



SPECIAL EDITION: Aircraft 14 Tragedy Lt. Gen. McCorkle meets with news media

(April 11, 2000) I'd like to start off by saying, for those of you that I talked to yesterday, once again the Marine Corps's heart goes out to the families of every one of these members of the Marine Corps that we lost. And as most of you all know, the Marines really take personally the loss of life of any of our Marines.

While this mishap is currently undergoing investigation — and that's what you normally get from most of the people that talk to you — I will answer very candidly any of the questions that I can. And I also plan on giving updates to you as I can, as we go along.

When I talked to the commandant immediately after this accident, I recommended that we send a colonel from Headquarters Marine Corps, here in the Pentagon, and he concurred. Colonel Dennis Bartels, who works here on the Headquarters Marine Corps staff, is currently out there. He is a CH-46 pilot by trade and has gone through a couple of these in the past. So I don't think that we could find anybody more experienced to head up the investigation.

Let me emphatically state that we're also looking for the truth. And as most of you know that have talked to me before, we will give it to you. Right now we have no indication of what caused the accident. I've heard on a number of news reports that we were looking at pilot error. We are not. We're looking at anything that caused the accident, whether it's material, whether it's mechanical, or whether it was human factors-related. And right now we have none of that information.

I'll tell you a little bit about the scenario. For those of you that don't know, this was an operational evaluation out at the weapons and tactics instructors' course. This is a production airplane. I've heard a lot of people use the word "test." It is not a test airplane; it's one of the first four production airplanes for

the Marine Corps, and it was doing an evaluation. All the tests were over and done with in the past, and I'll give you the hours on those in a couple of minutes.

There were 30 total airplanes in the flight, with helicopters and F-18s involved. I briefed some of you yesterday that the F-18 that was overhead was watching the whole scenario on his FLIR, the forward-looking infrared. And it was my opinion that we had a tape of that. We do not, which really disappointed me. And it's like having your TV on at home but not your VCR. And I'm told that that's not unusual at all. I've flown the F-18 many times. Most of the time, when I flew it, they had the FLIR on and the FLIR tape, so that we could come back if we were doing air-to-air. He did not have it on because this operation was taking place over a three- or a four-hour period. He was refueling in between and did not have it on.

The aircraft, as they were coming in, the first two MV-22s had 15 troops on board each one of them. And they were doing a simulated evacuation from Marana Airfield out in Arizona. There were two other MV-22s that were holding off to the side, and when the first two aircraft simulated the takedown of the airfield, they were going to come in and pick up the hostages.

At the same time, there were helicopters landing at each end of the other field as part of the weapons and tactics evaluation.

When the first aircraft came in — and I have more data now than I had yesterday because this aircraft had a VSLED [vibration, structural life and engine diagnostics] on there, which takes the altitude, air speed and everything else off of the aircraft. This is the first aircraft, not the mishap aircraft. And he was in a hover at about 30 feet and 40 knots, slowly moving forward, as the second aircraft crashed. And I can back that up just a little bit and say, as they were coming

in, they're supposed to have about a 1,000-foot interval. They were flying in a combat spread. The crew chief on the lead aircraft looked at the second aircraft as it was moving into position directly behind, which is the way that we land when we do something like this. Approximately six seconds from that time was when the mishap aircraft impacted the ground. I told some of you seven seconds yesterday. So I was off by one second.

I understand that the crew chief did look back and did see the aircraft when it was approximately 200 feet altitude and tucked nose down, according to the crew chief, and yawed to the right and went into the deck. So the crew chief did see him at about 200 feet, which I was asked yesterday and I said that I thought that it was lower than that.

When the aircraft impacted the ground — and I know some of you have a couple of questions on the lead aircraft — the explosion blew the ground cushion out from under the front aircraft, and he actually hit the ground on his wheels and went forward about 150 feet. Because he had the VSLED on there, which records everything on the aircraft, you know, as to if it's had any damage or whatever, all the VSLED indicates that there is no damage to the aircraft and it is good to go on the first aircraft, but we're having our experts look at it anyway.

