. All of this was accomplished while sustaining minimal losses, testifying to a high level of readiness.

Zhivits gave the major credit for allied successes to the comprehensive use of allied air and ground-based electronic countermeasures in their air operations. He noted that American knowledge with regard to specific Iraqi weapons systems and their tactical and technical specifications and combat employment characteristics made this possible. He also observed that the American command had carried out a series of organizational and technical measures and special exercises at ranges in Britain, France, and Germany two months prior to the allied attack on Iraq, with the objective of testing and evaluating the effectiveness of the U.S. Air Force in neutralizing Iraq's air defense system. On the basis of these evaluations, modifications were made to weapons systems, especially those designated for use against SAM complexes. Adjustments and reprogramming were carried out on all air and missile systems involved in the first strike, taking into account the latest data from radio and electronic intelligence in the region.

Zhivits concluded by warning Soviet readers against overestimating allied successes. He noted that Iraqi combat potential remained high and that the war could drag on, and remarked that several allied aircraft had already been shot down, including an "invisible" F-117. This remark was carried by *Moscow Radio* the same day.³

In a 21 January interview with *Izvestiya*, Lieutenant General Gorbachev, Faculty Chief at the General Staff Academy (equivalent to the U.S. War College), noted that superior American technical intelligence and highly accurate U.S. weapons played a key role in neutralizing Iraq's air defense system.⁴ He refuted assertions that Soviet military advisors had handed the Americans information on Soviet equipment in Iraq's inventory, noting that the decisive factor in accounting for the success of allied air operations was American electronic warfare systems, which overwhelmed Iraqi command and control in the first few minutes of the air operation.⁵ He observed that it took the Iraqis 90 minutes to recover from the initial shock of the attack. Even then, however, they were able to fire five Scud missiles.

Gorbachev then evaluated allied strengths and weaknesses. The main strength was the ability to create a powerful grouping of forces in a short period of time. Additionally, "the powerful and accurate strikes carried out, plus highly efficient intelligence all indicated a high degree of

professionalism" among allied forces, He cautioned that the main weaknesses would become evident only if the war became prolonged and coalition forces had to wage large-scale offensive operations in Iraqi territory, and indicated that the long distances from main bases and the vulnerability of lines of communications could greatly hinder allied military operations and threaten their success. He also warned that the operational use of troops and their coordination would become more difficult due to the differing levels of combat readiness among coalition forces. Finally, Gorbachev cautioned that the concentration of men and materiel in small, poorly prepared (from and engineering point of view) areas increased allied vulnerability.

Gorbachev concluded that the outcome of the war had already been determined in its first minutes by the ability of allied air forces to seize the initiative in the air and win air superiority from the outset. He noted that Iraq failed to take advantage of its one opportunity to mount a preemptive strike against allied forces. Having no opposition in the air, the coalition would be able to compensate for Iraq's superiority in tanks.

Reports on the accuracy of allied air strikes were disputed by some Soviet sources shortly after the beginning of the war. On 22 January 1991, *INTERFAX*, the independent and nonofficial Soviet news agency, carried an interview with an unidentified Soviet General Staff officer who asserted that 90 percent of allied air strikes missed their targets.⁶ The general noted that the allied bombing of Iraq and occupied Kuwait "hit no target" and that "a large number of airports and aircraft are undamaged, despite claims to the contrary." According to the source, "Iraqi air bases are well camouflaged and extremely hard to locate." After losing five planes in one day last week, the general said that allied air forces had been force to change their tactics. "Saying bad weather was the reason the planes were grounded was only a pretext. In fact they were planning a change of tactics."

INTERFAX had carried an earlier report by the Soviet General Staff, which said that "all the runways and Iraqi airports were destroyed." Additionally, Soviet military experts returning from Iraq had called the allied bombing "extremely accurate" saying that the bombs had fallen "mainly on industrial targets."²

The theme that the Persian Gulf War would be protracted was most authoritatively stated by Marshal of the Soviet Union Akhromeyev at the end of the first week of the war. In a 23 January interview with the Berlin-based *Neues Deutschland*, Soviet President Mikhail Gorbachev's top military advisor noted that the United States and its allies had used their superior air and naval power to deal a number of serious blows to Iraqi air and missile bases, air defense system, nuclear centers, and command and control systems. Akhromeyev warned, however, that although the Iraqi control system had been disrupted at the highest level, it was not paralyzed.⁸ He went on to observe, "I do not think that an army with nine years of combat experience can be paralyzed simply by air attacks. The conflict will drag on rather long." Akhromeyev noted that the Soviet Union had taken measures to strengthen its air defense system along its southern border:

Combat readiness has been brought up to a level that is necessary when there is a war going on near our borders. However, these steps do not mean that the Soviet Union will enter the war. I

believe that the USSR standpoint not to participate with its armed forces in this conflict has solidified even more.

In general, the Soviet press tended to take Western military reports on the progress of the war at face value during the first week of the war.

Week Two: "There is no longer any talk of a swift and bloodless victory"

On 25 January in *Krasnaya Zvezda* [Red star, hereafter cited as *KZ*], Colonel General of Aviation Ye. Shaposhnikov, Commander-in-Chief of the Soviet Air Force, commented that the initial stage of the allied air operation was "carefully planned, organized, and executed."⁹ He went on to note that "Good cooperation was noted among the mobilized forces and facilities, particularly with electronic warfare gear." Shaposhnikov cautioned, however, that while the first reports had given the impression that the aims of the operation had mainly been achieved, a somewhat different picture was emerging. Although Iraq might have miscalculated with regard to the timing of the start of the war, it had nonetheless carried out a number of important defensive measures, such as the concealment and dispersion of aircraft. Furthermore, the actual combat situation had not taken shape the way the allies had planned. Difficulties in material and technical supplies had diminished the number of daily sorties by coalition aircraft from 2-3 to 1-1.5 and weather conditions posed a major problem, hampering missile launches and bombing. Finally, a certain drop in the aggressive spirit of allied airmen had been noted as a result of exploitation of captured airmen.

Shaposhnikov indicated that the Iraqi Air Force had survived intact and was probably being kept in reserve for planned strikes against the ground forces of the allied coalition and Saudi Arabia, and for cover of its own combat formations in the event of large-scale Iraqi ground operations.

Another 25 January article in *KZ* by military and political analyst Colonel Manki Ponomarev also reevaluated allied successes in the first week of the war. He noted that the allies had indeed succeeded in achieving tactical and operational surprise, attributing allied success to the extensive use of electronic warfare and precision guided weapons. However, "certain blunders of the Iraqi command" also played an important part in the American success. According to Ponomarev, Iraq had not expected military operations to be initiated until after 17 January. Furthermore, the experience of the Iran-Iraq War, in which Baghdad enjoyed clear militarytechnical superiority, had engendered "smugness and complacency" among the Iraqi leadership. Despite reports to the contrary, however, Iraq's air defense system survived the initial allied onslaught, albeit at greatly reduced effectiveness. Furthermore, Baghdad succeeded in preserving the bulk of its combat aircraft through dispersion and concealment in shelters, as well as skillful use of prepared mockups and decoys.¹⁰ More worrisome for the West was Ponomarev's assertion that reports of the elimination of Iraq's nuclear, chemical and biological weapons centers were exaggerated, "to put it mildly." Ponomarev observed:

As far as possible to judge, Iraq's regular military forces ultimately proved capable of countering the latest weapons and methods of armed struggle. In addition, Iraq has declared with a certain amount of justification that it has won the "first round" and that Bush's game, based on the achievement of a swift victory with the aid of the latest technology, had failed.

He went on to comment, however, that Baghdad's statement about winning the "first round" was also a gross exaggeration, concluding that a "more sober mood has come to replace the first days euphoria. There is no longer any talk of a swift and bloodless victory."

Week Three: "I believe that a settlement will be found."

One of the third week's first articles concerning the war dealt with the nature of chemical warfare in the Gulf War. On 31 January in KZ, Major General I. B. Yevataf'yev, Directorate Chief in the Chemical Troops of the Soviet General Staff, speculated that Iraq did not possess sufficient resources for the effective use of chemical weapons.¹¹ He observed that in order to be effective, chemical weapons must be used on a massive scale. He calculated that, taking in consideration the degree of protection of American troops and chemical defense procedures, losses of 10 to 15 percent could be anticipated among U.S. troops. Casualties among civilians would be even higher. Here the United States would have to share part of the responsibility, due to American air strikes on Iraqi chemical munitions plants and storage facilities. Yevataft'yev noted that:

according to experts' assessment, the destruction of conventional munitions of chemical bomb stores containing 200-500 tons of sarin and tabun would result in casualties among the population for a distance of several tens of kilometers. In my view, the destruction of such facilities could be equated with chemical warfare.... In practice, a strike against military chemical facilities amounts to provocation of chemical warfare.

He went on to say that although the war posed no direct threat to the Soviet Union, disturbing trends were emerging:

The point is that accords have been reached between the USSR and the United States under which they exchanged data not only on their stocks of chemical weapons, but also on the places of manufacture and storage. Precise coordinates were supplied. Well, a secret that two people know is no longer a secret.... Yet the experience of the conflict in the Gulf shows that in the event of war these facilities will be first-strike targets. As a military man, I am obliged to think about this...

