Good afternoon, ladies and gentlemen, thanks for the invite to be with you today. I'd like to spend the next few minutes discussing how the Marine Corps is orienting itself and preparing for a different warfighting contribution; that is, this idea of fighting in the Information Environment. If I'm successful today, I'll do a few things: Talk to you about how a fight in the Information Age against a peer competitor will be different; I'll tell you how the Marine Corps is packaging tasks and capabilities to fight in that environment and then we'll finish with some thoughts on

building and employing military power in the

Information environment.

Let me begin by describing some of the ways

that the operational environment is different

today than in our history.   Here are a few of

the simple truths about our future operating

environment:

- We have traditionally looked at our air

  wings to generate sorties; the more sorties

  they could generate the better. Proliferation

  of advanced targeting and missile

technology means that sortie generation alone is no longer a sufficient measure of effectiveness. Rather, we need to focus on how we generate and sustain long range, precision fires.

- With our adversary in mind, we must recognize that lethality is no longer enough because to be seen is to be targeted…so we must think of how we create survivable lethality.

- The days of static command posts have given way to the need for mobile, agile points of presence.

- Our history has taught us to depend on space, the spectrum and the ability to command and control to enable the fight. But against a peer threat, space and air superiority should not be assumed. Instead, we must expect to be contested and we must train to deliver moments of clarity on demand. That is, we must challenge assumptions we have lived with for generations on our dependence on

space, spectrum and cyber freedom of
action.

-   The sequential phased approach to conflict
    escalation is not valid against peer
    competitors today. In the IE, we are being
    challenged every single day. Our
    competitors are contesting us daily, seeking
    to sow disinformation, probing cyber
    defenses, stealing intellectual property,
    conducting reconnaissance in places we
    wouldn't even consider part of the
    battlefield – like our universities, industry

and online applications like games. They're challenging norms of behavior in every domain, hardening us to provocative and unsafe behavior, challenging our leadership and ability to influence our environment. Particularly in the Information Environment, we must understand this environment and these tactics, condition the force for a constant state of competition and challenge existing templates for the use of authorities to deter and de-escalate.

- The Battlespace geometry has changed. Adversaries with global ambitions do not respect COCOM borders on a map. Moreover, the geometry of space and cyber is just different. Gen Raymond, for example, is a geographic Combatant Commander. When he looks up, no matter where in the world he may be, he is looking at his battlespace. We have to begin to master a global warfight – with multiple simultaneous supported and supporting commanders all pitching in to deter, respond, or deescalate.

- Strategic deterrence, traditionally thought of in terms of nuclear power, needs to be considered differently. We must take space and cyberspace into account and think of ways to deter in these new domains.

- Finally, events develop more rapidly in a globally-connected world. In the win/loss analysis of the Information Age, what matters is not the Big that eat the small, its the fast that eat the slow.

I could probably go on and on here – including a mention on how data may be the currency of the next warfight, but the larger point is that the character of warfare is changing and we must change with it. All of these changes require that we see, sense, C2, share data, message strategically, and master new technology… and do so in contested space and cyber domains, while fighting for access to the electromagnetic spectrum. In short, we have to think differently about warfighting and the information: how we share it, defend it, employ

it, and understand it. This is precisely why Information is the newest battlespace function.

As I transition to how the Marine Corps is approaching Information as a warfighting function, I want to ensure we see the new Information Environment similarly, or at least have a common definition. The Information Environment, or IE, is the aggregate of individuals, organizations, and systems that collect, process, disseminate, or act on information. Information and data are the glue that bind every other warfighting domain.

Specifically, the physical and cognitive systems and processes of information environment is maneuver space. And I'll touch on how we maneuver in the IE a bit later.

The Marine Corps began to mature our response to this changing environment more than 4 years ago. Recognizing that the contest in the Pacific would require a more determined approach and new capabilities in the Marine Expeditionary Forces, the Corps created the MEF Information Groups, or MIGs. The MIGs integrate intelligence, communications, MISO,

electronic warfare, space, cyber, and communication strategy (formerly Public Affairs and Combat Camera) capabilities. These capabilities were often "bolted on" to our formations or worked in stove-piped manners. Today, under the MIG commander's leadership, these are commander driven capabilities that are integrated across the portfolio to create a more persistent and holistic picture of the information environment. We are not strictly speaking of phase 3-like capabilities but rather all-day, everyday capabilities. Inside the MIGs, we created the Information Command Center,

or ICC, to be the fusion center within each MIG to control Information capabilities, resources and activities. The MIG commander will use the ICC to "fight" the MIG's capabilities and to present to the commander an ability to conduct the seven functions of Information.