As each of you know out here, our Marines are a precious asset to us. I will tell you that I've personally flown this aircraft. I know a lot of you who have taken several briefs from me have heard me say that many times, and I consider this to be the best aircraft that I've ever been in. This accident, to me, is not going to do anything to our MV-22 program, and I think this is a technology that this nation is going to get which rates right up there with the invention of the jet engine or rates right up there with the in-

Full Transcript: Lt. Gen. Fred McCorkle Remarks

vention of the helicopter, for those of you that have heard me say that before.

It's a great aircraft. If there's something that caused this accident that was material, we will fix it. And we do plan to go on. This technology takes us from a helicopter that'll go 120 or 140 knots to one that has flown 342 knots.

For those of you that are interested and don't have this data. This was not a test aircraft. The test aircraft was an FSD aircraft, or full scale development. And in those aircraft, one through six, we flew almost 1,200 hours. After that, we had the EMD aircraft, engineering and manufacturing and development aircraft, which both the [F/A-18] E and F and MV-22 went through at about the same time. That was aircraft seven through 10 for — four aircraft, and they flew approximately 1,600 hours. We've received five production aircraft. This one that crashed we received in January of this year. The first five production aircraft had flown a total of 840 hours since we received them.

This particular aircraft which we received in January had flown over 135 hours. And that, when Fred McCorkle had said it is more than most of our operational aircraft are flying out there, so that they had done very well. In fact, the four aircraft that were out there in the operational evaluation had flown 140

hours, over 140 hours in the last month, which was about 35 hours a piece.

The two pilots flying the aircraft, I did not bring their names for this because I did not think that that was appropriate. But I can tell you that they were very experienced. I can give you the names later if you would like to have them. One of them had over 3,800, or nearly 3,800 hours of flying, and the other one had over 2,100 hours. Both pilots were approaching a hundred hours in the MV-22, and both of them had a hundred hours or more in the simulator.

This aircraft was equipped — and I'll read this part — with a crash-survivable memory unit. What does this thing really do?

It does a lot more than I thought it did. It records 227 separate aircraft parameters, so when they get this out of the airplane, I think that it's going to provide us with invaluable insight.

The parameters, for those of you that don't already have this, include airspeed, altitude, heading, engine performance data and so on, and any potential system malfunction should be indicated on there.

We started recovery of the remains this morning at 0800. I know some people had already written or had on newscasts that all the remains had been recovered. They couldn't do that because we wanted to do it

the right way. We asked for pathologists and others to come out on the scene. They started that at 8:00 this morning, and we did not want to disturb the bodies in order to get to the flight data recorder.

It's my opinion that the bodies will not give us any additional evidence in the cause of the accident. I think that the only thing that the recovery of the remains will do is bring the families to closure. I might add that right now we have really been helped by our sister Navy, by the fire departments out there, by the police and by everyone involved. We've got 15 Aviation Mishap Board personnel on the scene. They've got 15 Naval Safety Center personnel on the scene. Human resources personnel from Davis-Monthan are there with counselors on site; HMX-1, with their flight surgeons on site, and others that have helped us out in that area.

I'd like to conclude these remarks — and then I'll take your questions — by saying I can quote our secretary of the Navy, Mr. Danzig, in saying, "Evaluating new equipment and training for war, like war itself, puts life at risk." And in peace and war, our Marines accept that risk.

We do everything that we can to keep them from being at risk.

Marine Corps Vows To Learn From Fatal Crash

Los Angeles Times, April 18, 2000
By Tony Perry, Times Staff Writer

CAMP PENDLETON—Under a cold and driving rain that added to the sadness of the occasion, 15 "grunt" Marines killed in the crash of a controversial aircraft were remembered Monday as among the "bravest and brightest" of young Americans. Marine Corps Commandant Gen. James Jones told several hundred family members of the victims, "You can take solace in the fact that your Marines and your loved ones did not die in vain. We will learn from this tragedy."

