

high-temperature superconductivity, to the domain of subatomic physics. Modern high-energy physics, especially that focused upon so-called “force-free” states of plasmas, shows that subatomic phase-space has a distinct, Kepler-Gauss sort of inherent curvature. It is also shown, that nonlinear effects of coherent electromagnetic pulses, as phenomena of the macro-scale, are rooted in the nonlinear physics of the curvature of “force-free,” least-action states in the subatomic domain.

One of the most important lines of inquiry to this effect today, is modern optical biophysics’ attention to the decisive role of precisely tuned, inherently coherent electromagnetic pulses in living processes.

Conceptually, this new work belongs to the tradition of Pasteur’s work on optical biophysics and the definition of living processes presented by Luca Pacioli and Leonardo da Vinci nearly five hundred years ago. Essentially, modern instruments permit us to detect and measure localized coherent pulses in the range of quanta of emission, leading into what is called today “nonlinear spectroscopy” of living processes. The comparison of the results obtained in this way in biological research, with lessons learned from the high-energy physics of force-free plasma states, is the key to design of strategic and tactical anti-personnel assault weapons and related applications.

These new directions in electromagnetic biology have a seemingly limitless application to medicine and other civilian biological research, offering entire categories of benefits not otherwise accessible. For example, it is better than mere speculation to assume that this provides the best strategy for discovering a cure for the infection widely known as AIDS. New electromagnetic approaches to genetic engineering are already indicated.

Curiously, but not accidentally, this approach was introduced into Soviet Russia by a famous graduate of the Pasteur Institute, Academician V.I. Vernadsky as early as the 1920s. The work of Soviet optical biophysics specialist Gurvich, from that period into the 1950s is leading among the classic work in this field. Hence, since the 1920s, there has been increasing Soviet attention to the potential military importance of these classes of electromagnetic effects, and to the increasing significance of the view, among relevant Soviet specialists, that the power first to control willfully the full range of the electromagnetic spectrum may rule the world. I suggest, from my work among international specialists in this field over the years, that that Soviet slogan is essentially no exaggeration.

I propose that Western nations include crash programs for the mastery and application of these technologies as among the highest strategic priorities, both for military applications to problems of defense and offense, and for the fountain of great benefits in peaceful applications to medicine and other matters. Let us commit ourselves to the highest possible rates of technological attrition in these fields.

# Radio frequency a strategic phase

by Michael Liebig

*Michael Liebig, executive director of EIR News Service in Europe, gave this speech at an EIR seminar in Paris on Nov. 26, 1987.*

The theme of today’s *EIR* seminar, “Radio Frequency Weapon Systems—Feasibility and Strategic Significance,” certainly lies somewhat outside the currently dominant strategic debate. The matter looks rather “exotic,” and many strategic experts will view it as “music of the future.” Before 1983, many of these same experts called SDI-related laser and other beam technologies “science fiction.” We of *EIR* in the United States and EIR News Service in Europe have always focused our attention on qualitatively new scientific-technological and strategic trends. Then, in the early 1980s, we focused on what later became known as SDI, and which still is one of the most fundamental strategic issues. Now, in the late 1980s, we focus—among many other important things—on the emerging RF weapons technology, which features the controlled and directed utilization of electromagnetic radiation, primarily against personnel and soft targets.

Our founder and contributing editor, Lyndon LaRouche, published in the early spring of 1987, a series of articles in *EIR* on the scientific-technological and strategic potential of RF technologies. Since then, more articles on that topic by physicists, biologists, and strategic analysts have appeared in *EIR* magazine. On Sept. 3, 1987, we held a first *EIR* seminar on RF weapon systems in Munich, West Germany.

It is obvious that the whole complex of RF technologies, precisely because of the vast potential for military application, is highly classified. Detailed information on RF systems is extremely scant in the public domain. Yet, we do know the scientific-technological *basics* of RF systems and their interaction with biological and other soft targets. While operational RF weapon systems may not yet exist as such, it can be stated affirmatively, that not just research, but development work toward operational RF weapons, is under way in East and West, especially in the East.

## **RF weapons on the battlefield**

In March 1987, the Pentagon provided the following

# weapons: change

assessment of Soviet work on RF systems (*Soviet Military Power 1987*, page 112): “Radio Frequency. Recent Soviet developments in the generation of radio-frequency (RF) energy have potential applications for a fundamentally new type of weapon system that would degrade electronics or be used in an anti-personnel role. The Soviets already have or are working on much of the technology needed for such a system. . . . No significant technological obstacles stand in the way of a prototype short-range tactical RF weapon.”