At the Headquarters Level, it was clear that we needed to elevate our engagement, the importance and the advocacy for the information fight. The 3 star billet I now hold was created in 2017 and I am pleased to be the 2d GO to hold this billet.

We also spent a great deal of time thinking about how we would organize our thinking on Operations in the Information Environment (or OIE).   Let me unpack that for you over the next couple minutes. OIE comprises a broad array of capabilities. In the Marine Corps, we believe that Information as a warfighting or battlespace function has seven sub-functions. These functions guide the Marine Corps' efforts to man, train, equip, and organize for operations in the information environment. The seven functions of OIE are:

1. **Assure enterprise command and control systems and critical systems** – This encompasses all actions to operate and defend networks, systems, and information in order to enable command and control and critical systems. Assured C2 requires mobile C2 nodes, a modernized network. Cyber resilient weapons systems, and agile points of presence that deny the enemy's ability to attack our networks.

2. **Provide IE battlespace awareness** – This consists of providing the MAGTF

commander with an understanding of

the physical, informational, and

cognitive dimensions of the IE in order

to identify challenges, opportunities,

and comparative advantages for the

MAGTF.

3. **Attack and exploit networks,
   systems, and information** – When

   necessary and when given the

   authority, we will exploit or attack

   adversary networks, systems,

   signatures, individuals, and information

in order to create advantages for the

MAGTF.

4. **Inform domestic and international audiences** – Our Communication Strategy teams, formerly Public Affairs and Combat Camera, are critical in building public knowledge, countering disinformation, and supporting operational and institutional objectives by keeping domestic and international audiences informed.

I will come back to this in a minute; its an essential discriminator in the Marine approach to the information fight.

5. **Influence foreign target audiences** – This goes hand-in-hand with our inform operations but offers more maneuver space, in that we seek specific cognitive effects with foreign audiences in order to create conditions favorable to operational objectives.

6. **Deceive adversary target audiences** – Our Psychological Operations teams are creating conditions that induce

ambiguity, misunderstanding, resource misallocation, and delayed actions with our adversaries in order to deliberately mislead adversary decision makers, causing them to reveal strengths, dispositions, and future intentions while protecting the MAGTF's true capability, readiness, posture, and intent.

7. **Control Information capabilities, resources, and activities** – This includes actions taken to ensure the commander's ability to exercise

command and control and integrate

assigned Marine, naval, and joint

information assets and enhance the

MAGTF's ability to operate in the

Information Environment.

Let me circle back for a minute and hover

over the Inform function. Ladies and

Gentlemen, I believe that the deliberate

incorporation of strategic communications

inside an OIE construct is one of the most

important thoughts we should consider. It is,

by the way, why I am the Deputy Commandant for Information and not the Deputy Commandant for Information Warfare. It is why we believe strongly that words matter and we have to align our language inside the Department to think about the Information fight more holistically through the competition continuum. We believe that strategic communications—how we message and how we use the truth—are a critical component of OIE. Recent real world and global exercises have revealed that our mechanisms for messaging and telling the truth are too slow for the

current operating environment. Remember –

it's the fast that eat the slow in this

environment…Commanders are realizing that

CommStrat matters, and here's why:

1. **You can't win playing defense**. We have

    to recognize and anticipate that malign

    actors will weaponize disinformation. We

    must counter their tactics by proactively,

    aggressively telling the truth, being at the

    low ready at all times…

2. **We have to expose bad behavior**

    quickly and repeatedly. Popular

    mobilization is particularly powerful in the

age of social media. People expect world powers to act in good faith and will speak out against those who don't… but they have to know about it.

3. **Reinforce norms and safe and professional behavior**. Our silence emboldens those who act recklessly, escalate tensions, violate long-standing international agreements or attempt to condition the world in their favor.