After the service, Jones told reporters that the Marine Corps remains steadfast in its support of the MV-22 Osprey tilt-rotor aircraft and has found nothing to suggest that the crash outside Tucson was the result of a design flaw. "The fact that this is a new aircraft does not make it a test aircraft," he said. ". . . It was a production aircraft, one we felt very comfortable flying in."

Still, Jones said he has ordered that other

Ospreys remain on an "operational pause" until investigators determine whether the April 8 crash, which killed 15 combat troops and four crew members, was the result of pilot error or a mechanical defect in the individual aircraft. Jones said that when he orders the Ospreys back to flight status, he will be aboard the first flight to show his faith in the aircraft, which is designed to lift off like a helicopter but fly like a fixed-wing aircraft. Studying the crash will help the mechanics and pilots assigned to the Osprey, Jones said. The doomed aircraft's flight data recorder was recovered and is being analyzed at the Pentagon. Rep. Duncan Hunter (R-Calif.), who attended Monday's service, said congressional support for the Osprey project remains strong. Hunter, chairman of the military procurement subcommittee of the House Armed Services Committee, said the upcoming budget will contain money to continue the project.

Maj. Todd Eckloff called on Marines attending the service to redouble their devo-

tion to the Corps out of respect for those who died in the crash.

"Anything less than our best would dishonor the memory of our fallen brothers," said Eckloff, his voice cracking. Lt. Col. Mark Callihan, commanding officer of the 3rd Battalion, 5th Marine Regiment, told the gathering that "the Corps is less of the flesh than of the spirit." Of the 15 Marines, 14 were stationed at Camp Pendleton and one at the Miramar Marine Corps Air Station in San Diego. The crash occurred as the Marines were participating in desert training before their deployment to the Persian Gulf. Four Ospreys were taking part in an exercise to train troops in what has become a Marine Corps specialty in the post-Cold War era: evacuating civilians from a hostile environment. Although the cause of the crash has not been officially pinpointed, Marine officials have discounted eyewitness accounts that the aircraft was on fire before it crashed. Officials said the explosion and fire were caused when the Osprey crashed nose-

Why the Osprey? -- A Marine View

By Maj. Richard Preble
United States Marine Corps

The 21st Century global environment will be characterized by expanding regional instability arising from ethnic, religious, cultural and economic strife. As a result, US and coalition forces will respond to a growing number of contingencies, ranging from disaster relief to major theater war. The National Command Authority will increasingly rely on expeditionary forces for quick response during developing crises in areas where there is little or no in-country support.

A primary characteristic of an expeditionary force is its inherent mobility, or more precisely — operational agility. By providing the speed and capacity to rapidly move forces and supplies from ships or austere bases directly to the operational objectives, the MV-22 will prove itself a key component of future expeditionary forces, and provide unmatched operational and tactical agility for on-scene commanders.

The Naval Services have developed a revolutionary operational concept known as Operational Maneuver from the Sea (OMFTS) that will enable us to fight and win on the battlefields of the future. Concurrently, we have made responsible fiscal decisions with our scarce dollars to buy sys-

tems that will give the Corps the capability it needs to execute this concept. The MV-22 is a key enabling weapons system for OMFTS and a cornerstone for the future of Marine aviation.

The MV-22 Osprey first appeared on the drawing board in the early 1980s as a multi-mission, expeditionary weapon system that would allow us to maintain our capabilities as the Nation's crisis response force. The requirement to maintain a 21st century expeditionary force in readiness was validated by the 1996 Quadrennial Defense Review (QDR) and the subsequent National Defense Panel. The QDR recognized the critical need for the capabilities inherent in the V-22 Osprey to support this 21st Century force and actually recommended an increased rate of procurement.

In each of seven Cost and Operational Effectiveness Analyses conducted by a diverse series of trusted institutions, the V-22 was a very clear and consistent first choice with no clear second choice among the widest possible variety of potential alternatives. Each analysis showed that the MV-22 Osprey is the most operationally effective choice and also, the most cost effective (affordable) choice for the Marine Corps. The analyses concluded that:

The total life cycle cost for the V-22 proved to be \$3 billion less than an equal lift CH-60/CH-53 force.

