However, some of the book's assertions are more contentious. Gamba-Stonehouse implies that the evolution of the current balance of power within deep South America was imposed or at least condoned by the large nations upon the small ones. For example (p. 10), "The creation of Bolivia and Paraguay provided a convenient set of buffer states between the most powerful countries . . .. " This reviewer believes the existence of these buffer states is due to their tenacious desire for independence in spite of the actions of the larger nations and not because of them. Moreover, the author sees a Chilean. long-term, master plan to achieve control of the Pacific West Coast. In the reviewer's opinion, this ascribes to Chile a continuity of military acquisitions and political stability to which it could only dare dream. Gamba-Stonehouse also measures military strength differently from this reader. For example, she concludes that "Peru achieved military dominance over Chile . . . in 1977." (p. 35) Peru may have amassed more hardware but this is not the same as achieving military dominance. The authors' observations that the Soviet Union may eventually seek bases in the southern cone has been overtaken by events in Europe. (p. 57)

The author concludes that the possibility of Bolivia acquiring an outlet to the sea "sometime in the future has a good chance of success." (p. 66) Even though Gamba-Stonehouse gives no time frame for this prediction, it is bold. This book will challenge readers to re-examine their understanding of the "Southern Oceans."

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Goodman, Hirsh, and W. Seth Carus. The Future Battlefield and the Arab-Israeli Conflict. New Brunswick, NJ: Transaction, 1989.

[Editor's Note: This review was written several months before the recent Gulf War.]

This excellent and up-to-date book, written under the auspices of The Washington Institute for Near East Policy, focuses on the conjuncture of two questions which are central to an analysis of the Arab-Israeli military balance at the outset of the 1990s. First is that which pertains to a net assessment — for the present and for the emerging future — of the conventional military balance between Israel and its primary foe, Syria. What shape would an Arab-Israeli war take if it erupted today, and who would prevail and how? Second is the question of the future impact of emerging new military technologies which, not only in the Middle East, promise to revolutionize conventional warfare. Which side will be advantaged or disadvantaged by these developments?

The appearance of this book is timely in several important respects. First, it is important to note that we are now fully eight years beyond the 1982 Lebanon war, the military lessons of which were widely discussed and which, according to commentators such as Edward Luttwak, appeared to herald an entirely new phase of conventional warfare featuring high technology, a.k.a. "the electronic battlefield." That 1982 war, in turn, had taken place only nine years after the 1973 war which initially had caused some military analysts to claim the obsolescence of Israel's once vaunted offensive capabilities based on armored shock and tactical airpower (the eventual dénouement in 1973 seemed to some revisionist analysts to have reversed the earlier assumptions about a new dominance of defensive precision-guided-munitions, i.e., antitank and surface-to-air missiles). The relationship here of the lessons of the Iran-Iraq war, meanwhile — a lengthy, stalemated attrition war — seemed ambiguous. But then there was Israel's startling use in 1982 of a host of new weapons and tactics — remotely-piloted vehicles (RPVs), battle-management aircraft, advanced electronic counter-measures (ECMs), anti-radiation missiles, advanced artillery fire control, reactive tank armor, new sensors, battlemanagement communications, etc. Altogether, they seemed to shift the advantage back toward offensive, preemptive operations, even despite the evidence that Israel's armored forces had faced tough going in Lebanon, partly because of rugged terrain, but also due to Syrian weapons and tactics. But that was 1982. Where, Goodman and Carus are asking, are we now in the early 1990s and where will we be in 1995, in 2000?

The book is further timely in that it appears just as the Cold War seems to be fading and with it, the habitually enormous interest in weapons developments related to the Central European balance. Up to now, and particularly with regard to "hi-tech," it was Central Europe which provided the gauge of emerging weaponry and associated tactics and strategies. Hence, in recent years, the military journals have been chock full of analyses of "Air-Land Battle" and "FOFA" (follow-on force attack), concepts rooted in assumptions about emerging technologies. Now, though even deep cuts under a CFE arms control regime will leave some contending forces in place in Central Europe, it is to the Middle East we may now turn for auguries of new conventional weapons, tactics, and strategies. Indeed, the Iran-Iraq war did provide some new such auguries, i.e., the use of battlefield chemical weapons, and that of surface-to-surface missiles as terror weapons against urban populations.

The book moves through several key sections, involving a step-by-step progression toward a bottom-line net assessment. There are chapters on the "strategic context of the future Arab-Israeli battlefield," one each on Israeli and Syrian military capabilities and strategic assumptions, one on arms transfers into the region, and several on the emerging new military technologies, their combat effectiveness, and their "human context." They are all well done.