Indeed, I believe there is little “futurism” involved when the Pentagon—a thoroughly conservative institution—anticipates the tactical deployment of RF weapons. Judging from today’s battlefield use of low-power lasers for rangefinding and target illumination, we can rather easily foresee the use of mobile and airborne RF weapons against the electronics of soft targets and armored vehicles. The same applies to an anti-personnel role for RF weapons in the battlefield. In the near future, RF weapons will constitute a significant added capability to traditional kinetic weaponry.

## RF weapons and strategic forces

Beyond the impact which RF weapons will have on the future battlefield, an admittedly awesome strategic dimension of RF weapons is emerging. In a space-based mode, RF weapon systems could become a qualitatively advanced strategic weapon for mass destruction. Powerful beam pulses in the RF range could be directed from space against densely populated target-areas on Earth. Large populations, especially in cities, could be killed or incapacitated almost instantaneously by space-based strategic RF assault weapons. The destructive power against populations would approach that of nuclear, chemical, or biological weapons, yet without producing the massive and incalculable collateral damage and after-effects associated with nuclear detonations or the large-scale use of chemical and biological weapons. A qualitatively new, quasi-“surgical” precision targeting of large populations for mass destruction would become a possibility superseding the traditional, “dirty” strategic ABC weaponry, with its incalculable and uncontainable side-and after-effects.

With this perspective in mind, the at least declaratory policy of the Soviet-Russian political-military command to “free the Earth from all nuclear weapons by the year 2000” becomes strategically rather consistent and logical. To me it seems obvious, that Marshal Ogarkov and his “kindergarten” at the Voroshilov Academy are orienting their strategic planning to a new strategic regime which is technologically based on weapon systems “based on new physical principles” (NPP systems). And RF weapons, both tactically and strategically, are a crucial component of such a military-technological and strategic phase change.

The emerging gestalt of modern warfare consists of three basic components, of which we have referred to two.

1) Strategic offensive and defensive warfare, in which nuclear weapons will be increasingly complemented by directed energy, electromagnetic weaponry “based on new physical principles.” Space will increasingly become the staging and battleground for strategic warfare.

2) Operational postures and battlefield tactics will be increasingly influenced by mobile and airborne directed energy/electromagnetic weaponry, which will complement kinetic weapons and more traditional instruments of electronic warfare.

These two components of modern warfare can appropriately be called the “regular” dimension of modern warfare. The indicated transformations in modern “regular” warfare through RF weapons, directed energy weapons, and other NPP systems, do represent a phase-change in terms of the fundamental parameters of warfare in general, namely fire-power, mobility, and logistical depth.

## Technological attrition

RF weapons and other NPP systems represent under present conditions of science and technology, the very essence of the principle of military-technological attrition. They signify technological attrition not in an incremental mode of linear refinement of technology, but in the sense of qualitative transformations.

Assuming there were a Western commitment to military-technological attrition through RF weapons and other NPP systems on a rather broad scale, that would necessitate a more general reinvigoration of the economic-logistical infrastructure of the West.

It should be obvious that the very same Soviet military-political command, which is energetically pushing ahead *their* development of RF systems and other NPP systems, will do anything to prevent the West from doing likewise. The Soviet command is by no means afraid of specific military technologies as such, but they are deathly afraid of the West’s committing itself to a general policy of technological attrition.

I do not believe at all that a commitment to technological attrition through RF and other NPP systems would trigger “a new round of dangerous arms race on earth and especially in

space,” and a “provocative destabilization” of the military balance between East and West.

No, the opposite is the case. If the West were to drop the principle of technological attrition, through NPP systems for example, the very essence of Western superiority over the East bloc would be lost. This is especially so under conditions of not merely financial crisis, but a maturing economic depression. You may say that this is a far-fetched proposition. Unfortunately, I see the West right now descending from a semi-stagnant, metastable state into the worst domestic and strategic destabilizations since World War II.

### The future of deterrence

The foreseeable impact of RF and other NPP systems on modern “regular” warfare in the strategic and operational/tactical arena will furthermore have far-reaching implications for the system of “deterrence” as we have known it for the last decades.

