

*This is the eleventh of a series of 12 articles on systems thinking, a way of understanding complex organizations and society offering significant promise for improving the leadership and management of commercial companies, not-for-profit organizations, and government agencies.*

## Part 11

### The Wingman Concept: Security and Reinforcement

By H. William Dettmer

*Excerpt from the movie Top Gun [1], about the U.S. Naval Fighter Weapons School. The scene is a multi-aircraft training engagement between two two-seat F-14s (piloted by call signs "Maverick" and "Hollywood") and two single-seat A4s (piloted by call signs "Viper" and "Jester"). "Goose" is the back-seat weapons officer in Maverick's plane.*

**Maverick:** Goose! There's Viper! Three o'clock low!

**Goose:** Stay with Hollywood, man—we're his cover!

**Hollywood:** Don't you leave me, Maverick!

**Maverick:** Hollywood, you're looking good. I'm going after Viper.

**Goose:** Mav, don't leave him!

**Maverick:** Goose, Hollywood's okay—I want viper!

*[Maverick breaks out of the formation, pursues Viper's A4, failing to notice that Jester has shaken Hollywood off his tail and is lining up behind Maverick. An intermittent missile firing tone sounds on Maverick's interphone.]*

**Maverick:** Goose! Check our tail!

**Goose:** Shit! There's Jester!

*[Steady missile lock tone signifies successful missile intercept.]*

**Jester:** Bingo! Maverick's dead. You're out of there, kid!

**Goose:** "The Defense Department regrets to inform you that your sons are dead because they were stupid..."  
*[SCENE: In the fighter weapons school locker room after the mission]*

**Jester:** That was some of the best flying I've seen yet. Right up to the part where you got killed. You never, never leave your wingman.

**Iceman** (another F-14 pilot): Maverick, it's not your flying, it's your attitude. The enemy's dangerous, but right now you're worse than the enemy. You're dangerous and foolish. You may not like the guys flying with you, they may not like you. But whose side are you on?

**Maverick:** That was stupid! I know better than that! That'll never happen again.

Scenes like the preceding one from *Top Gun* are enacted daily in different parts of the world, by aviators of different countries and services. Well, maybe not the stupidity demonstrated by Maverick, but certainly the formation flying in simulated combat operations. Rarely—maybe once every ten years—such multi-aircraft combat engagements happen for real. And all the daily training, such as that depicted in *Top Gun*, serves to prepare combat crews for the day when their lives will be on the line and they must behave and perform together completely intuitively.

In other words, their actions, reactions and support for one another happen without even having to think about it. This level of skill is not new. In installment 4, we discussed the philosophy of Miyamoto Musashi, the prototypical *samurai* warrior, who hammered on the need to practice incessantly until the sword became an extension of the warrior's arm and the warrior's action became instinctive, without having to think about it. In other words, Boyd's implicit decision and action.

## The Wingman Concept

But military aviators, particularly in the U.S., extend that implicit, instinctive behavior beyond their own personal skills alone, and into their teamwork with their compatriots. In other words, they and their fellow pilots operate as a single, coordinated unit. This is what the *wingman* concept is all about. The Air Force and the Navy understand this concept, and all that it implies, in a way that people outside the military flying community likely never will. In fact, they virtually invented it.

Military fliers are normally the only ones who fly multiple airplanes in close formation the most frequently. In any aircraft formation, one is designated as the leader. All others in that formation, then, are wingmen so named because their position in the formation is to the side of the leader, beyond the end of the leader's wing. Their position is specifically planned to enable them to watch the leader and follow his lead through every complicated movement of the formation. Regardless of the formation configuration, and there are many (see Figure 1), all of the aircraft and pilots other than the leader are considered wingmen, even if they aren't flying in a position precisely to the side of the leader's wing. In a broader sense, we could say that in formation flying, there is a leader and followers. (Remember this discussion of leadership and followers in the last installment?)

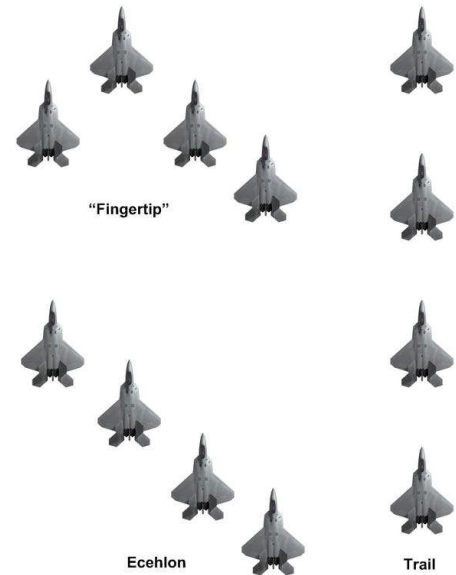


Figure 1. Types of Aircraft Formations

## The Foundation of the Wingman Concept

The wingman concept is based on three characteristics one might even call them virtues: loyalty, integrity, and commitment. The similarity between the *blitzkrieg* concepts of *einheit* (mutual trust) and *auftragstaktik* (moral contract) between the leader and the led, or between contemporary team members, is not coincidental. (Refer to installment 2, Business and the Blitzkrieg) [2:51-59]. In formation flying perhaps the ultimate expression of coordinated behavior and especially in combat situations, trust among air crews must be complete and unequivocal. Loyalty, integrity and commitment of each air crew (both leader and wingmen) to one another and to the successful execution of the mission essential and unquestioned. Lives depend on it.

