NOT FOR PUBLICATION UNTIL RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE
READINESS SUBCOMMITTEE

STATEMENT OF

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BEFORE THE

READINESS SUBCOMMITTEE

OF THE

HOUSE ARMED SERVICES COMMITTEE

ON

AVIATION READINESS AND SAFETY

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Chairman Wittman, Ranking Member Bordallo, distinguished members of the House Armed Services Subcommittee on Readiness, and other distinguished members, we appreciate the opportunity to testify on the current state of Marine Corps Aviation readiness. The Marine Corps' Title 10 responsibilities are to be the Nation's Expeditionary Force in Readiness. We are charged and expected to always be the most ready when the Nation is least ready. This responsibility is at the very core of our identity as Marines.

We are going through a period of risk for Marine Aviation. Since the end of official combat operations in both Iraq and Afghanistan, we have thus far been able to fulfill our responsibilities and make our steady state Global Force Management operational commitments by risking the readiness of squadrons remaining in the United States. Squadrons deploy on time with the required training and readiness levels to be safe and meet the minimum for tactical proficiency (T2.0). However, these deploying squadrons, along with those next to deploy, are the "Fight Tonight" force. In fact, 13 of the last 27 squadrons deployed at a T-rating less than 2.0. Marine Corps aviation is designed as a lean but highly ready force. We don't do tiered readiness. We can't afford to since our squadrons are always ready to deploy. We are designed to do a lot with a little – and the only way we can do that is to maintain the required levels of flight line inventory, and ensure those aircraft have the spare parts and quality maintenance we need to meet our force in readiness requirements. Today, there are not enough flyable aircraft – our "Ready Bench" – if our nation were subjected to a crisis. Today, I could fly 43% (443 of the 1040) aircraft I should have on my flight lines. That leaves the Corps shy of being able to meet our wartime commitments; and in the steady state, high Optempo environment we find ourselves in today – we have to make some very tough decisions to make our deployments and burn down risk for those next to deploy. One of the things we had to do was to temporarily reduce the

number of FA-18s, Harriers and CH-53Es in my gun squadrons because we simply didn't have enough of them. We went from 12 to 10 FA-18s, 16 to 14 Harriers and 16 to 12 CH-53Es. This reduction has caused pilot hours per month to fall below the T-2.0 monthly requirement in the FA-18 (15.7 hours), Harrier (15.4 Hours), and CH-53 (15.1 hours) by 5.9, 4.4, and 4.9 hours respectively. Our Commandant, General Neller, and I are deeply concerned about the current state of our Aviation readiness. This is what keeps me up at night.

Deterring global instability, near peer competitors, conducting counter terrorism missions and keeping the peace has increased Marine Aviation's deployment tempo. Our FA-18, AV-8, MV-22 and KC-130 units are, on average, at a Depth to Dwell of 1 to 2. That is technically a surge condition – and we have been operating at this tempo for many years. A 1 to 2 deployment tempo means if the unit and its Marines have a six month deployment, they will only be home for 12 months before being deployed again. To keep this in perspective, the optimal Depth to Dwell ratio is 1:3, or 18 months home to every 6 months of deployed. The last time we had a 3 to 1 ratio was before Operation Iraqi Freedom – 13 years ago. In addition to this stress on the force, we are halfway through replacing our entire fleet of aircraft. We are in stride replacing our legacy fleet with state of the art, game changing, war winning aviation platforms such as the MV-22, F-35 B and C, H-1Y and Z, KC-130J, MQ-21, G/ATOR Radars and soon CH-53K.

It is also important to note that we are operating in a resource-constrained environment. Marine Aviation continues to make challenging decisions and tradeoffs throughout this process. We are balancing the need to have our current fleet as ready and modern as possible, to train our pilots and maintainers, and to out match any current foe on the battlefield, while at the same time having the necessary resources to fund the continued essential recapitalization of our legacy aircraft – the oldest in the Department of the Navy. Our Optempo, force in readiness

requirements when matched with our low inventories and readiness of our legacy fleet, mandates that we recover our legacy fleet's readiness while we simultaneously recapitalize at the most expeditious rate possible. We simply cannot get into new iron quickly enough.

Readiness

The health of our Aviation Force is measured in aircrew flight time. Average aircrew flight time has reached historic lows. Every lost day, every missed hour, is missed experience this Nation depends upon in the future. Our shortfalls are due to a lack of ready aircraft.