One of the most interesting articles to be published in the Soviet press on the war was a 1 February *Komsomol'skaya Pravda* interview with Major General V. Filatov, chief editor of *Voyennoistoricheskiy zhurnal* [Military-historical journal], who predicted that the war would end in a major U.S. defeat.¹² He commented that the U.S. was moving steadily toward its "second Vietnam," which would be worse than the first: "Even if Iraq is defeated, which I doubt, other Arab countries will enter the war against the so-called international force. This could happen -- and very soon -- if Israel is drawn into the conflict." Speculating that neither nuclear nor chemical weapons would be used in the conflict, he nonetheless predicted that the war would be "protracted," and went on to comment that the U.S. would lose many of its allies, while the Soviet Union -- remaining on the sidelines -- would acquire them. "The Arabs realize that their rear is secure, that the Soviet Union will not hit them in the back. Therefore, our chances of acquiring new friends in the Arab world are now preferable to those of any other world superpower." He concluded that the chief aim of Soviet foreign policy during the Gulf War was to prevent a conventional war from escalating into a nuclear one.

A somewhat more balanced picture was presented the same day by General of the Army Vladimir Lobov, Chief of Staff of the Combined Armed Forces of the Warsaw Pact. Speaking on *Moscow Radio*, Lobov started out by noting that only after ground forces had been committed could any conclusions be made.¹³ He noted, however, that two weeks of bombing and missile strikes had not produced any definitive results. "I regard today's strategic situation as equal, with some military and technical advantage for the United States." Lobov observed that 90 percent of the aircraft being used belonged to the U.S., and that the allied coalition was, in fact, NATO, operating under another guise. "Although there is interaction and coordination," he criticized, "there is no reason to speak highly of their actions at this stage." Condemning Iraq's aggression against Kuwait, Lobov then commented on the danger the war posed to the Soviet Union: "Accidents may arise. There is the threat of such mass destruction weapons as chemical agents and also germ warfare.... This may be dangerous for the USSR. In particular, its southern part." He concluded by saying that he believed that a settlement to the conflict would be found.

In contrast to Lobov's remarks, Lieutenant General V. Pereverzev expressed the opinion that after the second week of fighting, the advantage belonged to the allied coalition. Writing in *Izvestiya* on 4 February, he noted: "A blockade has been set up around Iraq. This country can rely on those resources it has today, and these are steadily diminishing.¹⁴ Pereverzev observed that after two weeks of "relentless" air strikes, the allied coalition had gained air superiority, paralyzed Iraq's nuclear and chemical centers, and neutralized a significant number of Iraq's airfields, as well as part of its air defense system. In addition, the state and military administrative system had been partially disrupted. Despite these successes, however, the allied coalition's hopes of achieving a quick victory had been replaced by a more sober evaluation of the opponent and his potential. "It is clear," remarked Pereverzev, "that the allies and especially the United States underestimated Iraq's capability. Iraq had prepared itself to repulse possible attacks firmly and thoroughly..." Pereverzov outlined Iraqi preparations in much greater detail than previous writers, detailing the use of operational camouflage, dummy radio nets, field fortifications, obstacles, and secure administrative posts. He concluded by noting that, while the allied decision to continue air strikes would result in fewer casualties, it would also bring greater complexity to the allied situation in the region, as well as to adjacent areas.

Desert Storm - A Protracted Downpour?

Soviet press coverage during the first three weeks of the war was, for the most part, well balanced and objective. It is clear that Soviet military analysts were very impressed with the success of allied air and naval strikes against Iraq. It was pointed out, however, that a war against Iraq could only be won by allied ground forces. "A war cannot be ended," one military writer observed, "until a soldier's foot steps onto enemy territory, its army has been routed or has surrendered, and the population's potential for waging a partisan war has been crushed."¹⁵ The majority of Soviet military analysts agreed that a ground war would be prolonged. One quipped that Desert Storm had turned into a "protracted downpour."¹⁶

Desert Storm: The Soviet View (6-19 February 1991)

War in the Gulf and the Soviet General Staff

The conflict in the Persian Gulf has given the Soviet Union the unprecedented opportunity to evaluate all aspects of allied military operations in the region. Major General S. Bogdanov, Chief of the Soviet Armed Forces General Staff Center for Operations and Strategic Studies, recently observed that the Soviet General Staff is closely monitoring the developing situation in the Persian Gulf.¹⁷ Reports in the Soviet press indicate that the Soviets have committed considerable resources to monitoring allied performance, including electronic systems and space-based reconnaissance satellites.¹⁸ The Soviets are also taking advantage of media reports on the war, as well as observations on the ground, based on their relationship with Iraq.¹⁹ Thus, Soviet military developments in the theater of operations and a report on the latest events are presented to the Soviet Minister of Defense, Marshal of the Soviet Union D.T. Yazov, every morning by 0630. A copy of the report also goes to Soviet President Gorbachev and other key Soviet leaders.²⁰

Themes in the Soviet Press

During this period, the Soviet press devoted the majority of its coverage to coalition rather than Iraqi forces. A distinctly pro-Iraqi/anti-American bias was evident. Some of the major themes discussed include the impressive nature of allied electronic warfare capabilities, the performance of Soviet weaponry (especially air defense systems and aircraft) in the Gulf War, the accuracy and destructiveness of allied air strikes against Baghdad and Iraqi nuclear and chemical facilities, U.S. amphibious warfare capabilities, the possibility of allied nuclear and chemical strikes against Iraq, the allied coalition as a cover for NATO operations in the region, and allied use of the war in the Persian Gulf to test advanced weaponry (especially cruise missile and Stealth).

Week Four: "...Soviet Military equipment. of which Iraq has an abundance. has not shown itself at its best."

One of the most controversial issues to have emerged from the war in the Persian Gulf deals with the performance of Soviet weaponry: did it meet performance criteria or did it fail?²¹ The issue is one of great concern: a majority of the weapons systems used by Iraq in the war, especially air defense and combat aircraft, were of Soviet manufacture, and many of these same systems are used by the Soviets.²² The issue of Soviet weaponry also has serious political and economic overtones: in 1989, the Soviets provided some \$15 billion in military assistance to Afghanistan, North Korea, Libya, Angola, Vietnam, Syria, and Cuba, much of it in military hardware.²³ If it is discovered that Soviet weapon systems in Iraq failed, the Soviets stand to lose a great deal in terms of prestige and hard currency accounts.²⁴

On 6 February in *KZ*, Colonel V. Demidenko, a Soviet Air Force pilot, attempted to dispel charges that Soviet military equipment had failed in Iraq: $\frac{25}{2}$

In my view, Baghdad decided to preserve its Air Force and use it to cover ground forces during the land operation. People in Iraq were bound to take into consideration the experience of other wars in the Middle East; in particular, the wars between Israel and Egypt. I witnessed and took part in the battles for the Sinai in 1970. I know how skillfully the Arabs are fitting out blast walls for the aircraft. I am sure Iraq built the appropriate bunkers in time for the start of hostilities.²⁶

Colonel Demidenko went on to say that, although he believed the accuracy of initial allied air attacks to have been quite high, allied statements claiming to have destroyed up to 70 percent of the Iraqi Air Force were a "propaganda bluff." He also remarked that, while Soviet fighters such as the Su-17 and MiG-23 could hardly be expected to counter U.S. F-15s, Iraqi MiG-29s were more than a match for U.S. aircraft. He concluded: "Even an average MiG-29 pilot has a better chance of emerging victorious in a dogfight than his adversary in an F-15, not to mention other aircraft."

The alleged failure of Soviet equipment was also addressed by Major General N. Kostin, a department chief at the General Staff Academy. In an 8 February interview, Kostin told a *KZ* correspondent that any categorical condemnation of Soviet-made equipment should be avoided. "Speaking of air defenses," he observed, "a significant part of the Iraqi air defense's electronic network is made up of modern hardware bought from France. It cannot be ruled out that French specialists might have shared their secrets with their U.S. colleagues..."²⁷ Kostin went on to explain that the failure of Soviet Scud missiles was due to the lack of an electronic protection system. "But if the Iraqis install a small jamming station," he speculated, "the Scuds' invulnerability will increase tenfold." He illustrated his point by mentioning that while the North Vietnamese were expending one or two missiles for every U.S. aircraft downed early in the Vietnam war, American jamming increased this number five- to six-fold.

Kostin called electronic warfare, "the technical basis of modern combat." He praised American electronic warfare capability, remarking that it had been used quite skillfully against Iraq, and went on to say that, since 1970, the U.S. had tripled the combat potential of its motorized and mechanized infantry divisions through electronics systems alone. He indicated, however, that while the Iraqi armed forces lacked modern electronic gear for aerial warfare, they did possess electronic warfare units in their ground forces. He observed that the Iraqi ground forces were well equipped, well fortified, and superior to their opponents in desert warfare skills. "But the Iraqis' strength," he concluded, "will ebb considerably faster than the coalition's. The Baghdad leader has no support from the side."

The debate over the performance of Soviet weaponry in the Gulf War has been intense and has already resulted in a sweeping review of the Soviet air defense system in the wake of the Iraqi defeat. The Soviet Minister of Defense is reported to have admitted that Soviet air defenses have "weak spots" and that the MoD is "analyzing the use of the armed forces of the United States and other countries during the war." Yazov observed that Iraqi pilots flying Soviet MiG-29s "failed in most cases" in dogfights with allied aircraft.²⁸

Allied attacks on Iraqi air and nuclear sites have also drawn considerable attention in the Soviet press. On 8 February in *Sovetskaya Rossiya*, Major General I. B. Yevetaf'yev again condemned allied air strikes on Iraqi nuclear and chemical facilities.²⁹ "... the destruction of chemical and biological installations using conventional weapons," he reiterated, "may be equated with chemical warfare, primarily against the civilian population." He observed that, in light of the lack of delivery systems and allied chemical defenses, "...a possible Iraqi chemical attack on the coalition's forces would not be very effective and would have no effect on combat operations." He speculated that allied attacks on Iraqi chemical facilities were meant to provoke an Iraqi

chemical strike against allied forces in order to justify an American nuclear response against Iraq.

