The Film Doesn't Lie

How the Los Angeles Rams increased an infantry battalion's lethality by Maj Neal T. Jones

he Southern California coastline sat coated in a dense marine layer, the sun broke through as players walked past perfectly manicured practice fields. The gridiron lay on the outskirts of Thousand Oaks, CA. It was the start of off-season training activities (OTA) for the Los Angeles Rams. Rookies and veterans piled into their designated meeting rooms. Everyone arrived five minutes early; Coach Sean McVey never allowed tardiness.

Teammates exchanged pleasantries and pulled out their iPads. The position coach began talking and scrolled through video clips on a wall-sized monitor. The clips were a mixture of footage from practice the day before, last season, and notable examples of specific plays that drove home the coach's point. Afterward, they all compared notes.

Through active discussion, the players and coach shared valuable feedback with each other. To finish the meeting, the coach then synchronized both his and the players' notes, all with the click of a button. We did not know it yet, but both player and coach will reference these notes four hours later during a drill on the practice field. This is not magic; it is called engaged coaching, and it is the main reason the Los Angeles Rams are an elite football organization.

2/4's Summer Camp

Leaders from 2d Battalion, 4th Marines (2/4) and Mr. Steve Gera, CEO of Gains Group, an innovation consulting firm that specializes in optimizing the performance of elite organizations, visited the Los Angeles Rams to observe a full day of OTA. During the visit, the Marines observed every aspect of the OTA: team meetings, film study, on-

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Expeditionary tactical film room in the field environment. Range LFAM 710, Camp Pendleton, CA., July 2017. (Photo by author.)

field practice, weight room workouts, and shared meals with the players and coaching staff. The purpose of the visit was to get an inside look at how a professional football organization teaches, coaches, trains, and mentors its athletes. Marine Corps leaders were exposed to the way coaches and players interact and develop a dialogue about player skills, most notably how coaches used film to enhance their performance. Marine

leaders walked away from the experience with a better understanding of the tactics, techniques, and procedures used by elite professional football coaches. The following nine months, 2/4 put these lessons to the test during predeployment training, they developed better planning strategies, more efficient schedules, and systematic training methods. However, the most critical component was still missing: utilizing

video to enhance our coaches' ability to coach.

Rams-7, 2/4-0

The film did not lie. Instantly, we understood how, institutionally, there was a critical piece missing from our training program, a piece that would allow us to score more—to win.

First, units (like teams) must establish a protocol for filming training—all types of training. Traditionally, Marines are taught in a classroom and then practice in a crawl, walk, run methodology. Because of poor vantage points in the field, it is difficult for instructors to give direct feedback on team movements. The use of film, from an elevated point of view, vastly enhances a Marine's ability to improve their skills. The problem is that there is no culture of using film to coach in the Marine Corps, and the infantry battalion does not currently possess the resources to do so comprehensively.

Why are we not maximizing the use of video to train our Marines and increase the lethality of our close combat formations? We argue that key leaders within our Corps are unaware of the technological advances in software design, which support realtime video editing. As a result, our Corps-wide acceptable standard is that leaders use phones, drones, or request Combat Camera support to capture video for use in a debriefing at a later time. Compared to modernized software specifically designed for coaches to capture film and store in a database for future use, the mediums listed above—currently used in the Corps—are outdated and offer little value.

Joe Harrington, the University of Tennessee's video coordinator for the past 27 years, once stated:

We used to look at the last four games of a team ... now in getting ready for Florida, we'll look at the coordinator's last two years, we'll look at the coach's last two years, we'll look at Florida personnel-wise for two or three years. We had years and years of film when we used to look at four games, and that was it.¹

Ask yourself this question, "How do I use video to coach my Marines?"

Some may reference their time at one of the three Marine Corps Infantry Immersion Trainers (IITs). Remember walking on patrol? Conducting a scenario-based event? Walking to the debrief room? What else can be remembered about that debrief? Not much? Why? When was the film revisited to watch again?

If you still have trouble answering these questions, do not worry, that is a common reaction. A number of 2/4 Marines attended division-level training events at the IIT, four times over the last eight years, and none could remember much about the debriefs. Why?

It is not because the debriefs were not useful at the time, they were. The contractors at the IITs are a fantastic resource; the primary reason Marines do not recall much about debriefs is there has been no way to access the video data—the data is not accessible.

All video captured in support of training must be stored in a database, cataloged, and made available for future use. Without a user-friendly database, a continuum within the coaching process does not exist, leaving the overall idea of coaching marginalized. Since fiscal year 2012, 59,000 Marines trained across the three separate IITs.² Because of our Corps' inefficient use of subpar video software and equipment in training, coupled with a lack of database storage for future use, these 59,000 Marines did not receive the most effective coaching possible.