There are several reasons for this lack of flyable aircraft. Outside of our need to recapitalize (replace old worn out aircraft at the end of its service life), our aircraft suffer poor readiness for four reasons: They are stuck in a Depot awaiting repairs, they are in need of an In-Service Repair (a task Marines are not qualified to perform), it is awaiting organizational level maintenance (Not Mission Capable Maintenance)– and lastly it doesn't have the parts it needs to fly (something we call not mission capable – Supply). In my mind the last one is one of the most impactful – both in keeping a large number of Marine aircraft on the ground – not flyable. Additionally, the spare parts (NMCS) problem leads to higher not mission capable maintenance rates – because my Marines will take parts off squadron aircraft to make a "whole" bird since they can't get the part from supply. In essence they will do three times the work to get that part on an aircraft – and the other bird is now "harder" down.

The ready aircraft, for our crews, are supported by numerous Marines, Sailors, civilians, and contractors. They provide for the fleet parts, logistics, facilitating processes, and a training pipeline for Marines to fix and fly the aircraft. Healthy aircraft rely on parts and Marines.

Aircraft on the flight line may require **in-service repairs**. These repairs require an artisan to correct or fix an airplane. Artisans are only found at the depot and are fielded to conduct the repairs upon request. These aircraft sit on the flight line awaiting corrective actions.

To meet in-service repair requests, aviation depots must divert workers from scheduled depot maintenance efforts. Currently, depot capacity is unable to meet demand and dispatching artisans to conduct in-service repairs further exacerbates this problem. Aviation depots are hiring artisans in an effort to increase capacity, but this takes time.

The Fleet Readiness Centers (FRCs) and the **Navy's aviation depots** have been challenged to recover full productivity after hiring freezes, furloughs, and overtime restrictions in FY2013. Through a concerted hiring effort with the support of congressional budgetary increases, the recovery in maintenance capacity continually improves. However, the FRCs face a significant backlog of work, particularly for the service life extension of our legacy F/A-18 Hornets. FRCs hiring progress returned to pre-sequestration manning levels in FY2015 and they continue to adjust hiring in order to ensure the workforce can meet the workload demand. In an effort to improve throughput, FRCs are contracting additional private sector support. Even with these improvements and focus on the Depots, the Marine Corps does not expect to eliminate the backlog of legacy F/A-18s until FY2019.

The legacy F/A-18s make up the bulk of the Marine Corps' TACAIR fleet and have been challenging to manage. The scale of this backlog and the **maintenance** delays are seen across the TACAIR community. The current primary mission aircraft authorized is for 264 airframes across

all of our TACAIR squadrons (F-35B/C, F/A18 A-D, AV-8B, EA-6B). Currently, Marine Aviation only has 141 total flyable TACAIR aircraft, this equates to only 54% of the requirement. We will replace all of these aircraft with the F-35 and we have started to stand-up squadrons – and the new birds can't come to us soon enough.

The Naval Aviation Enterprise is actively correcting, tracking and managing depot, supply, and in service repair efforts. The Marine Corps is actively improving our maintainer qualification depth and tracking it in more detail.

Inventory

The Marine Corp lacks sufficient aircraft inventory. In regards to low inventory or low numbers of flyable aircraft, the FA-18 and CH-53E communities are the ones I am the most concerned about.

For the FA-18, I should have 12 squadrons with 12 flyable aircraft in each – plus a relatively large (39 aircraft) training squadron. The total requirement for USMC FA-18s is 183 flyable aircraft. Today, I have 83 flyable FA-18s. We are working to recover those aircraft – but it will take time and when I get them back they are still old birds. They are not as reliable as they were when they were new – and our 15 year FA-18 is an average of 26.6 years old. Our oldest is 31 years old. We don't retire the FA-18 for another 14 years. For our CH-53E fleet, we should have 200 airframes in our inventory. After years of hard war time use, we now have only 146 total airframes and of those I can only fly 47 today. We are engaged in an effort to "reset" each and every one of the CH-53Es in waves of 16 aircraft (we completed our first just last month). Each reset takes 120 days – but we get a full up, high readiness bird on the backside. That reset will not be complete until 2019.

The low aircraft inventories and flight line readiness impacts our ability to not only deploy for a crisis – it impacts our ability to train our crews. We do not have enough airframes in our inventory to both train and fight at our current pace, let alone if a surge was required.

This affects far more than just the Marine Corps' steady state operational requirements. In some of our wartime operational plans, the requirements that will be placed on the Marine Corps will equal upwards of 75% of our force structure. In a "Fight Tonight" scenario, the Marine Corps does not have enough ready airplanes.

Flight Hours

FY2014 and FY2015 lower readiness resulted low flight hour execution. In FY2016, increased demands to fix aircraft have increased costs and we enacted flight hour funding short of requirements to focus on repairing the fleet. FY17 flight hours were reduced to allow investment into readiness enabler funding. The USMC took risk accepting lower flight hours to balance funds available.