Yevstaf'yev repeated an earlier theme: a convention banning chemical weapons and destroying stockpiles would be worthless, unless the destruction of chemical production and storage facilities using conventional weapons was also banned "although he fails to mention why such facilities would be necessary if chemical weapons were banned and existing stockpiles destroyed]. He concluded by warning that the Soviet Union "must not reveal information during any disarmament and arms reduction talks that may be used, even in theory, to the detriment of our country's population in the future... Ultimately, conventions are formulated to boost our people's security."

Yevstaf'yev's views indicate deep concern on the part of the Soviet General Staff over the vulnerability of the numerous Soviet nuclear and chemical production and storage facilities to strikes by conventional Western precision-guided weapons. They may also be indicative of concern over the vulnerability of those Soviet allies in the region possessing chemical and nuclear facilities, such as Libya, to allied strikes in the future. Finally, Yevetaf'yev's views are indicative of retrenchment on the part of the Soviet General Staff with regard to pursuit of conventional and nuclear arms control treaties with the West. The Soviet military has made a great deal of the fact that current treaties between the Soviet Union and NATO fail to address either cruise missiles, stealth technology, or forward basing of carrier aircraft. Moreover, the war in the Persian Gulf appears to have invalidated the quantitative paradigm at the heart of current arms control treaties. Instead a new qualitative paradigm in which a smaller, professional, technologically superior force is able to defeat a much larger, technologically inferior one is taking shape. The success of the allied air campaign in Desert Storm has thus created a new set of security concerns for the Soviet Union.

As might have been expected, some elements of the Soviet press have taken an anti-American stance in the Persian Gulf War. On 9 February, *Moscow Radio* aired a commentary by Nikolay Agayants criticizing the pro-Iraqi bias in Soviet coverage of Operation Desert Storm:

I refuse point-blank to understand the standpoint of some of my compatriots and representatives of our mass media who, in the tragedy that has flared up in the Persian Gulf, perceive only intrigue by the imperialists and secret services, and who cast doubt on the justice of the U.N. decisions on Baghdad which, after all, has occupied sovereign Kuwait.³⁰

Agayants identified the newspapers *KZ* and *Sovetskaya Rossiya*, both bastions of Soviet conservatism, as the two main culprits:

You know, it would not surprise me in the least if tomorrow some of our jingoistic publications raised one almighty hullabaloo about poor old Saddam --put in a word for him. Well, those who long for a firm hand and who fancy a dictator in the mold of Baghdad's Hussein need not hold back. When all is said and done, that is their right.... But... what about their individual consciences?

It has been taken for granted in the Soviet press that U.S. forces would conduct amphibious operations against Iraqi forces. On 12 February in KZ, Lieutenant General Skuratov discussed the nature of an American amphibious landing in the Persian Gulf. "Taking into account the presence of a large contingent of U.S. Marines and amphibious forces in the region," he observed, "one can presume that they will conduct amphibious landings...³¹ Skuratov analyzed American and British amphibious landings during the Korean, Middle East, and the Vietnam Wars, and the Falklands Conflict. He emphasized the growing role of helicopters and hovercraft in U.S. Marine amphibious landings. Shuratov calculated that a force of 2000 to 2500 Marines (two-three battalions) supported by a tank regiment, two-three artillery batteries, one-two antiaircraft batteries, additional armored equipment and armored tank and engineer platoons or companies could be landed in one hour. He went on to compute that an independent Marine brigade, along with a minimum amount of equipment, could be landed in three hours; with all combat equipment - in up to half a day. Skuratov pointed out that onshore Marine operations were characterized by high maneuverability, with some LAV units operating in enemy territory, more than 200 kilometers from the beachhead.

Skuratov's article is indicative of the success of the allied disinformation campaign in the Persian Gulf. The inevitability of a Marine amphibious assault into Kuwait received world-wide press coverage. American amphibious exercises and the subsequent threat of a landing by U.S. Marines kept a significant Iraqi force close to the shores of the Persian Gulf, while allied forces executed a strategic envelopment. It is high praise for the allied plan that in the end, even the Soviets, long considered the masters of deception, were themselves deceived.

Week Five: "We are worried...about the possibility of use of mass destruction weapons during the course of hostilities."

Possible American use of nuclear and chemical weapons against Iraq continued to be a major theme.³² In a 13 February commentary on *Moscow Radio*, Vladislav Kozyakov asserted that some political leaders in the United States favored the use of nuclear weapons in the Gulf War to minimize American losses. He also questioned whether the U.S. had given up its policy of preventing the proliferation of nuclear weapons and promoting the Nonproliferation Treaty. Kozyakov concluded that the very fact that American officials were considering the use of nuclear weapons as an option in the Gulf showed that events were threatening to go beyond the UN mandate.³³

On 18 February, *INTERFAX* reported that senior Soviet Army officers had strongly criticized allied military operations in the Persian Gulf. According to the report, these were the first public criticisms of U.S. actions by senior Soviet officers since the beginning of the war.

Marshal Akhromeyev strongly criticized bombardment of the Iraqi people and economy:

These strikes have been launched against the Iraqi people and economy. This cannot be tolerated any longer.... If necessary we should go to the Security Council and demand that the fighting be conducted within the framework of the U.N. resolutions, or else it must stop.

The Soviet President's top military adviser also admitted to differing with Gorbachev on Soviet policy in the Gulf, although he found it "fairly correct." "The bombing of the bunker [in Baghdad]," he continued, "cannot be tolerated." He added that senior Soviet Army officers were "very closely" following events in the gulf.

Akhromeyev was followed by General Lobov, who was even more stinging in his criticism of allied military operations in the conflict. "No one," he noted, "should be allowed to use the Security Council resolutions as a smoke-screen to camouflage the massacre on Iraqi territory." Lobov went on to express concern over the "testing of advanced weaponry, such as cruise missiles or Stealth aircraft." He warned that such tests could "disturb the qualitative parity in the weapons sector and have serious consequences for the future." He concluded that the prospects were very alarming.

Public condemnation of American military operations by such senior-level Soviet officers is indicative of increasingly problematic Soviet-American relations in the postwar period. With the military gaining an increasingly influential role in Soviet domestic politics, Gorbachev's "New Thinking" is rapidly being replaced by to the General Staff's old thinking. According to reports in the Western press, resurgent military conservatives in the Kremlin are taking an increasingly hard line in both the START and CFE talks.³⁴

In a 19 February speech to the Supreme Soviet in Moscow, Soviet Foreign Minister Aleksandr Bessmertnykh reiterated Soviet concerns over reports pertaining to the possible use of nuclear and chemical weapons in the conflict.

We are worried by statements that have been made recently at the political level...about the possibility of use of mass-destruction weapons during the course of hostilities. We consider absolutely impermissible the use of chemical, biological, and nuclear weapons. As Soviet President M. S. Gorbachev warned in his statement of 9 February, if this occurs, then all world politics and the whole world community would be shaken to its foundations. There cannot be any doubt of this.³⁵

Bessmertnykh went on to indicate that continuous nuclear, chemical and biological monitoring had been taking place along the Soviet Union's southern border since the beginning of the conflict.

On 19 February in *KZ*, Colonel I. Vladimirov remarked that "...from the first days of the conflict, the North Atlantic alliance assumed the functions of coordinator of the alliance countries' war preparations in the Persian Gulf zone."³⁶ Vladimirov speculated that the dispatch of naval and air assets to the Persian Gulf and Turkey by Western European countries was conducted under the auspices of NATO. He warned that the war in the Persian Gulf had provided impetus for building up NATO's military might. Vladimirov observed ominously that work on the reduction of armed forces and conventional arms in Europe had been suspended. "Unfortunately," he concluded, "this NATO response to the Persian Gulf crisis could quite easily cast into doubt everything positive that has been achieved in the sphere of disarmament on the European continent and in the world."

Vladimirov's article suggests that, having concluded that conventional force reductions in Europe run counter to Soviet security interests, the Soviet military is prepared to blame NATO for their failure.

Conclusion: "...the highest standard of technical problem solving was demonstrated at all levels."

The success of the allied air campaign --and Western technology --in the Persian Gulf has created a security dilemma for the Soviet Union; it finds itself increasingly unable to keep pace with Western technological developments. That dilemma was best illustrated in a recent interview with Colonel Aleksandr Radionov, a leading specialist of the Ministry of Defense's Space Units.³⁷ Speaking to a correspondent from *Izvestiya* on 11 February, Radionov outlined the development and successful testing of the U.S. Army Strategic Defense Command's ExoAtmospheric Reentry Interceptor System (ERIS). He observed that the system could enter into U.S. Army service in 1994-1996:

It is planned to have up to 100 missiles on combat standby. Although U.S. specialists believe that such a quantity is hardly enough to intercept a massive nuclear missile strike, it is very effective as an anti-satellite weapon: it could hit 60-85 percent of spacecraft in low orbits.³⁸

When the concerned *Izvestiya* correspondent asked whether the Soviet Union was capable of carrying out similar missions, the Soviet Colonel frankly admitted: "I do not *think* so."³⁹

Desert Storm: The Soviet View (20 February-4 March) War in the Persian Gulf: The Soviet Central Asian Factor

One reason cited to explain the Soviet Union's lukewarm support for the allied coalition is Soviet

One reason cited to explain the Soviet Union's lukewarm support for the allied coalition is Soviet Muslim backing for Saddam Hussein.⁴⁰ In a poll conducted by *INTERFAX* early in the war, most Soviet citizens supported the allies in the war.⁴¹ The survey, however, failed to take into account Soviet Muslim sentiment. According to Oleg Shchedrov, a *Radio Moscow* commentator, many Soviet Muslims view Saddam Hussein as a defender of the faith, "comparable to the late Ayatollah Khomeini."⁴² *Novosti*, the government news agency, reported that the Iraqi Embassy in Moscow had received more than 10,000 letters from Soviet Muslims volunteering to fight on the side of Iraq against allied forces.⁴³