Other Marines reading this article may reference their time in a close quarters combat shoot-house debrief room at one of the various naval installations, Marine Corps bases, or Army facilities. How do units receive a video debrief? Was it by inefficiently scrolling back and forth on a continuous video reel while the unit leader tried to identify personnel and specific moments to pause and replay? It sounds all too familiar. New software exists, and to dramatically improve training effectiveness, our Marines need it now.

Currently, the most popular methods for implementing video in coaching are the individual helmet or chest-mounted camera systems, cell phones, or drones. These techniques may have been the answer in 2014, but they do not answer the mail in 2019 and beyond. Why?

All three video platforms detract from the immediate coaching required to improve a Marine's performance during the training event. They all require the downloading of video from the platform, uploading it to an editing application, and then splicing it together into a useable product; only then is it ready for review by a unit leader and presented to the end-user. By the time this process is complete, the end user's mind has already moved onto the next task: chow, weapons maintenance, gear inspections, and liberty.

Software programs exist that allow real-time editing of numerous angles, all on one screen. The edited film can then be shared across an infinite number of linked devices and stored on a database for future use, all at the click of a button. This type of software is currently used by over 70 worldwide elite sports organizations.

DVDs Are Dead

Digital and cloud-based platforms are the answer. Todd McCarthy, Georgia Tech's video coordinator for the past 21 years, estimates digital technology saves him 40 to 50 hours of work per week.³ Within the next 18 months, this type of software will be utilized by over 150 elite teams, police departments, and private military training organizations across the globe. Our Corps must acknowledge that modern, user-friendly software and video platforms will enable our small unit leaders to become better coaches, and better coaches will serve to increase the lethality of our close combat formations. We must stop wasting money and priceless training time on cumbersome, inefficient, and outdated technology.

Software and Platforms: Angles Software-Fulcrum Technologies

Ten months after our visit with the Los Angeles Rams, 2/4 deployed as part of the GCE Marine Rotational Force-Darwin 201. Throughout the deployment, it was commonplace to find Marines recreating the similar scenes they had witnessed between players and coaches with the Los Angeles Rams, but



Angles software displayed on a computer screen. Filming Marines during the Australian Defense Force's 1st Brigade Military Skills Competition. Robertson Barracks, Darwin, Australia, July 2018. (Photo by author.)

this time it was lance corporals using video to coach one another. Peer-to-peer coaching, tempered with added guidance from experienced sergeants, became the norm.

In Darwin, Australia, 2/4 partnered with software guru Rex Proctor from Fulcrum Technologies to test modern software used by elite sports organizations around the globe. Fulcrum Technologies, an industry leading video technology company, proved what the Marine Corps has needed for years: Angles. Angles is a revolutionary software program designed to capture video from multiple angles, immediately edit the footage, and then instantly transmit that video over multiple electronic devices. Fulcrum Technologies' userfriendly software and minimal hardware footprint allowed Marines to record themselves from multiple angles simultaneously and to debrief with video footage within two minutes of completing a scenario-based event. Never before have Marines been able to film training and instantly use the footage to debrief their actions.

Throughout team- and squad-sized battle drills, Marines used Angles to video record crew-served weapons drills,

capture movement, techniques of fire support teams occupying observation positions, and assess an artillery gun team's efficiency while conducting a fire mission. Angles allowed leaders to capture video footage from three separate perspectives, conduct real-time editing of the video, and then debrief their Marines within minutes of completing the battle drill. Marines continued to review the video multiple times throughout the remainder of the training evolution. What was the result? Marines completed their prescribed battle drill faster; peers began to critique each other and offer constructive feedback to seniors; and leaders demanded more education on how to become better coaches.

Culture Change–Enhanced Coaching Through the Use of Film

What does Gen Robert B. Neller have to say about coaching? He states that coaching is closely related to teaching. It is the process of both encouraging and demanding output. Coaching focuses on both individual and team success. Coaching encourages success in stated goals; it is forward-looking. For Marines, coaching is a continuing action.⁴

The culture is shifting in our Corps, specifically with the way Marines respectfully interact with one another across all ranks. However, we have stalled in the leader's ability to coach Marines through the training and readiness tasks required to master their jobs. How do we move forward and improve?

Coaching is a process which concentrates on directing, instructing, and training either an individual or a group of people with the aim to attain specific goals and objectives.⁵ Acknowledging the use of video during tactical training enhances coaching techniques will get our Corps set on a path toward increased lethality through more effective training feedback. Additionally, leaders need training on how to coach and the freedom to develop their coaching styles.

Are leaders Corps-wide meeting our Commandant's intent? We argue that the answer is no. If we are not utilizing video to enhance our coaching, we are falling short of our Commandant's intent. What can we do about it? Bill Walsh, famed coach of the San Francisco 49er's, stated that good coaches talk to each player and indicate the importance of everyone's participation in the process—that it is vital for everyone to express himself, to offer ideas, explanations, solutions, and formulas.⁶

What are the solutions?