Funding flight hours requires balanced investments across readiness enabler accounts. If these accounts are underfunded then readiness recovery is slower. An example of a major readiness enabler account is Aviation Systems Support. This area covers many accounts, but the largest is 1A4N. 1A4N provides a host of support funding which incurs specialized logistics software development and/or technical publications. This account is critical to properly fund so the1 Marines on the flight deck will associate the correct part and or updated procedure. This reduces errors and speeds the return of aircraft to a ready condition. All readiness enabler accounts, to

include the flight hour program, must be funded to match flight hour execution to ensure the readiness recovery trajectory continues.

Safety

Mishaps are tragic part of the business of aviation. We constantly strive for safety and a lower mishap rate whenever and wherever possible. But Aviation is inherently risky and our aviators and aircrew operate our aircraft at the limits of the machine's capability and their own. It is important to note that while we have lower readiness rates, the aircraft that do fly only do so if they are air worthy and safe.

Class "A" mishaps occurred this year that have tragically resulted in the loss of life. However, when we look at our historical data on Class "A" mishaps, we have found that recent trends are in line with our historical norms. We cannot draw a correlation to the lack of readiness and flight time, with an increase in Class "A" mishaps. We have, however, seen an increase in less serious accidents; both Class "B" and Class "C" level mishaps. We are seeing more "aircrew error" mishaps than those attributed to "material failure" – and that is something the Wing Commanders and I are looking at closely. I worry about our inability to fly and mature our pilots and aircrew. Whatever experience they don't get now, means they will be a less proficient flight leader, supervisor and teacher/instructor tomorrow. I worry about the long term impact to the overall efficiency of Marine Aviation from our human capital side of the ledger. Today's crews just aren't getting the experience they need to be really good (experienced) flight leads tomorrow.

Independent Readiness Reviews (IRRs)

Given the seriousness of our Readiness problems, Marine Aviation has and continues to conduct comprehensive IRRs of all aircraft. We have completed two IRRs on the AV-8B and CH-53E, are completing the MV-22 this summer. We will begin the H-1 review later this summer. These reviews bring in qualified outsiders, led by former flag officers, to take an unbiased look at our programs and how they are doing business. We take their recommendations very seriously and have already started to see results as we implement their suggestions. What we have found, in Marine Aviation, is there is no **one** standard strategy to recover the readiness of all of our aircraft. Each type/model/series needs a tailored recovery plan – and we have 3 in execution right now. They revolve around four areas: people, parts, process, and funding in different amounts.

We have already seen movement in the AV-8B Harrier fleet and have started to move the needle back towards achieving our readiness goals. **We started this process with only 40 Harriers out of 97 flyable with a goal of 66. Today, we have 70 Harriers flying**. We also started this spring on the CH-53E reset program, which Congress funded last year, to ensure that we could get every one of our airframes back up and flying. We expect to cycle each of our CH-53s through this process over the course of the next three years. This will allow the CH-53 fleet to be as healthy as possible until we bring its replacement, the CH-53K King Stallion. The King Stallion will reach IOC in 2019.

Conclusion

The Marine Corps is dedicated to being the best stewards of the taxpayer's money and we will get everything we can out of the aircraft that we fly and fight today. We are excited with the new aircraft we have received like the F-35B and in testing our new CH-53K. In their last WTI

course our F-35Bs proved that we have a war winning capability in our hands. The CH-53K just lifted a 27,000 pound external load, and it continues to make steady progress in flight testing. Thank you so much for helping us bring these new capabilities into the Corps. While we will extract every ounce of capability out of these new birds, we will do the same with our legacy fleet. We will do this by executing our readiness recovery plan initiated two years ago, protecting our readiness enabler accounts and ensuring that our Marines have the proper spare parts, balancing depot workload, and completing needed evolutions such as the CH-53E reset program to get as many airframes back in the hands of the war fighters as we can.

In addition to our readiness accounts, **we will highly scrutinize modernization investments** and keep our older platforms healthy. In some communities, such as the CH-53E, we will never have enough aircraft to meet our requirements. The only way to fully recover readiness and meet our responsibilities is our continued transition to new aircraft. The Marine Corps needs to continue to buy our new aircraft as fast as we can to not just relieve pressure on our legacy platforms, but to give your "Fight Tonight" force the instruments that give pause to our most capable near peer and afford our civilian leadership the required decision space.

The Marine Corps has studied readiness, has a plan which is showing benefits in the fleet and will continue as a capable force. A balanced approach is our only option within the current Marine Corps' top line.