Some 58 million Muslims live in the Soviet Union, most in the Central Asian republics (Uzbekistan, Tadzhikistan, Kirghizia, Turkmenistan, and Kazakhstan) located only 250 kilometers from the fighting in the Persian Gulf. Thus, Soviet Muslims account for more than 20 percent of the Soviet population.⁴⁴ Furthermore, they are rapidly growing in number. The latest census figures indicate a significant population increase in Central Asia as opposed to a relative decrease in the Slavic republics (Russia, Belarussia, Ukraine and the Baltics). Between 1979 and 1989, the population of the Central Asian republics grew 22-34 percent. In comparison, the population of the Slavic republics grew only 4-7 percent.⁴⁵ Soviet authorities fear that the war will further exacerbate tensions between the Soviet Government and a rapidly growing and

increasingly militant Muslim population. The result would be a further escalation of the ethnic violence which has already engulfed the region.⁴⁶

Major Themes in the Soviet Press

During this period the Soviet press devoted the majority of its coverage to coalition rather than Iraqi forces. While the tone at the beginning of the period was stridently anti-American, a more balanced view has emerged since the end of the war. Although the Gulf War strained Soviet-American relations, it is generally believed that once both countries turn their attention back to normalizing relations it will be possible to repair the damage.

Some of the themes discussed during this period included allied adherence to UN resolutions on the use of force, the impact of the war on the future of arms control and troop- reductions in Europe, NATO exploitation of the conflict to test new technologies, the effectiveness and destructiveness of the allied air campaign, allied use of space-based communications and reconnaissance systems, allied technological superiority over Iraq, the possible use of chemical weapons, Iraqi use of operational camouflage, the importance of the "human factor" as the decisive element in war, Soviet military assistance to Iraq, and the need to reexamine prevailing Soviet views on modern war, Soviet military doctrine, military strategy, Soviet air defense, and *the* quality of Soviet weaponry and equipment.

Week Six: "The conflagration of war is blazing near our southern borders in the Persian Gulf."

The destructiveness of the allied air campaign in the Persian Gulf has raised questions about the adherence by the allied coalition to UN resolutions on the use of force. Speaking in a 21 February interview on *Moscow Radio*, Colonel General Stanislav Petrov, Commander of Soviet Chemical Troops, expressed the opinion that the war had already gone beyond the limitations of the UN resolution authorizing the use of force in order to restore the sovereignty of Kuwait. Petrov called for an immediate cessation of hostilities without any preliminary conditions, noting that the continued use of military force would only

escalate the tragedy and result in additional casualties.... In spite of the heaviest air attacks on Iraqi military and administrative centers its Army is still capable of fighting back....My opinion is that the means used in this war go beyond the level which is necessary to achieve the goal. This is a war for the complete destruction of the Iraqi military and economic potential.⁴⁷

Petrov concluded that the final outcome of the war was difficult to predict.

The war in the Persian Gulf has raised concerns about the future of arms control and troop reductions in Europe. On 22 February in *KZ*, Major M. Zheglov lamented the disbanding of the Warsaw Treaty Organization (effective 1 April 1991), especially in light of the situation in the Persian Gulf. "We hardly have the right to forget about the Warsaw Pact's modern, constructive ideas aimed at detente, arms reductions, and the development of the all-European process.... What," he asked rhetorically, "will happen to our security?"⁴⁸ Zheglov argued that forces which advocated the resurrection of the Cold War were once again active in NATO. "A crisis had only

to break out in the Persian Gulf region," he pointed out, "for NATO to begin putting the brakes on the programs to reduce armed forces and armaments and appealing for the creation of new mobile forces capable of operating in any region." Despite his rhetoric, however, Zheglov concluded that the Soviet Union must pin its hopes on the current CSCE "Conference on Security and Cooperation in Europe] process. "It is not hard to see that these structures and, if necessary, others too, given active and effective work, are also capable of regulating the complete package of security problems, security in Europe above all, and thus, for the Soviet Union too."

Zheglov's views on arms control and troop reductions in Europe are not widely shared by most senior Soviet military officials. Indeed, the Soviet General Staff appears to be the driving force behind Moscow's retrenchment in both CFE and START negotiations.⁴⁹ Zheglov's article indicates that the Soviet military is attempting to shift the blame for the failure of CFE and START onto NATO.

The performance of Soviet military equipment in the Persian Gulf continues to be a major theme. Perhaps in an effort to restore the confidence of the people in Soviet military technology, a military affairs commentator on *Radio Moscow* announced that the Soviet Union was preparing to provide the People's Republic of China with a number of MiG-29 advanced fighters. In a 22 February broadcast, the commentator, identified only as Korzelov, pointed out that a Soviet delegation, headed by Igor Belousov, Deputy Chairman of the Soviet Council of Ministers, recently returned from China after holding talks on cooperation in the field of defense industry. In light of these talks, it is very probable that the Soviet Union will sell arms to the PRC. Korzelov indicated that the Chinese were particularly interested in purchasing Soviet MiG-29s. The aircraft belongs to the export category of Soviet arms. He stated that:

many of the capabilities of the MiG-29 are greater than those of similar aircraft of the Western nations. Experts draw attention to the fact that its engine is very powerful, enabling the fighter to reach a height of 1,000 meters just 15 seconds after take-off.⁵⁰

Korzelov remarked that the German Defense Minister, Gerhard Stoltenberg, believed the MiG-29 to be the most advanced fighter in Europe. He noted that during the recent reunification of Germany, the German MoD inherited "scores" of Soviet MiG-29s. Since then the Germans have conducted exercises to test the capabilities of the MiG-29. He notes that

a prestigious journal in military circles carried a report on an air war game in Germany involving U.S. F16s and Soviet MiG-29s. The MiG won several times. After the exercise, a defeated U.S. pilot said: first, the MiGs vertical speed is much higher; second, the radar on the MiGs is able to detect enemy planes earlier.⁵¹

Korzelov pointed out that India, Bulgaria, Cuba, and Syria had already signed contracts to purchase the MiG-29. He added that companies in Britain, Israel, South Korea, and Canada had also shown interest in buying the aircraft.⁵² "I would not be surprised," he concluded, "if the Chinese military decided to buy the MiGs.... In light of the current level of miliary training in the Soviet Union and China, broad prospects for military cooperation between the two countries exist."⁵³

Despite allegations that Soviet equipment failed, the war in the Persian Gulf will probably not have an adverse impact on Soviet arms sales. The comparatively low price of Soviet weaponry (vis-a-vis Western systems), its simplicity and ruggedness, and the favorable sales terms under which it has been offered in the past, will continue to make it attractive to foreign buyers. In light of the Soviet need for hard currency, one can expect that they will make their top-of-the-line models available to any and all potential customers.⁵⁴

In another 22 February broadcast on *Moscow Radio*, the Soviet MoD took the opportunity to refute Western reports that a delegation of the Soviet General Staff was staying in Iraq. According to the Defense Ministry, allegations that the Soviet Union was supplying Iraq with either military supplies, specialists or intelligence were false. It also denied providing the United States with information on Iraqi systems. The report notes that

despite the fact that all previous fabrications have been officially denied, a mythical delegation has now been added. It is not difficult to guess that this is being done with a view to discredit the basic Soviet stance on the crisis in the Persian Gulf area.⁵⁵

The broadcast concluded by stressing that such "disinformation" is being spread by someone "who is not interested in a peaceful settlement to the conflict," a clear allusion to the United States.

Allegations of Soviet military assistance to Iraq were also refuted by the Soviet MoD in *New Times*. Colonel Vladimir Nikanorov, an MoD spokesman, and Sergei Gorbunov, a press service officer for the Main Space Command of the MoD Space Units, denied reports that the Soviet Union was providing military assistance to Iraq. *New Times* correspondents also interviewed General Vladlen Mikhaylov, Chief of the Main Intelligence Directorate of the Armed Forces of the Soviet General Staff [the GRU]:

As for space intelligence, I can say that in accordance with the decision of the government and the Defense Ministry, such data is not passed on to anyone. We did not even pass on such data to our former Warsaw Treaty allies. I should add, however, that Baghdad submitted a request, asking U.S. to provide it with satellite intelligence. But we categorically refused.⁵⁶

The investigative trail led to General Yevgeniy Smirnov, Chief of the Tenth Directorate of the Soviet General Staff. The directorate is responsible for sending armaments and military specialists to work abroad. Smirnov called Western reports "absolute nonsense":

The last Soviet specialist left Iraq on the night of January 9 to 10. No one even expressed a desire to remain there. It is not the first time that mis- information of this kind has appeared. We firmly and strictly adhere to the provisions of the Security Council resolution. We stopped deliveries as soon as Iraq began its aggression against Kuwait.

It is evident that allegations that the MoD provided military assistance to Iraq during the conflict will continue to haunt it (and Soviet-American relations) for some time to come. Indeed, a week after this interview, as the war was coming to an end, the Soviet Minister of Defense, Marshal of

the Soviet Union D. T. Yazov, denied publicly that the Soviet Union had provided Iraq with any military assistance during the war. $\frac{57}{2}$

In his 22 February Order marking Soviet Army and Navy Day, Yazov, called attention to the conflict in the Persian Gulf.