Proposed Solutions: Long- and Short-Term

The long-term solution is modernization of our training facilities. However, we must also understand not every range or training facility will support modernization efforts with fully outfitted cameras and software such as Angles. Normally, leaders enjoy the flexibility associated with developing a scheme of maneuver on terrain that supports their tactical plans, regardless of where a potential camera may be fixed in place. If we tried to modernize all ranges with fixed cameras and modern software support, we could potentially lose flexibility in the planning process for fear of not moving within sight range of the cameras, and platoon or company-level leaders would fail to receive lessons learned associated

with planning attacks. Specific ranges that are heavily utilized, and generally employ similar schemes of maneuver regardless of which unit is training on the range, could be outfitted with the cameras and software to support fulltime use. The 400-series ranges and larger urban facilities at Twentynine Palms are the most obvious candidates.

We can no longer sit idle and proclaim that iPhones, GoPro's, combat camera, and drones are the answer. We must do better. First and foremost, leaders in our Corps must accept that the use of film enhances a coach's ability to coach his players. Then we must establish a protocol for filming tactical training, provide our leaders with training on how to coach, and buy the right equipment. Cost, as always, will play a role in implementing this idea. However, it should not strike fear in the heart of our Defense budget personnel. For the price of two Javelin missiles, we can outfit an infantry battalion with a state-of-the-art video suite.

A video-suite kit would allow a battalion to support all requirements associated with a tactical film room. Considering the \$2.5 billion invested in our combat arms units, this would be a reasonable investment for the improved efficiency it brings to training, positive culture change associated with coaching, and the increased lethality of units that traditionally bear 90 percent of our Corps' casualties in war.

Where is the tactical film room best utilized in the near term? Formal schools will benefit the most because they train large groups of Marines in controlled environments and need a mechanism that facilitates a feedback loop between instructors and students.

An artillery battery gunnery sergeant stated:

Thinking back to my time teaching at the formal schoolhouse, the use of video would have increased the instructor's ability to teach Marines. Based on watching Marines use the film today, I would say that [Marines] would have gained proficiency quicker because we would have reduced the number of gun drills needed to gain proficiency. We could then have dedicated the extra time towards other T&R tasks we normally do not have time to achieve.

Where, When

Where will we find the time to dedicate coaching-specific training for our leaders? Replace the time spent on hazing prevention, defense travel system training, tobacco cessation, family advocacy, and violence prevention, with leader-led discussions on coaching tactics, techniques, and procedures. To develop leaders into better coaches, provide them the training and the right video equipment to execute the task.

Video-based coaching will increase efficiency in training, facilitate a rapid feedback loop within teams and increase lethality.

Conclusion

We learned three valuable lessons during this endeavor. First, the use of video dramatically enhances a Marine's ability to coach other Marines, regardless of rank. Second, our Corps is far behind the power curve when it comes to recognizing the importance of videobased coaching. Finally, by not using the appropriate video technology that unquestionably enhances our leader's ability to coach, we are failing to meet our Commandant's and Secretary of Defense's intent to maximize lethality of close quarter combat formations.

Time is a unit's most precious resource as it prepares for war. The unit could be an infantry battalion or an elite football team. For the Los Angeles Rams, the use of film as they prepare for their next opponent enables coaches to show players what right and wrong looks like in a rapid feedback loop.

Military training benefits from this time restrictive analog because time is not on our side—we are expected to deploy tonight. Video-based coaching will increase efficiency in training, facilitate a rapid feedback loop within teams, and increase lethality.

In former Secretary of Defense James N. Mattis' "Close Combat Task Force Lethality" memo, he clearly stated he was committed to improving the combat preparedness, lethality, survivability, and resiliency of our Nation's ground close combat formations. Our Secretary of Defense's intent is clear: our small unit leaders must be highly skilled professionals. To become highly skilled professionals, our small unit leaders will need good coaches, and good coaches will need video capability to develop their Marines.

Notes

- 1. Zac Ellis, "Technology in College Football: The Evolution of Video and Film Study," *Sports Illustrated*, (Online: June 2015).
- 2. Dr. Peter Squire, "FitForce: Marine Corps Warfighter Optimization," (Arlington, VA: Office of Naval Research, August 2018).
- 3. "Technology in College Football: The Evolution of Video and Film Study."
- 4. Gen Robert B. Neller, *Marine Corps Order* 1500.61, *Marine Leader Development*, (Washington, DC: Department of Defense, July 2017).
- 5. Mike Morrison, "History of Coaching—A True Insight into Coaching," *RapidBI Blog*, (Online: November 2010).
- 6. Richard Rapaport, "To Build a Winning Team: An Interview with Head Coach Bill Walsh," *Harvard Business Review*, (Online: January 1993).
- 7. James N. Mattis, "Close Combat Lethality Task Force Memo," (Washington, DC: Department of Defense, March 2018).

>Author's Note: A special thanks to all the dedicated Magnificent Bastards (past and present) and friends of the organization who contributed to this article. For any future correspondence regarding topics listed in this article, please contact Maj Neal T. Jones at neal.jones@usmc.mil.