The essence of deterrence is the mutual capability for an ultimate nuclear retaliation. It is based on the assumption of some sort of approximate balance of nuclear forces. The “regular” nuclear and non-nuclear forces of East and West seem to be strategically positioned in a strictly “direct” setting, in the fullest sense of Liddell-Hart’s notion of “strategic directness.”

Indeed, the SDI, RF, and other NPP systems, if developed and deployed, do represent a “flank,” so to speak, which would tend to supersede the strategic regime of deterrence with its fixed “direct” setting. I believe, as indicated above, that we have the choice of transcending deterrence through technological attrition or wait out its—rather unpeaceful, to be sure—collapse and disintegration.

The system of deterrence covers only the “regular” nuclear and non-nuclear military capabilities in the East and West. Deterrence never encompassed the third dimension of modern warfare, irregular warfare. Therefore, deterrence never really signified war-avoidance. Only “regular” wars between East and West, in the “direct” strategic setting, have been avoided so far. “Deterrence,” defined as true war avoidance, would have to encompass all three dimensions of warfare, irregular warfare included.

The Soviet command has subscribed to deterrence insofar as it left them the conduct of irregular warfare as the cutting edge of their strategic “indirect approach,” again in the sense of Liddell-Hart.

### Irregular warfare

After having tried to sketch the impact of RF and other NPP systems on “regular” strategic and operational/tactical forces, and on the system of deterrence as a whole, the next questions are:

- 1) What are the basic features of modern irregular warfare? And,
- 2) Do RF and other NPP systems have an impact on

irregular warfare similar to the above-sketched impact on “regular” war?

Lieutenant General Berkhof and Brigadier General Scherer will present to you a detailed account of the Soviet irregular warfare threat ranging from psycho-political “active measures” to the specifics of *spetsnaz* [Soviet special forces—ed.] operations as such.

I will attempt to give a more general outline on the basic features of modern irregular warfare.

Modern irregular warfare is a hydra and a chameleon. The forms of irregular warfare are manifold, and one is tempted to capitulate in front of that diversity because of the danger of falling for some sort of schematism or a mechanistic world communist conspiracy theory. The basic forms of modern irregular warfare—nevertheless—are:

a) The by-now “classical” modern guerrilla war or, in Soviet phraseology, the “national war of liberation,” as exemplified in Vietnam, Algeria, China, or Cuba.

b) Modern irregular war—usually denominated as “terrorism” of “violent minorities”—directed against the democratic, highly industrialized OECD states, especially Western Europe, since the late 1960s.

c) Irregular warfare, in which special forces or related organizations are a crucial feature, like the Soviet partisan warfare behind German lines in Russia, the British SAS in Africa, the SOE/OSS-French Resistance combination just before the Normandy Invasion *and*—most important—Soviet *spetsnaz* as they emerged since the early 1970s.

In addition to these three basic forms of modern irregular warfare, there do obviously exist many more variations, overlaps, and hybrids. But I think that these three basic forms and their derivatives are all forms of *one principal gestalt* of irregular warfare. These different forms simply mirror the specific conditions of geography, economic and social development, political structures, the military and general security environment, and ideology.

The best summary of the crucial internal features of the different forms of irregular war that I know of, is provided by Professor von der Heydte [in his book, *Modern Irregular Warfare*], who defines irregular warfare in the following way:

“This present study describes modern irregular warfare as a strategic model—as the model of a total, violent conflict, one which takes hold of the totality of the state and people, is conducted with all possible instruments, and lasts a long time, a conflict which is initially of low military intensity, but for which the tendency for a gradual escalation is characteristic. In this conflict, that party to the conflict will be victorious, which succeeds in isolating his adversary in the course of combat, psychologically and in space, and wears down his adversary’s morale, so that the latter accepts all the conditions imposed upon him.”

Every form of irregular warfare demonstrates most clearly Clausewitz’s dictum of the causal function of political aims

and military means. In contrast to “regular” warfare, the political aim penetrates into the very fabric of irregular war. There is no such thing as the “autonomous mechanics” of “regular” warfare. Every armed encounter, ambush, act of sabotage, or assassination in irregular warfare must be, in an immediate sense, continuation of politics with others means. And this is all the more true, if one considers, that in irregular warfare, not more than 10-20% of the total war effort goes into lethal combat as such, but 80% or more are “politics as such” in terms of logistics, psychology, culture, and so forth.