The conflagration of war is blazing near our southern borders in the Persian Gulf region. Under these conditions, while insistently implementing military reform, it is necessary to maintain the Soviet state's defensive capability and the combat readiness of the Armed Forces of the USSR at the level of reliable sufficiency.⁵⁸

In a 23 February interview with *Pravda*, Yazov remarked that he wanted to believe that the war would end soon. Speaking on Army and Navy Day, he commented that Saddam Hussein's actions in the Persian Gulf could not be vindicated. "There is no bad or good aggression. Aggression is aggression... nor can one justify those who are destroying a totally innocent people."⁵⁹ The Defense Minister was clearly alluding to the tremendous destruction wrought by the allied air operations against Iraq. Yazov reiterated a theme being stressed by other senior Soviet military and political leaders: the U.S. had gone beyond the mandate of the UN Security Council. "Let me repeat," he warned, "its bombs and missiles are destroying not only Iraq's military might, but also its cities, streets, and monuments."

In response to criticisms of Soviet technology, Yazov remarked that while "the Iraqi's have at most a couple of squadron's of MiG-29s", allied aircraft were "almost all the latest models." Comparing the Soviet T-62 being used by Syrian forces and the American M-1, he commented: "I know that not one tank has lagged behind, not one has become unserviceable. This is in the desert. What about the U.S. Abrams tanks? They have to be stopped frequently so filters can be cleaned. So there is not reason to say that the Abrams is good and the T-62 is bad."⁶⁰ Yazov indicated that he was in favor of studying the lessons of the Gulf War and taking them into account. "But," he cautioned, "this is not a war whose experience can be taken as a 'pearl"

The Soviet Minister of Defense pointed out that Soviet forces of the Transcaucasus, North Caucasus, and Odessa Military Districts and the Black Sea Fleet had been placed on alert status rather than in full combat readiness.

There has been no need to place the troops and the fleet forces in a higher state of combat readiness.... [S]pace and air surveillance has been stepped up and electronic intelligence has been intensified. Intelligence collected by space assets has worked more purposefully.

On the same day, Yazov told the USSR Supreme Soviet that the allied victory in the Persian Gulf had prompted the MoD to reexamine its air defense capability. He warned that the Soviet Union was currently capable of repelling attacks, although this might not be true in two or three years. He nonetheless defended the performance of Soviet supplied weaponry, arguing that the allies had enjoyed a huge quantitative superiority over Iraq.⁶¹

According to Soviet commentators, the conflict in the Persian Gulf illustrates the need for a comprehensive ban on chemical weapons. On 23 February in *Pravda*, Colonel-General Stanislav

Petrov, Commander of Soviet Chemical Troops, observed that the effectiveness of Iraqi chemical weapons, in terms of decisively affecting the outcome of military operations, would be small:

Chemical weapons are militarily effective only if they are used on a large-scale.... In my view, such use of aircraft delivered chemical weapons is unlikely, since the multinational force has air superiority. This also applies to rocket delivered chemical agents. Therefore, one should not expect the use of chemical weapons to bring Iraq any significant results.⁶²

Petrov stated that in the event that chemical weapons were used in the Persian Gulf, the danger to the Soviet Union's southern republics {Armenia, Azerbaijan, Georgia, and Turkmenistan) would be minimal. "Large mountainous areas and considerable altitude variations would prevent air currents from carrying chemical agents as far as our borders in any significant concentrations." He offered the opinion that the Americans should not have hit chemical weapons storage facilities for fear of provoking Iraq into retaliating with chemical munitions. He also indicated that air strikes against Iraqi chemical weapons facilities were not altogether successful.⁶³ Petrov concluded by observing that the Gulf War had seriously threatened the prospects for the signing of a comprehensive convention banning the production and storage of chemical weapons.

Week Seven "Humanity has survived...one of the most just wars ever fought."

The most comprehensive and authoritative insight into official General Staff views on the war was provided by Major General N. Kutsenko, Deputy Chief of Staff for the Center of Operational-Strategic Research. On 27 February in *Izvestiya*, he outlined the allied ground campaign for Soviet readers.⁶⁴ Kutsenko pointed out that three separate allied army corps --each consisting of 4-7 tank, mechanized, and marine divisions, and 3-5 brigades --had participated in the ground assault against Iraq. The main effort was launched in the center sector by American, British, and French forces. Moving along the Iraq-Kuwait border, allied forces were advancing toward Basra. A second attack, conducted by U.S. Marines and Egyptian troops in cooperation with airborne and naval landings, was launched along the coast. A third attack was launched in the West by an American army corps. Finally, an airborne landing was conducted in the vicinity of Kuwait city.

According to Rutsenko, the allied offensive was supported by more than 4000 artillery pieces and mortars, and 2000 aircraft and attack helicopters. Coalition electronic warfare assets were used on a large scale to disrupt Iraqi command and control systems. He highlighted the fact that Allied forces of battalion size and higher were utilizing space-based communication systems, as were allied staffs, which were making use of satellite reconnaissance to keep track of developments along the front.⁶⁵

Kutsenko observed that while Iraqi forces were preparing to conduct an organized withdrawal from Kuwait, this would be difficult to accomplish. Allied forces enjoyed air superiority and would be able to completely destroy the withdrawing Iraqis. He argued that the United States sought not only the restoration of Kuwait, but complete control over a strategically important region of the world and its sources of oil. It was for this reason that attempts by the President of the Soviet Union to resolve the conflict through peaceful means were rejected.

Izvestiya commentator V. Litovkin, pointed out that the bulk of Iraqi military equipment was Soviet-produced, and that Iraqi Army officers had been trained in Soviet military academies. Thus, for many people the war in the Persian Gulf represented a clash between "U.S. and Soviet military science, between their weapons and ours.... It is obvious," he concluded, "which side has the advantage..." Kutsenko responded that Iraq had been armed by both East and West, not just the Soviet Union. In addition, Iraqi officers were trained "in the best military schools in the West; France, Britain, Italy ... "He called the assertion that the Iraqi Army had copied Soviet tactics and operational art ridiculous. Kutsenko commented that the Iraqi Army had developed its own system of tactics and operational art during the Gulf War with Iran. It was there, he stressed, that the Iraqi Army had "perfected [their] own methods and means of waging armed combat," including the art of concealment, disinformation, and preparation of engineer positions for personnel and equipment. Kutsenko also indicated that the outcome of the conflict was not dependent on technology as much as on the professional preparation of the people operating and servicing it. "In the Iraqi Army, both [technology and preparation] left a great deal to be desired."⁶⁶ Finally, he noted that most of Iraqi's military arsenal had been produced in the 1960s and 70s. In comparison, U.S.. British, and French weapons had been produced in the 1980s and 90s.

Kutsenko remarked that the leadership of NATO had exploited the war as an opportunity for testing the newest weapon systems and military technologies, many of which are already entering the arsenals of NATO armies.⁶⁷ These included the F-117A Stealth fighter-bomber, the Patriot air defense missile complex with its "anti-missile missiles," the E-3A with its radar system for ground target reconnaissance and target designation, reconnaissance-strike complexes, air- and sea-launched cruise missiles, laser-guided bombs, and new armored equipment. The desert terrain and climate, however, revealed serious deficiencies in coalition equipment. Kutsenko noted, for example, that the gas-turbine engines of the Abrams tank were quite frequently disabled by sand. Additionally, the Apache, Puma, and other coalition helicopters proved unreliable in sandstorms. In comparison, Kutsenko pointed out that, according to the Syrian Minister of Defense, Corps General M. Tlass, Soviet T-62s and other tanks, Mi-8 helicopters and later models, and small arms proved "very reliable and effective in desert conditions."

Kutsenko concluded by drawing attention to the fact that the U.S. might exceed its authority and conduct military operations into Iraq. "Then," he warned, "the war would assume a completely different character. As to how everything does, however, only time will tell."

For the second time since the beginning of the conflict, Major General Viktor Filatov, the editor of *Military-Historical Journal*, provided one of the most colorful and wrongheaded reports of the war. Filatov was covering the war as a special Soviet correspondent in Baghdad. Writing in *Sovetskaya Rossiya*, he reported that the Iraqi army had shown "its bravery and courage" in a series of counterattacks which "smashed" allied forces in the Persian Gulf.⁶⁸ Filatov observed that the U.S. was bent on bombing Iraq "back into the stone age" as it had tried to do to Vietnam. He called American soldiers "the barbarians of the 20th century" and asserted that American forces had not actually entered Kuwait on February 24, as announced, but remained inside Saudi Arabia on the defensive. Filatov noted that those allied forces that did attack were halted by the

Iraqi Army. "[A]fter resisting the initial power allied assault," he concluded, "the Iraqi 3d Army Corps launched its counteroffensive, which has been going on for eight hours."

Filatov's report accurately reflects the tone set by *Sovetskaya Rossiya* throughout the war, a bastion of Soviet conservatism, viewing the United States through Cold-War-colored glasses. It is interesting to note that Filatov's article in *Sovetskaya Rossiya* closely paralleled Iraqi dispatches of the fighting broadcast the same day.⁶⁹ This suggests that Filatov-and perhaps the Soviet General Staff as well --was overly reliant on Iraq for information and thus misled on the progress of the war. The errors in Kutsenko's reports indicate that the Soviet General Staff encountered difficulties in effectively and accurately monitoring and analyzing developments during the Persian Gulf conflict, despite the formation of a special "operations group" early in the war and the commitment of additional Soviet space and communications intelligence assets to monitor the war's progress.⁷⁰ The alternative explanation is that the Soviet General Staff knew the specifics of allied ground operations, but did not want to reveal the extent of the Iraqi defeat for fear of triggering an avalanche of criticism about the inadequacies of Soviet military thought and technology.

In stark contrast to Filatov's stridently anti-American tone, was a 27 February broadcast on *Radio Moscow*, which called the Gulf War "one of the most just wars ever fought."⁷¹

The war in the Gulf did not bury the hopes for a new world order, as some people had though it would. It only sharpened the outlines of a new worldwide political structure. The Soviet Union and the United States demonstrated common goals, even when quite natural subtle differences appeared in their approaches.