The wingman's primary function, as the *Top Gun* excerpt implies, is protection of the leader's blind spot (the so-called six o'clock position, directly to the rear—180 degrees out from the leader's point of focus). As roles and responsibilities change during dynamic situations, leaders can temporarily become wingmen and vice-versa. In any case, whomever is leading trusts the wingman without reservation to protect his rear.

Effective application of the wingman concept, like the *blitzkrieg*, manifests itself in the tacit knowledge and confidence of everyone involved what everyone else will do at the required time. It's this kind of utter dependability that enables a flight of aircraft to perform as a unitary team, subordinating their own individual performance and recognition to the benefit of the whole formation. Such coordinated performance is what allows a formation of stealth fighters over Iraq in 1991 to release two laser-guided bombs in rapid sequence from exactly the right point in space, the first one blasting the armored door off a fortified bunker, and the second one instantaneously entering the bunker through the hole just created by the first.

## The Wingman in Business

The transferability of the wingman concept to the non-military environment should be self-evident, but often people fail to recognize it. Perhaps the most visible example would be a highly skilled professional

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football team. Holes in the line open up an instant before the running back reaches them at full speed, allowing him to achieve a big gain. Pass receivers run complicated pass routes, turning back to look at the quarterback after the ball is already airborne on its way to them. Simultaneously, offensive linemen keep defensive players from reaching the quarterback just long enough for him to get the pass off...and not a moment longer. Meanwhile, the quarterback, without even looking at or coordinating with his blockers, knows just how long he can hold the ball before he has to get rid of it. And the timing of all this is compressed into less than four seconds.

Likewise, the wingman concept can apply to a business situation. But it seldom happens. Okay, maybe business doesn't have the same built-in life-or-death consequences that military combat aviation does. But businesses are no less comprised of coordinated activities than are multi-aircraft combat missions. So why are businesses often "siloeed" in their efforts, while aerial combat remains a team effort?

Motivation is certainly one factor. It's hard to get up for teaming with a bunch of people you may experience some friction with, or have no shared objective with, when you know that at the end of the day you'll be going home, sitting down in front of the television with a cold drink, and putting your feet up. On the other hand, when you realize that you may not live to see the sunset (or sunrise), it's not hard to take a vital interest in what your teammates are doing, and how they'll interact with you.

## **A Mutual Reinforcement Culture**

In the last installment, we talked about the importance of leadership and the differences between leadership and management. Since mutual reinforcement is not naturally motivated by survival instincts in business, it becomes the leader's responsibility to instill it. There is a heavy psychological component to this task, which we'll address in more detail in the next installment. For now, it's sufficient to emphasize that leaders in non-military situations need to devote considerably more attention to establishing a mutual reinforcement and support culture than military leaders, for the simple reason that they don't benefit from a life-or-death motivation.

Inculcating a mutual reinforcement (wingman) culture in a typical business environment requires fostering a whole-system view of the organization. Especially when teams are cross-functional, it's absolutely essential that everyone have a big picture perspective. In the past, even the military wasn't very good at doing this. But in the past several decades, particularly since the advent of the all-volunteer force, all the services have made a concerted effort to help those operating "where the rubber meets the road" understand how their efforts contribute—sometimes critically so—to the reinforcement of their compatriots and the success of the mission as a whole. If you doubt this, just listen to almost any television interview of a soldier in (or just back from) Iraq. They express confidently and eloquently that they understand what they're doing and why, and their pride in doing it. Can people in typical business situations do the same thing? *Dilbert* comic strips [3], by virtue of their popularity, demonstrate through their resonance with a large audience that this is probably not the case.

## **Summary and Conclusion**

The wingman concept of mutual support and reinforcement has been around a long time. Though it's most commonly associated with military aviation, it has its roots in the underlying principles of the *blitzkrieg* (*einheit* and *auftragstaktik*). The synergy possible through the mutual reinforcement culture is significant, but it doesn't come naturally, either to the military or the commercial sector—though it's easier to promote in the military, where lives may be on the line. In the civilian sector, the wingman concept has no less potential, but it requires considerably more effort from senior leadership to instill. In our next installment, we'll see some ways this might be done.

## **Endnotes**

1. *Top Gun*, Paramount Pictures, 1986.
2. Richards, Chet. *Certain to Win*. Xlibris Corporation, 2004
3. Scott Adams, Inc., distributed by United Features Syndicate, Inc.