### **The ‘interested third’**

It may sound repetitive to stress once more that not only the internal strategic dynamic of irregular warfare is Clausewitzian, but that on a higher plane, irregular wars are Clausewitzian in terms of Grand Strategy. Whatever form an irregular war may take, it serves as a strategic means toward grand strategic, global political aims.

Every form of irregular warfare has, in addition to the indicated internal features, another crucial inherent feature, the so-called “interested third.”

This “interested third” must be a state, with the strategic interests and the resources which only a state or a group of states possess.

It is obvious, that any form of irregular warfare in whatever state must begin with a “homegrown, genuine” potential. The beginning of irregular warfare must be “original.” Usually, such a beginning is associated with a determined conspiratorial minority committed to the overthrow of the existing political order. It is not our business here to elaborate the objective and subjective conditions which must be met in order to facilitate a successful politico-military irregular warfare campaign. The literature on that topic is vast.

The point to be made is that, while the beginning and the early phases of irregular warfare can develop up to a certain point *autarchically*, beyond that point—and this point may occur earlier or later, depending on concrete circumstances—the “interested third” will come into play. I think, that not only does the eventual breakthrough and victory in irregular warfare depend on the “interested third,” but already the continued existence of an irregular war campaign is not possible without “outside” support.

I believe that history clearly demonstrates that already the great irregular wars of the past depended on outside support. For example, the Dutch War of Liberation, the American War of Independence, or the Spanish Guerrilla War of 1808-12. In the 20th century, the Russian Revolution is no exception. Nor the irregular wars in the context of World War II.

Much less can one assume that under the conditions of the bi-polar world of the two superpowers since World War II, there is a chance for irregular wars, whatever form they may take, to exist, without taking into account the involvement of the “interested third.”

In the postwar period, there have been irregular wars against communist totalitarianism with Western support. But the record is rather depressing: the Baltic states, the Ukraine, Tibet, Savimbi in Angola, and Afghanistan today.

At the same time, we have witnessed the Soviet Union playing the part of the global strategic “interested third” with great skill, commitment, and success. But while it is quite appropriate to characterize the Soviet Union as the “interested third” by looking at her from within the evolution of a “local” irregular war, the Soviet Union is actively and ruthlessly *conducting* irregular warfare on a global scale.

### **How the Soviets do it**

As we said earlier, the Soviet doctrine defines irregular war as an integral component of total warfare together with “regular” warfare. The doctrinal issue is an eminently practical one. Due to the temporary stalemate—deterrence—of “regular” nuclear and non-nuclear forces, irregular warfare becomes a strategic priority.

The conduct of Soviet irregular warfare does not take the form of a linear, mechanistic “export of the revolution,” and it is not a “marionette theater,” with the Kremlin in the role of puppet master. Soviet conduct of irregular warfare is so effective, precisely because it is indirect, flexible, and—most important—it is covert. The principal “secret” of the Soviet conduct of irregular warfare lies in its *indirect and covert character*. Courtroom proof will be difficult to obtain.

“Local” potentials of irregular war against the West are carefully evaluated and flexibly supported, directed, and eventually controlled. The principal means to achieve effective military-political control of irregular warfare are: 1) political-military training, 2) financial and logistical support, 3) availability of intelligence. These means are provided either by the Soviet Union directly or in most cases by satellites or surrogates.

The global strategic approach of the Soviet Union in respect to irregular war is a classical “indirect” one, namely focusing on outflanking the U.S.A., Western Europe, and Japan in the Third World, especially cutting the West off from vital raw material supplies.

This seems to have been understood in the West, but it involves a problem in the sense, that Soviet irregular warfare tends to be reduced to the Third World “guerrilla” mode. Soviet irregular warfare and spetsnaz operations in OECD countries, especially in Europe, are usually given much less attention. I think this reductionist view of irregular warfare, for example, permeates the U.S. Army Joint Low Intensity Conflict Project Report of Aug. 1, 1986.

### **Irregular war in Europe**

Strictly parallel to the Soviet diplomatic-psychological offensive featuring “détente,” and culminating in the Gorbachovian “arms control” summitry, the Soviet military-political command has refocused on irregular warfare against

Western Europe.

In 1971, the West German Baader-Meinhof Gang issued a statement stating that (*Modern Irregular Warfare*, v.d. Heydte, note p. 38):

“Since the destruction of the bourgeois military apparatus by an international war is not to be expected . . . consideration must be directed to those forms of combat and tactics, which make a gradual consumption of the forces of the enemy, in the sense of wearing down *morale*, and simultaneously the development of a military potency of the proletariat, appear possible: the form of combat of the guerrilla war.”