Several key points are discussed under "strategic context," all familiar to those knowledgeable about Middle Eastern military affairs, but in some cases involving debatable assumptions. It is assumed that Egypt will not be militarily re-engaged with Israel anytime soon. Ditto for Jordan. Iraq's case

is seen as more ambiguous, though its continuing preoccupation with Iran and its hostility toward Syria are seen as rendering its actual participation in a war against Israel unlikely, though possible. Hence, and even despite Moscow's recent reduction of support for Damascus, it is the Israel-Syria military balance which commands central attention. That in turn impels attention to the often noted, following critical factors: Israel's demographic shortfall, its sensitivity to attrition warfare and its preemptive short-war imperative; the geographic facts of the short Israel-Syria frontier on the Golan Heights (a mere 80 kilometres) and the layered Syrian defenses between Golan and Damascus which (absent alternative invasion routes through Jordan or Lebanon which are largely ruled out for political reasons) greatly restrict Israel's use of its favored mobile, offensive tactics. In short, Israel has the problem — whatever the state of technology — of how to win a quick, decisive victory in the face of unfavorable terrain factors. Syria, to the contrary, looks either to a preemptive "seize and hold" operation similar to that tried in 1973 (perhaps now to be assisted by deep strikes on Israeli marshalling facilities), or, to a protracted, defensive war of attrition which clearly would be to Israel's disadvantage, comparatively speaking.

The book's final chapters and its appendix detail a bewildering array of new or improved technologies said to presage a radically new modern battlefield. Among them: fibre optics used in missile guidance systems; a variety of reconnaissance, surveillance and target acquisition systems (film and video cameras, infrared cameras, SIGINT, new and better radars of all sorts including Side-Looking Airborne Radars); new computers, RPVs, "brilliant weapons" (SADARM, the Sensor Fusion Weapon, the Millimetre Wave Terminally-Guided Submunition); deep strike weapons (stealth aircraft, stand-off missiles), laser-guided missiles, accurate rocket artillery, kamikaze drones, etc.

## As a result, according to the authors:

A military force with such an array of sensors at its disposal could possibly create a comprehensive, real-time image of the battlefield that will reduce the lag between the time information about enemy forces is gathered and the time it becomes available to combat units. It should also improve the accuracy of attacks. It will be increasingly difficult for enemy troop movements to take place without being detected, and it will be harder for the enemy to conceal units from observation. (p. 197)

Most of these new systems are under development in the US and Western Europe, some in the USSR. Some are apparently being developed in Israel itself. If Soviet support for Syria really is waning, a crucial question is where Damascus will get its modern battlefield technologies. From Western Europe or the US? One major general shift foreseen by the authors (mostly through Israeli eyes) is that of the wholesale supersession of the now traditional role of tactical aircraft for ground interdiction (battlefield and deep strike) by land-based systems.

Israel is here claimed to have a big advantage by virtue of the quality of its human resources at all levels: national strategic decision-making, operational and tactical military planning, and the individual combatant. Meanwhile, the earlier expectations by some analysts that the new "hi-tech" military systems could be operated by poorer quality manpower, i.e., uneducated troops, are said not to have panned out. Indeed, the military gap between Israel and Syria is thought to be widening at the dawning of the age of "hitech" warfare, exacerbated by declined Soviet support for Syria to the extent not compensated for by Western Europe.

Despite the excellence and comprehensiveness of the book, the authors might have done just a little more. Specifically, they might have added a summary chapter to integrate the material on new weapons developments with the early-on material regarding Israel's strategic dilemma, rooted as it is in demographics and the military geography of the Golan-Damascus axis. No doubt the advent of the "hi-tech" battlefield anticipated by the authors would greatly advantage Israel in a fast-moving, mobile war in the much larger amphitheatre of the Sinai Desert. But on the Golan Heights and the plateau toward Damascus, would they allow for an Israeli breakthrough? Or, cause the Syrian forces such attrition as to force a ceasefire?

Otherwise, the economics of the new weapons also needed some more attention, i.e., how much of what might either Israel or Syria afford and thus reasonably be able to deploy? Fielding large numbers of all or most of these systems would presumably be an expensive proposition. If oil revenues were to climb again and if Syria were given extensive aid by Arab OPEC states, might it then have an advantage in a competitive race for acquisition of these systems? These are hard-to-answer questions, but they go to the heart of any analysis of the evolving Middle Eastern military balance.

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Hart, Alan. Arafat: A Political Biography. Bloomington and Indianapolis: Indiana University Press, 1989.

This is the first American edition of a work first published by Alan Hart in London in 1984. On the dust-jacket of the first British edition, the publishers prominently advertized the fact that the book had been, "Written in cooperation with Yasser Arafat and the top leadership of the PLO." The US publishers have removed that piece of promotional 'blurb'. Nevertheless, the close cooperation Hart received from his subject is evident in every paragraph of the book.

It should be said at the outset that the fact that Hart enjoyed such full access to the Chairman of the Palestine Liberation Organization gives this