The broadcast went on to note that though the course of war proved "inevitable", its escalation was forestalled due to the efforts of Israel, Iran, and Turkey. "Today," it concluded, "we must congratulate all who took part in the anti-Iraqi coalition; from the men in uniform to the diplomats who battled as fiercely at the negotiation table. Humanity has survived another war, one of the most just wars ever fought."

Conclusion: "the Soviet Armed Forces will have to take a closer look at the quality of their weapons, their equipment. and their strategy."

Soviet officers are discussing the outcome of the Gulf War and attempting to derive relevant lessons. Opinions vary: some laud the efficiency of allied air and ground operations, while others refuse to accept Western reports at face value.

Colonel Aleksandr Tsalko, who headed a Soviet Air Force Training Center prior to assuming his duties as a Soviet People's Deputy, observed that the crushing defeat of the Iraqi Army made it clear the Soviet military doctrine and the entire model of military development were obsolete. On a 1 March *Moscow Radio* broadcast he stated:

Some military authorities in this country continue to believe that the outcome of a war is determined by a clash of huge masses of ground troops. It is sheer madness. The war in the Gulf

clearly showed that the Iraqi Army was simply overwhelmed by air strikes and the troops had to keep their noses buried in the sand.^{$\frac{72}{2}$}

Tsalko disagreed with those who claimed that the war demonstrated the inferiority of Soviet military equipment. "On many counts we are not so much behind." He stressed, however, that the main lesson of the war was that huge amounts of tanks, armored vehicles, and artillery pieces were "absolutely useless."

In the same broadcast, Colonel Nikolay Petrushenko, one of the leaders of the powerful, conservative, *Soyuz* [Union] organization, stated that he had no doubts that the reported successes of the multinational forces were exaggerated by the Western press. "Only a very naive person," he commented, "can believe that during the month and a half of preparations for the war, the U.S. lost 80 people, while more than a month of hostilities claimed a total of 70 men killed or wounded."⁷³

In a separate 1 March broadcast on *Radio Moscow*, Major General Kutsenko remarked that operation Desert Storm "was not very novel in the operational-tactical sense."⁷⁴ He pointed out that the large-scale use of air forces, cruise missiles and other precision-guided weapons, and prolonged electronic warfare operations to disable the enemy's command and control structure and undermine his military and economic potential had already been employed in other wars and conflicts. These had involved the air forces of the United States, Israel, and Great Britain. With regard to the Iraqi Army, however, Kutsenko stated that its imaginative use of operational camouflage was of some military interest.⁷⁵ He concluded by announcing that the MoD would soon hold a workshop to analyze all aspects of the Gulf War.

A conference of the Moscow City Council on 3 March discussed the lessons of the Gulf War. According to speakers, the war showed that Soviet military doctrine and principles of military development had "considerable drawbacks" and that prevailing Soviet views on modern war had become "outdated."⁷⁶ The war also showed the advantages of a highly-professional army over a mass army based on universal military service. Participants in the conference included Soviet and Russian People's Deputies, members of the Democratic Russia Movement, and military servicemen. They pointed out that the previously announced military reforms were actually not taking place for lack of relevant legislation.

In an interview with *INTERFAX*, Marshal of the Soviet Union Viktor Kulikov, former Commander-in-Chief of Warsaw Pact Forces, said that the "human factor" was largely responsible for the Iraqi defeat in the Gulf War.⁷⁷ Kulikov, who is now responsible for veterans' affairs at the MoD, noted that the Soviet equipment sold to Iraq was not technologically inferior to Western equipment. He claimed that the "human element" was always the derisive element in the success or failure of any weapon system. He observed that while the Iraqis had been trained by Soviet military advisors, "one does not always succeed in injecting one's knowledge into someone else's head." However, like Soviet Defense Minister Yazov, Kulikov acknowledged that the Iraqi air defense system, composed essentially of Soviet equipment, had not functioned. He concluded: The military operations between the coalition forces and Iraq have modified the idea which we had about the nature of modern military operations. A deeper analysis is necessary, but one point is already clear; the Soviet Armed Forces will have to take a closer look at the quality of their weapons, their equipment, and their strategy.

SUMMARY by Colonel David M. Glantz

The Gulf War has fueled Soviet concerns regarding the nature and consequences of future war. Soviet observers commented extensively on the diplomatic and military deployment phases (August 1990-January 1991) and on the air war (January-February 1991), and have begun critiquing the short but violent ground phase. Although their judgments have often reflected a wide diversity of political views, arid some have been polemical in tone and unrealistic in content, these observers have begun identifying several important trends or tendencies which are worth, of deeper analysis.

Certainly the question of coalition-building and power projection heads the list of important Soviet concerns. Although they themselves contributed to the process, they were impressed by the ability of the U.S., within the context of the United Nations, to form a coalition from such diverse and often mutually hostile states. Observers have also noted U.S. ability to move a sizeable force to and, even more important, conduct an impressive logistical build-up in a distant region which lacked a well-developed communications infrastructure. Despite the fact that this process of "preparing a remote theater of military operations " took up to six months, the military results and political consequences of that feat will likely prompt increased concern on the part of those who, since Marshal Ogarkov's time, have warned of U.S. power projection capabilities.

To Soviet planners the most troubling trend was the seeming dominance of the battlefield, if not the theater as a whole, by modern technology in the form of hi8h-precision weapons Despite the predictable achievement by the Allies of total air superiority, the crushing weight of technology seemed to confirm the Soviet's worst fears -- that new high-precision weapons and weapons whose effect could not be readily predicted did, in fact, dominate and even alter the course and outcome of the subsequent ground war. These new weapons and, even more important, the systems employed to integrate them and older weapons in combat may, they fear, negate many more traditional measures of military power and have a revolutionary impact on future combined-arms concepts. The role of the Allied naval forces during active operations and as a means of deception will reinforce Soviet anxiety regarding the issue of naval power in warfare and insure that the U.S. Navy is a subject of future arms control negotiations.

Deception and surprise, in the Soviet view, played critical roles in both the air and ground phases of the war. This judgement reinforced the existing Soviet belief that recent technological developments have placed an even greater premium on the conduct of deception and the achievement of surprise. Both are absolute necessities if a state is to achieve success in future warfare. Early Soviet concerns that the Allies had not exploited the effects of the air campaign soon enough probably evaporated when the Allies ultimately did so quickly, effectively, and with practically no ground casualties. Soviet anxiety over the poor performance of specific Soviet weapons and integrating systems will probably pale beside their realization that modern high-precision weaponry, artfully and extensively applied, produced paralysis and utter defeat. Subsequent large- scale Allied conduct of successful operational maneuver sustained to great depths by an unprecedented logistical effort, combined with limited loss of materiel and weapons on the part of the attacker, will likely become major subjects of future Soviet study. While Soviets analyze these important issues, it is likely they will be plagued by the nagging questions, "Did not the air phase of the operation render all subsequent ground actions anti- climatic," and if so, "Why?."

Soviet planners certainly recognize the unique circumstances existing in the theater and asymmetries in forces, levels of modernization, and military competence between coalition and Iraqi military establishments. Nevertheless, in all probability the Allies ability to forge an effective combined effort and apply force efficiently in both the air and ground phases of the campaign has prompted concern in Soviet military and political circles. The unprecedented disruption of Iraq's military infrastructure, combined with extensive operational maneuver conducted within the context of the Airland Battle concept against Iraq's military center of gravity, seems to have confirmed Marshal Ogarkov's oft-expressed concern about a potential Soviet enemy's so-called war-winning potential in an initial period of any future war. Depending on one's political point of view, this will give cause for concern on the part of both those who have supported the concept of defensive sufficiency and those who have argued strenuously against it. The events of the Gulf War will likely, reinforce the arguments of reformers who have underscored the destructiveness and, hence, folly of future war. Conversely, it will serve as fodder for those who have argued against defensiveness or for greater defensive strength in light of what they perceive as a growing threat to the Soviet Union.

For the U.S., it would be a mistake to generalize from the experiences of the Gulf War and assume that the performance of the Iraqi Army with its predominantly Soviet equipment replicates how Soviet forces would operate in future war. The Iraqis did possess Soviet equipment, but did not employ it in a "Soviet manner." An over-arching system similar to that of the Soviets to integrate weaponry was noticeably absent. The result was the almost immediate loss of the air war and subsequent disaster.

Most Iraqi senior commanders, as Soviet critiques point out, were educated in Western or Indian staff colleges, while lower level commanders were Soviet educated. Much of the Soviet equipment performed well technically, and the Soviet military will not scrap the T-72 tank because its Iraqi crews chose to abandon them rather than fight.

Soviet military theorists are carefully studying the lessons of Operation Desert Storm and will continue to study them. While that study will be intense and the lessons learned will likely be extensive, the Soviets do not view the results of the war as an indictment of their weaponry or military methodologies. Rather, they will likely view the lessons of the war as an indictment of an inflexible Iraqi war leadership which failed to support its army adequately and gave short shrift to the vital issue of armed forces morale.