There is a strict continuity between this statement and the operational directives issued at the January 1986 planning session of most of Western Europe’s terrorist organizations in Frankfurt, West Germany. These 1986 instructions for the irregular fighters called for an intensification of a Europe-wide offensive against the “NATO Military Industrial Complex.”

Since the early 1970s, the size of the irregular warfare forces in Western Europe, and particularly in West Germany, has steadily increased. The same is true for their training and experience. Its military character has asserted itself not just in terms of stated intentions, but in terms of the concrete, tangible results of irregular warfare in Europe.

The notion of “terrorism” is not only inappropriate, but dangerously misleading when used to characterize the overall phenomenon of irregular warfare in Western Europe. “Terrorism” is only one, subsumed tactical feature of irregular war. In order to be effective, terror must be selected and aimed at creating a maximum propaganda effect. It is used to demonstrate the impotence of the state under attack and/or to provoke that state into a disposition for mindless “direct” retaliation. The spectacular and sensational terrorist murders and kidnappings, especially in the 1970s, have in my view blinded the understanding for the overall process of irregular war in Western Europe.

## Sabotage and ambush

I believe, that the really important new tactical evolutions of irregular warfare in Western Europe are: 1) large-scale, ever more professional *sabotage operations*, 2) *ambush tactics* growing out of violent rioting. These two new tactics, which, in my view, dominate irregular warfare in Europe in the 1980s, became possible because, since the late 1970s, the manpower base for irregular warfare personnel has significantly grown. By now, I believe, the combined striking power of the so-called “autonomists” or “revolutionary cells” has left that of organizations like the Baader-Meinhof-RAF far behind.

The irregular warfare force of the *autonomisti* is conspiratorial, decentralized, and stretches over most of the country, if we stay for a moment with the West German case, which seems to me the most dangerously advanced. I fear, that reports are not exaggerated, which estimate that the irregular

warfare forces in West Germany consist of up to, a) 1,000 irregular warfare fighters committed to lethal combat, i.e., to kill and be killed, b) another some 5,000 who are ready to become involved in sabotage acts and willing to take the risk of being injured in combat or quasi-combat situations, and c) a support screen for these two categories of irregular warfare fighters in the order of at least 30,000.

This combined irregular warfare force is capable of carrying out an average of three sabotage acts per day in West Germany. These large-scale sabotage operations target:

- a) military installations, including the theft of weapons and explosives,
- b) railway lines and airports,
- c) industry, banks, department stores,
- d) power plants, the energy grid, especially electricity pylons.

It must be stressed that most of these acts of sabotage are carried out on a rather professional level and clues are rarely left. The same astonishing standards of training show in the new type of *ambush tactics* against the security forces, which emerged for the first time in the context of the May 1986 Wackersdorf riots. These ambush tactics include tactical drill, a command hierarchy with radio communications and combat equipment consisting of flare ammunition, deadly slingshots, and Molotov cocktails. These ambush tactics have since been perfected in the May 1987 Berlin-Kreuzberg night ambush, and in the November 1987 attacks at the Frankfurt Airport, where the night ambush included the use of firearms, killing two policemen.

## Spetsnaz

The quality of training of these irregular warfare forces cannot, in my view, be explained by the large-scale circulation among the *autonomisti* milieu of irregular warfare *combat and sabotage manuals* of high professional standards. Specialists in irregular warfare instruction are, in my view, indispensable to produce the indicated results.

The deployment of such training personnel and the training process must be wrapped in the blanket of the highest possible degree of secrecy. And here we come back to the covert and indirect Soviet control of irregular warfare, through training, logistical, and financial support, and the making available of intelligence, as indicated earlier.

I believe that there exists a grey zone of overlap between the just indicated forms of irregular warfare in western Europe and the role of Soviet special forces, the *spetsnaz*.

