

AIR POWER: MEDIUM OR MESSAGE?

by

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Air power is a common term in the military lexicon. Like many everyday words or things, it only seems curious when we stop to look at it closely or when we slip out of sophistication, with all its buried assumptions, into a kind of naivete.

Last week my daughter asked me, "Why are your buttons on the wrong side?" The purpose of this article is to look at air power with that kind of perspective, to raise some questions, and to make some assertions that are basic.

As a departure, it seems useful to examine air power as an idea. The reality and the term are poorly matched, but no more so than sea power and ground power. Air is a medium. Its contribution to the real power involved is one of permissiveness: it freely gives privileges of altitude, speed, range, and routing. There are, on the other hand, real constraints in factors such as persistence and discrimination. We can say similar things about sea power and ground power. Sea power gives us dogged mobility short of most destinations and targets. Ground power gives us territory, but defends it or extends it with short arms. Hybrids such as the helicopter assault team and the aircraft carrier give us a little of this, at the expense of a little of that.

Our traditional categorization of military forces into air, land, and sea dimensions is not, in general, an inevitable or fully illuminating way to approach missions, plans, or problems. It puts too much emphasis on the medium, too little on the message. There are other ways to think.

We could consider the Viet Cong and North Vietnamese campaigns in South Vietnam, for example, in terms of sustaining power, persuasion power, or in a more confined sense, night power, communications power, and timing power. It would be refreshing to see an article on "Night Power in NATO," covering what our composite forces can do in the dark that the Warsaw Pact cannot. Instead, we tend to see articles on what the attack helicopter can do in the dark, what the A-10 can do in the dark, or what the infantryman can do in the dark, with heavy emphasis on new systems and their impact on traditional roles. We tend to measure progress

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in channels of hardware defined by our habits of thought and language.

My first argument, then, against the term air power—against its overuse—is that it is conceptually confining, in terms of collective ends and means, at some cost in alternative ways to visualize military activity.

My second argument is that emphasis on the medium tends to obscure—partially, not entirely—the byplay with evolving defenses, trade-off opportunities between aerial delivery platforms and weapons, and necessary questions about aircraft on the ground.

EVOLVING DEFENSES

There is a tendency to believe that if we exploit the medium more dramatically, we have a better system, and a parallel tendency to highlight airframe performance characteristics and offensive capabilities as they relate to an older generation or to the closest comparable enemy aircraft. The first things we hear about the F-15 are that it can outclimb, out-turn, and outdistance the F-4, and that it can defeat any Soviet aircraft we have seen or are likely to see for some years. The more relevant question, given growing Soviet quantitative advantages in tactical airpower and the link between attrition and any degree of surprise, is whether the F-15 can defeat two, three, or four enemy fighters in inevitable engagements with uneven sides.

In all probability, it can, due to the cumulative effect of a superior airframe, a superior weapon in the AIM-7 SPARROW missile series, and the multiplier effect of comprehensive radar warning and control from the E-3A Airborne Warning and Control System. The E-3A, commonly referred to as AWACS, represents a break in the pattern of history, in that we have let an essentially defensive system with intangible benefits capture our imagination. We have learned from experience—presumably from World War II, when radar can be said to have won the battle of Britain after taking from 1922 to 1938 to mature from a proposal to a requirement. We have also learned from Vietnam, where a crude, patchwork control

system far less sophisticated than the AWACS increased our kill ratio over North Vietnamese aircraft by a factor of nearly six. The existence of the AWACS has forced us to think about the air defense mission in broad, integral patterns, simply because its role is too complex to be measured by yardsticks. We see it as surveillance power and information power.

Excluding factors such as base survival, we have sustained a proper balance of offensive and defensive strengths—relative to the threat—for the air superiority mission in Europe or elsewhere. We may not have asked the questions in quite the right way or postured survivable forces, but the ingredients for success are available. The F-15 is a better system; more importantly, the AWACS is a better idea.

When we turn to another slice of the air envelope, we find a totally different situation. Loiter and prolonged maneuver over or near the battlefield have been possible in the past only because of relatively inefficient defenses—defenses that lagged a half step behind the speed and dexterity of the air arm. The breakthrough in shoulder-launched weapons, however, has been dramatic and is only in its infancy. If we plot growth curves in the sophistication of close air support weapons and small antiaircraft weapons over the past years, the convergence toward a

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near-term intersection is obvious. The defensive curve is racing up from below.

Attack aircraft, such as the A-10, are viable, important systems, but they are systems which must now be used with principles of concentration and surprise to achieve shock and curtail attrition. Close air support will, by virtue of the change in defenses, become less direct, more a form of forward interdiction—suitable against massed or channeled targets, such as Warsaw Pact second-echelon armor. Battlefield targets may be struck on request by guided munitions fired from offset or tangential positions, but the day of the aircraft that “hustles” targets is fading. We contemplate this, but structure and plan for it only in a hesitant way, in somewhat the same mood as the ant making what should be progress along a log that is drifting downstream.

The air in air power, then, is not a uniform blanket. It is sliced into mission requirements, defensive challenges, and local variations nearly as diverse as any landscape.

AERIAL WEAPONS

Air power is not just platform power; it is also projectile power. In a fascinating role reversal between aircraft and their munitions, the projectile has taken over the most delicate and important task. The bullet now does the aiming.