The V-22 force exhibited much greater survivability—over a 7 to 1 advantage in troop transport. Thus, resulting in a much greater level of protection than other assault support aircraft could provide to our most precious asset...our Marines.

An MV-22/CH-53E force will deliver three times the combat power of an equal lift CH-60/CH-53E force in the critical first hour of an amphibious assault.

An additional \$3 billion cost avoidance was attributed to a decreased need for shipping and airlift assets due to the self-deployability of the V-22. The V-22 option is fully supportable within the Marine Corps' current force structure. An equally capable CH-60/CH-53E alternative would demand a force structure increase of 3,000-4,000 personnel. This represents several billion dollars of cost avoidance over a 20-year period.

The MV-22 Osprey provides the Nation an affordable balance of flexibility, responsiveness, and survivability that is required for 21st Century military operations. Such balance cannot be achieved with any other combination of platform options. (Apr 15)

Mourners Told That Victims Did Not Die In Vain

Commandant: Military Remains Committed To Tiltrotor Osprey

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down.

"We see no design flaws," said Lt. Gen. Fred McCorkle, deputy commandant for aviation. All 19 aboard were killed instantly. The crash rocked an Osprey flying nearby, and that craft experienced a hard landing, although there were no injuries. The Osprey is meant to fulfill the Marines' need to deliver combat troops and equipment ashore quickly and without the availability of airstrips. Jones and Hunter said that despite the tragedy, the Osprey will save American lives because its speed allows it to evade enemy gunfire. "This is an aircraft that will save lives, not take them, over the long run," Jones said. After the service, family members huddled near field packs and weapons arranged to symbolize the 15 dead.

"He was a strong, moral person and he loved the Marine Corps," said a tearful Ja-

son Neely, whose cousin, Cpl. Adam C. Neely, was aboard the craft.

Destined to be stationed aboard amphibious assault ships, the Osprey is designed to replace the aging CH-46 Sea Knight, which joined the fleet during the Vietnam War. The Osprey can fly twice as fast and four times as far, and carry twice as much weight as the Sea Knight. The crash was the deadliest involving Marines since a helicopter crash in South Korea in 1989 killed 22.

A memorial service was held Friday at Quantico for the Osprey's four crewmembers. They were part of a helicopter squadron whose duties include flying Marine Corps One, the helicopter used by the president. Like most military aircraft, the Osprey has had its share of controversy, with critics suggesting that its innovative tilt-rotor design is unworkable and that its price tag is too high. The major contractors are Boeing Co. and Bell Helicopter Textron.

The George Bush administration attempted in 1992 to kill the Osprey program, but boosters in Congress, particularly congressmen from districts in Texas and Pennsylvania where the aircraft is to be built, saved it. At \$44 million each, the Marine Corps has ordered 360 Ospreys, the Navy 48 and the Air Force 50. The first of the aircraft are to be deployed in three years.

Although a rainstorm kicked up just moments before Monday's service was to begin, officials opted not to move the ceremony indoors. More than 1,000 rain-soaked Marines sat in bleachers. Two large tents provided shelter for the family members of those killed. The weather reminded Jones of an incident three decades earlier.

"The first Marine I saw die died in my arms in a rice paddy in South Vietnam," said Jones. "I was 23 years old and it was a day very much like this: in a driving, miserable downpour...I anguish every time this happens."

Center for Security Policy -- Decision Brief

Semper Fi: Memorializing lost Marines by proceeding with – not slowing, cutting or canceling – the V-22 program

(Washington, D.C. – April 10, 2000) This weekend's tragic loss of 19 Marines in a crash involving the V-22 "Osprey" tiltrotor aircraft is bringing out the usual critics urging that the program be shelved. Nothing could more grievously defile the memory of those lost servicemen -- or do more to put at risk a generation of Marines whose future safety and operational effectiveness may depend upon the fullest possible utilization of the Marines' version of the Osprey, the MV-22.