4. **We need to build the coalition's ability to be the force for good**. If we

communicate in support of our objectives, we can amplify their impact.

5. **We should advertise our strengths**. In peer competition, potential partner nations face a choice in who they want to align themselves with. If we don't tell them why we're the best partner, we risk losing them to our potential adversaries.

6. **Deterrence capabilities don't work if the adversary doesn't know you have them. Every once in a while, you have to carry some risk to shake the confidence of the adversary.**

I've been talking to leaders from every service about rethinking strategic communication, and the Marine Corps will continue to lead on this issue because it's critical to effective operations in the information environment.

Finally, ladies and gentlemen, I want to spend just a minute talking about how we expect to employ these capabilities moving forward. First principles, we believe we must return to a more integrated Navy Marine Corps

team. We were born and raised as soldiers from the sea and after years of fighting bad people in SWA, we are returning to our roots as Fleet Marine Forces, ==better integrating with and supporting the Navy to provide both sea and shore based power projection in the maritime domain.==

Today, Naval integration – specifically for a fight in the Pacific, is at the center of all our planning and force design efforts. My team, in particular is working closely with NAVIFOR and

N2 N6 to make sure that the OIE capability of the MAGTF will complement the incredible skills and abilities of the Navy's IW force, supported by its three pillars of assured C2, battlespace awareness, and integrated fires. As the FMF, we'll add our own capabilities, in those pillars and add the rest of the functions I've already described. As the inside force or the Stand in force, Marines on the ground in the Pacific are well-suited for civil affairs, human intelligence, strategic communication, MISO, MilDec, and many other capabilities that

will help enhance joint force operations from cooperation through conflict.

In this way, the Marine Corps' particular areas of expertise complement the Navy's experience, depth and reach. We can see the future potential for a comprehensive naval approach to OIE facilitating the Joint Force's success; one that has the Marine Corps as a 'first in force,' seizing necessary portions of electromagnetic spectrum, cyberspace, as well as critical 'human terrain.'

Fundamental changes in our operating environment demand that we adapt our approach to operations in the information environment. Though the roles of the Navy and Marine Corps are clear and distinct, we are bound by our naval character to bring a comprehensive 'combined arms' approach to maneuver in the information environment. We have a tremendous opportunity to break new ground in both our tactical formations and the support we provide to the joint force.

As a department, I believe we will need to continuously expand our vision and refine our ability to coordinate kinetic and information fires globally. We need to build on our ability to integrate not only Naval IW and OIE but also the capabilities that other services and combatant commands bring to bear, such as cyber operations and space-based capabilities. In our new operating environment, doing this effectively means crossing boundaries traditionally held by geographic combatant commands. We can't think regionally anymore; this is a global fight.

Everything I've discussed today—the changing operating environment, the Marine Corps' approach to operations in the information environment, and our contributions to the joint force—are leading us to challenge long-held assumptions. In the Marine Corps, we are thinking through a new concept of Military Information Power. Earlier this year I co-signed an interim terms memo with LtGen Eric Smith, our Deputy Commandant for Combat Development and Integration, articulating this concept. We define 'military information power'

as "*the total means of force or information capability applied against a relevant actor to enhance lethality, survivability, mobility, or influence.*" We created this term because we believe that we are no longer bound to combat power as our sole means of power projection.

This theory signals an overdue mindset shift: for too long combat power has been the only tool we have given our commanders. While the Marine Corps must always be prepared to decisively execute lethal, kinetic force, we must also empower commanders beyond destructive

solutions. The Marine Corps has proven our ability to win decisive tactical victories again and again; potential adversaries are too smart to willingly challenge us in a battle of fires and maneuver. Instead they are choosing to compete via other means every day. If we fail to build our proficiency in the IE and expand our ideas of power projection beyond kinetic combat power, we will fail to compete.

We must integrate information resources, capabilities, and activities and enable maneuver units to leverage information in both

competition and conflict. In light of the basic need for information across our government's departments, agencies, and the joint force, the Marine Corps' adoption of military information power will make us more flexible in our response to threats from our competitors, more versatile in supporting policy, and better integrated with the joint force and interagency partners.

Thank you for your time and attention. I look forward to your questions and insights.