If the sophistication and range of our weapons continue to increase, as they should, the demands on aircraft should decline, opening opportunities for a different emphasis in characteristics. Fast, high-payload systems may be stressed, for example, with less regard for maneuver. As the sophistication of weapons and control systems increases, as with the AWACS, delivery platforms and pilots can be given less complex and demanding roles.

We are, like it or not, crossing the threshold into a standoff era. Some penetration problems, such as access to deep targets in the Soviet Union, will be so difficult as to require the combined best in both a manned delivery vehicle and a variety of weapons. Most targeting problems, however, will permit a

basic shift from skill and maneuver to technology and position. The lethal relationship between attrition and proximity in future wars may well force such a shift. We could be better prepared for it if we thought in terms such as the power of elusiveness as well as in terms of air power.

BASE SURVIVAL

Finally, the phrase air power is dangerous because the image it projects includes the idea of air basing. What is an airfield in the eyes of an enemy planner? If he has attack credibility, it is a gigantic aircraft carrier sitting at anchor close to his shores. It is fixed and vulnerable. Key support activities, from communications centers to fuel dumps to hangars, are soft. Exposed aircraft are more than soft; they are fragile. Some of the planes can disperse on warning, but if they are denied recongregation and recycling, what good are they?

Suppose I were a Soviet planner, and suppose the head of state said: “I want to invade Western Europe. Can you deny NATO air power and resupply?” I would probably say, “Yes.” At the very least, I would say, “Give me three more years of development and production effort in our ground-based cruise missile and our depressed trajectory SLBM programs, and then I can do it.” Airfields are in essence no more than a flat, hard patch of ground; they are resilient targets. But given the matrix of support required for modern systems, it is hard to believe that the technology to debilitate three acres of flight line facilities and concrete is anywhere but close upon us. The debilitation would not have to be prolonged, for without an effective air arm, NATO could not fight long.

Our air power has historically held a relative degree of basing sanctuary. That was the case in World War II, after the Battle of Britain preserved it, and that was the case as well in Korea and in Vietnam. The danger is that as we have experienced history, it has conditioned us. The notion of an airbase as a kind of free zone is so buried in our consciousness and so manifest in our

deployments that we examine its implications with only one eye. There are active programs to increase aircraft shelters, accelerate runway repair capability, and improve air defenses in NATO. However, if the combined potential of Soviet reach, precision, munitions diversity, and a relative degree of tactical surprise is outpacing the sum of these programs, we are left with the same Achilles' heel wearing a thicker sock in the face of a sharper arrow.

If we would speak and think in terms of survival power now and then—survival across the spectrum of force elements—we might better avoid or modify dangerous habits.

Obviously, the questions and considerations raised here are not ignored. Summary language and categories do not dictate detailed planning. They do, however, lend emphasis, and if they are stale, they can blind us to opportunities for clearer perception. If images are important to emphasis but never fully rounded, it is essential to shift them occasionally to see what we might have missed. This is true of the somewhat fresher as well as the hackneyed variety.

If we look at NATO and the Warsaw Pact, for example, as two scorpions in a bottle, we are predisposed to measure claw against claw and stinger against stinger. If we look at NATO and the Pact as a cobra and a mongoose in a pit, however, we are subtly urged toward a more profound analysis based on the different perspectives and capabilities involved.

To some extent, this air power discussion hints that we tend to project our own point of view onto the Soviet Union, to assume that the powerful forces in being—NATO from their perspective, the Warsaw Pact from ours—are deterrent signals, based on power potential. We worry in our rhetoric; we tend to give them the benefit of the doubt in our actual force structure. If, in fact, the Soviet momentum and modernization we are witnessing are aimed toward an invasion force—if we are dealing with the mongoose and the cobra rather than two nervous scorpions—we need a deterrent structure in NATO rather than a deterrent signal, a

structure which goes out of its way to complicate what they are most likely to do.

To cite just one example, if Soviet doctrine, the outset of World War II, and the recent wars in the Middle East are indicators, the Soviets would unquestionably include airbases in the first wave of any attack. We give them that, and it is a difficult concession to remedy overnight. The support structures we have built are too massive and too complex to dissect and disperse. The systems we have built are too reliant on these structures. As a consequence, we rest satisfied with a comforting potential that is ideal for virtually any theater or conflict *outside* of NATO territory, and we paste a deterrent label on it.

Deterrence and war fighting, however, are two sides of the same coin stamped with different patterns. For either side to have more than face value, we have to be able to flip the coin quickly. That means consideration of wider dispersal patterns for air power, consideration of greater reliance on rearward basing and refueling, consideration of future systems designed for sod strips, and on and on.

It means consideration of air power as mobility power on a grander scale.

Language can be both a flashlight and a hobble in the movement of ideas. It does not create power, but it does illuminate the paths power may take. As S. I. Hayakawa has said, “. . . while the result of communications successfully imparted is self-satisfaction, the result of communications successfully received is self-insight.”¹

I hope that this brief examination of air power and the overuse or misuse of that term will, in fact, be successfully received. Only through so examining elements of our strategic vocabulary are we likely to eliminate the deceptive self-satisfaction of the medium in favor of the healthy self-insight of the message.

NOTE

1. S. I. Hayakawa, “How to Attend a Conference,” in *The Use and Misuse of Language*, ed. S. I. Hayakawa (Greenwich: Fawcett Publications Inc., 1962), p. 76.