Endnotes

1. See, for example, Suzanne Crow, "The Gulf Conflict and Debate Over Soviet 'National' Interests," *Report on the USSR*, 3, no. 6 (February 8, 1991), pp. 15-17.<u>BACK</u>

2. G. Zhivits, "How Professionals Wage War: Soviet Military Expert Analyzes the Course of Hostilities in the Persian Gulf Region," *Izvestiya*, 19 January 1991, p. 4.<u>BACK</u>

3. See "Iraqi Aims Analyzed," FBIS-SOV-91-014, 22 January 1991, pp. 23-24.BACK

4. V. Gorbachev, "...Tanks Will Not Save the Day. Soviet Military Expert Analyzes the Progress of Combat Operations in the Persian Gulf Region," *Izvestiya*, 21 January 1991, p. 6.<u>BACK</u>

5. Reports that the MoD had provided the United States with information about Soviet-built Iraqi systems would continue to haunt it. Chief of the Soviet General Staff, General of the Army Mikhail Moiseyev's rebuttal was aired on Moscow TASS International Service, 1110 GMT, 30 January 1991. See "General Denies Revealing Secrets," *FBIS-SOV-91-021*, 31 January 1991, p. 5.<u>BACK</u>

6. "General Says 90 Percent Off," FBIS-SOV-91-015, 23 January 1991, p. 12.BACK

7. "Evacuee Says Extremely Accurate," FBIS-Sov-91-015, 23 January 1991, p. 12.BACK

8. "USSR Marshal Akhromeyev: Conflict Not of Short Duration," Interview with Marshal of the Soviet Union S. Akhromeyev, *Neues Deutschland*, 22 January 1991, p. 4.<u>BACK</u>

9. Captain S. Sidorov, "In the Skies Over Iraq," KZ, 25 January 1991, p. 3. BACK

10. For insights into Iraqi use of Italian produced military decoys, see N. Miroshnik, "Persian Gulf: Business Is Business," *Pravda*, 25 January 1991, p. 4.<u>BACK</u>

11. Alekeandr Colts, "Shadow of Chemical Weapons Over the Persian Gulf," *KZ*, 31 January 1991, p. 3. Yestaf'yev is described as "a U.N. expert on the use of chemical weapons." However, an article in *KZ*, 11 September 1990, p. 3. describes him a Chief of a Directorate of Chemical Troops on the Soviet General Staff. <u>BACK</u>

12. A. Rhokhlov, "The War in the Gulf Has Not Yet Begun," *Komsomol'skaya Pravda*, 1 February 1991, p. 3.<u>BACK</u>

13. "Lobov Foresees Settlement," in Moscow World Service in English, 1210 GMT, 1 February 1991, *FBIS-SOV-91-023*, 4 February 1991, p. 15.<u>BACK</u>

14. V. Pereverzev, "Military Observer's Notes," Izvestiya, 4 February 1991, p. 4.BACK

15. Ye. Shchekatikhin, "Protracted Downpour," Sovetskaya Rossiya, 2 February 1991, p. 5. BACK

16. Ibid.BACK

17. V. Nikanorov, "The General Staff is Closely Monitoring the Developing Situation," *KZ*, 31 January 1991, p. 3.<u>BACK</u>

18. "War Gives Soviets Unprecedented Chance to Evaluate U.S. Performance," *Aviation Week and Space Technology*, February 18, 1991, p. 46.<u>BACK</u>

19. One example of this is the recent visit to Baghdad by the Major General V. Filatov, editor of *Military-Historical Journal*. According to unofficial reports, he recently spent five days in the Iraqi capital during the height of the allied bombing campaign. This would have made Filatov, who has provided Soviet coverage of the Vietnam War, the War in Afghanistan, and the Iran-Iraq War, the ranking Soviet officer in Baghdad.<u>BACK</u>

20. See Scott Shane, "U.S. Had Underestimated Iraq's Military Capabilities, Soviets Say," *Baltimore Sun*, reprinted in *Kansas City Star*, February 10, 1991.<u>BACK</u>

21. See, for example, S. Zavorotnyy and I. Chernyak, "Baghdad Blazing Like a Christmas Tree," *Komsomol'skaya Pravda*, 18 January 1991. The two analysts observed: "The Iraqis' helplessness is striking: There is no sound of their aircraft taking off, they have only been able to launch a few missiles. We note that Soviet military equipment, of which Iraq has an abundance, has not shown itself at its best. Will anyone dare to buy it after such an obvious failure?"<u>BACK</u>

22. While Iraq possessed some French ADA systems and aircraft, the majority were of Soviet origin. At the beginning of the war, the Iraqi Army had Soviet SA-2,3,6,7,8,9,13,14 and 16s, in addition to French Roland Is, IIs and captured American Hawks. Additionally, nearly two-thirds of Iraq anti-air artillery was Soviet, while the remainder was Chinese. See National Training Center Handbook 100-91, *The Iraqi Army - Organization and Tactics* (Ft. Irwin, California, 3 January 1991), pp. 132-133. The Iraqi Air Force possessed Soviet Su-17/20/22s and MiG 21s, 23s, and 29s, in addition to French F-1 Mirages.<u>BACK</u>

23. *Soviet Military Power 1990*, (Washington DC: U.S. Government Printing Office, 1990), p. 5.<u>BACK</u>

24. This is a repetition of the same debate that followed the 1973 Arab-Israeli War. After the war, Arab clients demanded, and were provided with increasingly sophisticated Soviet weaponry. In light of the need for hard currency, the postwar period may thus find the Soviet Union providing its clients with its most sophisticated systems.<u>BACK</u>

25. V. Demidenko, "Special Comments on *Komsomol'skaya Pravda* Correspondents 'Tunnel' Vision of the Quality of Soviet Military Equipment," *KZ*, 6 February 1991.<u>BACK</u>

26. According to one Soviet analyst, the bunker system which so effectively sheltered the Iraqi Air Force was built by the West. In "Shelters for Iraqi Air Force According to NATO Standards," *Izvestiya*, 2 February 1991, B. Moskvichev writes that from 1984 to 1985 a series of underground air bases, including some 300 underground aircraft shelter, were built in Iraq to the

same standards that are stipulated for NATO bases. Various French, Italian, German, and British firms took part in the construction of Iraqi underground air bases."Take-offs can be executed right from the hangers, which transforms the concrete underground structure into a real fortress."<u>BACK</u>

27. N. Burbyga, "Ground War Inevitable," KZ, 8 February 1991, p. 6. BACK

28. "Soviet Review," USA Today, March 1, 1991, p. 3A.BACK

29. I. Yevataf'yev, "Chemical Attacks and Nuclear Retaliation," *Sovetskaya Rossiya*, 8 February 1991, p. 5.<u>BACK</u>

30. Moscow Radio Rossiya Network (in Russian), 1900 GMT, 9 February 1991. See "*Krasnaya Zvezda*'s Pro-Iraqi Bias Deplored," *FBIS-SOV-91-030*, 13 February 1991, p. 17.<u>BACK</u>

31. Lieutenant-General I. Skuratov, "D-Day, February '91? What Will the Amphibious Landing in the Persian Gulf Be Like," KZ, 12 February 1991, p. 3.<u>BACK</u>

32. In "The General Staff is Closely Monitoring the Developing Situation," *KZ*, 31 January 1991, p. 3., Major General Bogdanov observed: "Certain Western specialists have no doubt that the American command has plans for low-yield nuclear strikes against Iraq if the latter resorts to chemical weapons."<u>BACK</u>

33. "Possible Use of Nuclear Weapons in Gulf View," Moscow World Service, 2300 GMT, 13 February 1991, *FBIS-SOV-91-031*, 14 February 1991, p. 15.<u>BACK</u>

34. See, for example, "Soviets: Stopping START," *Newsweek*, February 25, 1991, p. 3., and "Arms Pact Sleight of Hand," *Time*, March 4, 1991, p. 57.<u>BACK</u>

35."Bessmertnykh Speaks to Supreme Soviet on Gulf War," Moscow TASS International Service, 1620 GMT, 19 February 1991, *FBIS-SOV-91-034*, 20 February 1991, pp. 24-27.<u>BACK</u>

36. I. Vladimirov, "NATO and the Crisis in the Persian Gulf," KZ, 19 February 1991, p. 3. BACK

37. According to *Izvestiya*, 12 December 1990, p. 6, Soviet Space Units are commanded by Colonel General V. L. Ivanov.<u>BACK</u>

38. V. Litovkin, "Patriot for Space: United States Tests New Antimissile Unit," *Izvestiya*, 11 February 1991, p. 4.<u>BACK</u>

39. Only a few years ago, such an admission of Soviet technological inferiority would have been unthinkable.<u>BACK</u>

40. See Scott Shane, "Soviet Muslims Support Saddam Hussein," *The Baltimore Sun*, January 20, 1991 and George Stein, "Soviet Muslims Divided on Gulf War," *Report on the USSR* (Radio Free Europe), Vol. 3, No. 8 (February 22, 1991), pp. 13-15.<u>BACK</u>

41. Some 63% of 2000 Soviet citizens interviewed during the first week of the war supported the allied coalition. See "Soviet General Fears War Could Reach USSR Territory," *Reuters*, January 31, 1991. Cited in Stein.<u>BACK</u>

42. Oleg Shchedrov, "Islamic Factor in Policy on Iraq," *Radio Moscow* (in English), November 8, 1990. Cited in Stein.<u>BACK</u>

43. "10,000 Soviet Citizens Want to Serve in the Army of Saddam Hussein," *Novosti*, February 5, 1991. Cited in Stein. The same day the Soviet Ministry of Defense announced that it could not concern itself with sending volunteers to assist either Iraq or the allies in the war. See "We Do Not Enlist Volunteers," *KZ*, 5 February 1991, p. 3.<u>BACK</u>

44. See Population of the USSR. A Statistical Yearbook (Moscow: Finances and Statistics, 1989), p. 8.<u>BACK</u>

45. *Ibid.*, p. 3. Population growth was 17 percent in Azerbaijan, 13 percent in Kazakhstan, 4 percent in Latvia, 6 percent in the Ukraine, and 7 percent in Russia, Byelorussia, and Estonia.<u>BACK</u>