I believe, that within the irregular warfare force of the *autonomisti* type, deep-cover Soviet Special Forces operatives are active in singular command and control points. They would play a critical role in operational planning and training. These *spetsnaz* operatives certainly do *not exist in any quantity*, but they would steer the overall irregular warfare effort from a few command and control points. *Spetsnaz* operations do need the environment and the infrastructure of *autonomisti*

type of irregular warfare forces in carrying out the vast number of low-priority and, relatively speaking, low-risk sabotage and disruption operations, for which a deployment of highly specialized spetsnaz would be outright wasteful. Yet, the accumulation of such large-scale, relatively "minor" scale sabotage and ambush operations do produce an extraordinary net result of political, administrative, and military disruption and paralysis. And this result is achieved in spite of the military equipment of the *autonomisti* irregular warfare forces—arms and explosives—remaining on a rather low technological level.

This is certainly not the case with spetsnaz forces. Their equipment will be technologically advanced, since their missions are the destruction of high priority military and political targets. Spetsnaz operations mostly have the character of "one chance only." The targets must not be alerted by repulsed attacks or only partially successful destruction. This is all the more important if one considers the fact, that many spetsnaz targets are large in terms of space and personnel involved, such as command centers, missile batteries or air fields.

Obviously, the "hours of fulfillment," the climax of

spetsnaz operations, are the immediate period before "regular" military operations—nuclear or non-nuclear—commence. But, I believe, spetsnaz operations should not be seen as being rigidly limited to only the last hours of "peace" or a "period of heightened tension." Soviet doctrine sees irregular war as one component of total war and, in that sense, spetsnaz irregular war operations are defined as functional "pre-war" operations to "regular" war. But beyond spetsnaz reconnaissance missions, the build-up of "sleeper" infrastructure and the infiltration of material, spetsnaz do operate as an irregular warfare force of their own right, so to speak. Just as Soviet doctrine defines irregular war as a very real war in its own right. In that sense, spetsnaz forces play a critical role for selected, covert sabotage and assassination operations, as well as training and command and control assignments under general conditions of irregular warfare.

With spetsnaz covering the high-technology side of irregular warfare, we must be prepared for ABC weaponry tailored for special forces' use in the arsenal of spetsnaz. It is known that "back-pack" or "hand-carry" nuclear weapons for special forces' use are designed to destroy larger targets such as harbors, railway junctions, bridges, and so forth. In the summer of this year, Douglass/Livingstone published a book on the awesome potential of chemical and biological weapons in the context of irregular warfare operations.

The practical and possible political drawbacks of the use of chemical, biological and nuclear weapons of mass destruction in "regular" warfare come to bear also when this type of high-tech weaponry is included in the arsenal of special forces in the context of irregular warfare. At the same time, even most modern firearms and high explosives have a rather limited efficiency for the destruction of characteristic targets of special forces. It is therefore only logical that special forces should look precisely in the direction of weapons based on new physical principles, and among these, first of all in the direction of RF weapons against human and soft targets, which will be the principal targets of special forces.

We have clear indications that exactly this is happening with the Soviet Special Forces. Were spetsnaz equipped with RF weapons which are *miniaturized, highly mobile*, and which need no considerably great energy input, then the combat effectiveness would rise by orders of magnitude.

## Conclusions

In conclusion, I would like to say that the strategic weight of irregular warfare, relative to "regular" warfare—nuclear or non-nuclear—is increasing rather dramatically. Within modern irregular warfare in general, the role of special forces is steadily increasing. The combination of a broader based low-tech irregular warfare infrastructure and *special forces* represents a new quality of irregular warfare. The foreseeable availability of NPP systems, especially RF weapons, for special forces' use defines *High Tech Special Forces* as the potential new "cutting edge" in warfare in general.

## For further reading

**Karl von Clausewitz**, 1780-1831, Prussian general and military strategist. His classic treatise, *On War*, is currently available in a 1976 edition published by Princeton University.

**Basil Liddell-Hart**, 1895-1970, English military strategist. Among his works are:

*History of the Second World War*, 1980 reprint, Putnam Publishers.

*The Defence of Britain*, 1980 reprint of 1939 edition, Greenwood Press.

*Defence of the West*, reprint of 1950 edition, Greenwood Press.

*The Remaking of Modern Armies*, 1980 reprint of 1928 edition, Greenwood Press.

**Friedrich August Freiherr von der Heydte**, 1907-, retired West German Brigadier General of the Reserves, former member of the Bavarian state parliament. In 1972 he published a classic study of irregular warfare, *Der moderne Kleinkrieg*, which was reissued in 1986 in a German edition and in an English translation, titled *Modern Irregular Warfare: In Defense Policy and as a Military Phenomenon*, New Benjamin Franklin House.