Any deviation from the planned procurement program appears unwarranted, moreover, in light of the great success the V-22 program has experienced thus far in its development and training phases. **The Osprey fleet now has over 2,500 hours of flight time and a record of safe operations that permit it more accurately to be described as "revolutionary" than "experimental."** (The only two other accidents involving the V-22 occurred in an early stage in its development in 1991 and 1992, when the aircraft could properly be considered to be experimental. Those setbacks, moreover, set the stage for continuing technological and structural improvements that have made today's V-22 an even better and safer aircraft than in its original configuration -- precisely what a development program is supposed to do.)

The V-22 is the world's first -- and, to date, *only* -- transport aircraft with vertical takeoff and landing capabilities, but with the capability to transition its propellers so as to travel horizontally at speeds comparable to conventional turbo-props. Thanks to these qualities, the Osprey represents more than just an invaluable asset to the U.S. military -- first for the Marines and, in due course, for special operations, combat search and rescue and other applications.

The Marines' development and operational validation of tiltrotor technology promises, moreover, **to be a genuine "peace dividend"**: The U.S. government, the V-22 contractors (the Bell-Boeing team) and aerospace analysts have identified over 30 different missions that variants of the V-22 could perform including: commercial and corporate aviation, emergency medevac, freight transport and disaster and humanitarian relief. One needs only to look at the recent international response to flooding in Mozambique to realize that with the added speed, payload and mission duration made possible by tiltrotor technology, vastly larger numbers of victims could have been saved.

The Bottom Line

It would be foolish to cripple -- let alone halt -- a program that has performed exceptionally well because of a single accident at this stage of its development. This is all the more true since the cause of the accident remains uncertain and may have nothing to do with the safety or reliability of the aircraft. It would be a far more fitting response to the sacrifice these 19 Marines have made to *redouble* the final testing and accelerate the procurement of these exceptional tiltrotors, clearing the way for their full potential to be realized by the Nation as a whole.

Headquarters Marine Corps Public Affairs office press release

MV-22 Osprey Accident Update

HEADQUARTERS MARINE CORPS, Washington D.C. (April 19, 2000) - The translated data from the Crash Survivable Memory Unit (CSMU) of the MV-22 that crashed April 8 is expected to be delivered to Naval Air Station Patuxent River, MD, today for analysis by the Aviation Mishap Board and Naval Safety Center Investigators.

There is no time frame for when that process will be completed. The raw CSMU data was retrieved by its manufacturer, Smiths Industries, and delivered over the weekend to Boeing in Philadelphia for translation of the raw data. Naval Safety Center Investigators have, and will continue, to maintain custody of the data through the translation process.

The wreckage from the mishap aircraft has been laid out for analysis in a hangar at

V-22 EMD Flight Test Status as of April 18, 1999

A/C #	Total EMD Hours	Total EMD Flights
7	385	190
8	477	269
9	318	140
10	429	183
Totals	1,609	782

Total V-22 Flight Time	2,654 hrs
Maximum Airspeed Attained	342 kt
Maximum Altitude Attained	25,000 ft
Max Take-Off Gross Weight	60,500 lb
Maximum Load Factor	3.9 Gs

MCAS Yuma. Components of the aircraft will be identified for thorough engineering investigations to help determine the cause of the mishap.

At this time the cause of the mishap remains undetermined. The Marine Corps maintains its confidence in the safety of the Osprey and will take a measured approach in determining when the operational aircraft will resume flight. While engine run-ups and ground taxis are being conducted with existing aircraft, there is no specific date for returning to flight.

Once the memorial services and interments of the Marines are completed, the Commandant of the Marine Corps, Gen. James Jones, will make the final decision on when to resume flight operations of the MV-22. Gen Jones will base his decision on careful consideration of input from the Naval Safety Center, the accident investigation team, and Deputy Commandant for Aviation.

Engineering and manufacturing development (EMD) aircraft at NAS Patuxent River and Boeing will resume flights first with flight crew only. As the mishap investigation continues and information is revealed through preliminary findings, we will resume flight with Marine passengers. Gen. Jones has stated his intention to be aboard the first operational flight that carries passengers.

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