46. Inter-ethnic violence in the Soviet Union has already led to the appearance of hundreds of thousands of refugees. See Ann Sheehy, "The State of the Multinational Union," *Report on the USSR* (RFE/RL Research Institute), Vol. 3, No. 1, (January 4, 1991), p. 18. See also Charles Carlson, "Kazakhstan. Inter- ethnic Tensions, Unsolved Economic Problems," Bess Brown, "Tadzhikistan. Ten Months after the Dushanbe Riots," and James Critchlow, "Uzbekistan. The Crisis Deepens," in the same issue, pp. 29-30, 32-34 and 36-40 respectively.<u>BACK</u>

47. *Moscow World Service*, 1210 GMT, 21 February 1991. See "Chemical Troops Commander Speaks," *FBIS-SOV-91-036*, 22 February 1991, pp. 29-30.<u>BACK</u>

48. M. Zheylov, "The Warsaw Pact and European Security," KZ, 22 February 1991, p. 3. BACK

49. See "Army-Navy Game," *U.S. News and World Report*, March 18, 1991, p. 28. The Soviets are reported to be transferring large amounts of military equipment to naval outposts in order to circumvent arms-reduction accords. They are also reported to be building four new ballistic missile submarines, despite assurances to the U.S. to the contrary. *Jane's Defense Weekly* reports that the Soviets have shifted some 10,000 tanks, 4,000 other armored vehicles, and 20,000 artillery pieces to storage depots located east of the Ural Mountains to escape destruction under a conventional arms treaty. See "Soviets Are Moving Military Equipment," cited in *The Kansas City Star*, March 14, 1991, p. A7.<u>BACK</u>

50. Korzelov, "Half an Hour with Wang Xio," *Moscow International Service*, 1300 GMT, 22 February 1991. Cited in "Commentary Views Possible MiG-29 Sale to PRC," *FBIS-SOV-91-037*, 25 February 1991, p. 6.<u>BACK</u>

51. With a maximum take-off weight of 39,000 lbs, the MiG-29 Fulcrum is reported to have an engine thrust of 18,300 lbs, a maximum speed of Mach 2.3, and a service ceiling of 56,000.

Soviet and East German aircraft are equipped with an extremely powerful pulse-doppler lookdown/shoot down radar. In comparison, the 68,000 lb. F-15 has an engine thrust of 23,830, a maximum speed of Mach 2.5, and a service ceiling of 60,000 ft. With a wingspan of 42 ft. 9.75 inches, a length of 63 ft. 9 in. and a height of 18 ft. 5.5 in. the F-15 has a large radar cross section. In comparison, the MiG-29 has a wingspan of 37 ft. 8.75 in., a length of 56 ft. 8 in., and a height of 14 ft. 5.25 in. In Lebanon's Bekaa Valley in June 1982, Israeli F-15s engaged the best Soviet build fighters in the Syrian Air Force --which included MiG-29s --and destroyed 58 in air combat without suffering any losses. See Walter J. Boyne, *Weapons of Desert Storm* (Lincolnwood, Illinois: Publications International, Ltd., 1991), pp. 9, 16.<u>BACK</u>

52. The U.S. has also expressed interest in purchasing or leasing the MiG-29. See Charles Bickers, "U.S. Plans to Lease Soviet Aircraft," *Jane's Defence Weekly*, 9 March 1991, p. 325. According to the author, coalition pilots practiced against former East German MiG-29s in the buildup to Operation Desert Storm.<u>BACK</u>

53. In the case of China, the MiG-29s are part of a barter deal in which the Soviets provide arms for food.<u>BACK</u>

54. See, for example, "Israelis Fear Syria is Buying Sophisticated Weapons," *Knight-Rider Newspapers*, cited in *The Kansas City Star*, March 16, 1991, p. A13. The Syrians and Soviets are involved in a "very huge" arms deal as Syria is attempting to upgrade its arsenal as a result of the lessons learned from the Persian Gulf War. "The arms race...," remarked one Israeli military official, "is going to increase in the coming months." <u>BACK</u>

55. *Moscow TASS International Service*, 1515 GMT, 22 February, cited in "Defense Ministry Denies Military Delegation in Iraq," *FBIS-SOV-91-037*, 25 February 1991, p. 17.<u>BACK</u>

56. "Is Moscow Helping Baghdad," New Times, No. 7 (19-25 February 1991), p. 1.BACK

57. *Moscow International Service*, 0100 GMT, 27 February 1991, cited in "Yazov Interviewed on Gulf, Pact, China Ties," *FBIS-SOV91-041*, 1 March 1991, pp. 51-52.<u>BACK</u>

58. "USSR Defense Minister's Order of the Day No. 8," *KZ*, 22 February 1991, p. 1. The order was dated February 1991.<u>BACK</u>

59. A. Gorokhov and V. Izgarshev, "Today is Soviet Army and Navy Day," *KZ*, 23 February 1991, pp. 1-2.<u>BACK</u>

60. Yazov reiterates the point made by Corps General M. Tlass, Syrian Minister of Defense, on *Moscow Radio* during a recent visit to Moscow.<u>BACK</u>

61. *Report on the USSR* (RFE/RL Research Institute), Vol. 3, No. 10 (March 8, 1991), pp. 19-20. See also "Soviets Analyze Air Defence," *Jane's Defence Weekly*, 9 March 1991, p. 328. Articles in the recently declassified journal of the Soviet General Staff, *Voyennaya MYS1'* [Military thought], suggest that a debate over the sufficiency of Soviet air defenses has been on-going for a number of years. See, for example, Colonel A. P. Vasil'yev and Colonel V. K. Rudyuk, "Is

[Soviet] Air Defense Sufficient?" *Voyennaya MYS1*', No. 9 (September 1989), pp. 59-68. The authors argue that in light of recent American developments in stealth, cruise missile, and electronic warfare technology, the Soviet air defense system is inadequate.<u>BACK</u>

62. "But the Chemical War Has Already Begun..," KZ, 23 February 1991, p. 3. BACK

63. Petrov is the second senior Soviet officer to express the opinion the allied air strikes failed to completely destroy Iraqi chemical weapons production and storage sites. Reports that Saddam Hussein recently approved the use of chemical weapons against anti-government rebel forces in the South of Iraq give some validity to this argument.<u>BACK</u>

64. N. Kutsenko, "The Lessons of Combat," Izvestiya, 27 February 1991, p. 4. BACK

65. Kutsenko was drawing attention to the fact that the Gulf War was the first conflict in which wide-scale use was made of space assets, a lesson stressed by Western experts as well. See, for example, Barbara Starr, "Satellites Paved the Way to Victory," *Jane's Defence Weekly*, 9 March 1991, p. 330.<u>BACK</u>

66. In comparison, a British general called the Iraqi Army "well equipped but badly trained, with no night fighting capability or experience of the operational level of war....It was totally out of its depth in the context of modern land-air battle." See Ian Kemp, "100-Hour War to Free Kuwait," *Jane's Defense Weekly*, 9 March 1991, p. 327.<u>BACK</u>

67. This has been a common theme throughout the Soviet military press. In an earlier interview, Army General M.A. Moiseyev, Chief of the Soviet General Staff remarked: "The Persian Gulf has, to all intents and purposes, become a kind of testing ground for state-of-the-art technology and weapons which are or will become standard equipment for NATO's combined-arms forces in the near future. We must keep this in mind." See Yu. Rubtsov, "Unified Armed Forces for a Unified State," *KZ*, 23 February 1991, p. 2.<u>BACK</u>

68. Viktor Filatov, "Those Who Shed Blood," Sovetskaya Rossiya, 27 February 1991. BACK

69. See, for example, "Iraq Orders Troops to Halt Hostilities," *United Press International*, 1010 GMT February 28, 1991. "Despite the interference of large numbers of enemy helicopters and jet fighters," announced an Iraqi commentator on *Baghdad Radio*, "our troops managed to inflict heavy casualties on the enemy troops, which retreated in defeat."<u>BACK</u>

70. According to Moiseyev, an operations groups was formed at the beginning of the conflict. Its task was to "gather, generalize, and assess the information received." See Rubtsov, "Unified Armed Forces for a Unified State."<u>BACK</u>

71. Mikhail Mayorov, *Moscow World Service*, 1210 GMT 28 February 1991, cited in *FBIS-SOV-* 91-040, 28 February 1991, p. 14.<u>BACK</u>

72. *Moscow TASS*, 1711 GMT, 1 March 1991, cited in "Officers Discuss War Lessons," *FBIS-SOV-91-042*, p. 40.<u>BACK</u>

73. Ibid., p. 41.BACK

74. *Moscow TASS*, 1936 GMT, 1 March lg91, cited in "Useful Lessons to be Drawn," *FBIS-SOV-91-042*, 4 March 1991, p. 42.<u>BACK</u>

75. This probably refers to mobile missile launchers, a matter of great interest to the Soviets. Despite all its space-based and aerial intelligence-gathering assets, the U.S. was unable to determine until late in the war just how many launchers were available to Iraq (initial estimates stated approximately 30, while final reports stated 200) and where they were located. Thus, the Persian Gulf War appears to vindicate Soviet emphasis on tactical, operational, and strategic mobile missiles. Conversely, it castigates the Soviet concept of the air campaign (at least against an opponent which possesses mobile missiles) which has as one of its main goals the swift destruction of the enemy's nuclear and chemical delivery capability.BACK

76. *Moscow TASS*, 1502 GMT, 3 March 1991, cited in "Military Reform Prospects Discussed," *FBIS-SOV-91-042*, 4 March 1991, p. 41.<u>BACK</u>

77. "Kulikov Defends Soviet Weaponry," FBIS-SOV-91-042, 4 March 1991, p. 43. BACK