



*Adjunct Professor of International Affairs*

October 15, 2007

**MEMORANDUM FOR:**       **COLONEL MIKE MEESE**  
                                  **United States Military Academy**

**CC:**                       **COLONEL CINDY JEBB**  
                                  **United States Military Academy**

**SUBJECT:**                After Action Report—General Barry R McCaffrey USA (Ret)  
                                  Adjunct Professor of International Affairs---USMA  
                                  **VISIT NELLIS AND SCOTT AFB 14-17 AUGUST 2007**

**1. PURPOSE:**

- This memo provides an independent operational assessment of Air Force capabilities and requirements based on extensive presentations and demo's at Nellis and Scott AFB's.
- Note attached book of USAF briefings/slides and fact sheets.
- Look forward to de-briefing you and the department faculty at your convenience.

**2. SOURCES:**

- 1.) **The Honorable Michael Wynne - Secretary, USAF**
- 2.) **General T. Michael Moseley - Chief of Staff, USAF**
- 3.) **Dr. Lani Kass – Special Assistant to the Chief of Staff, USAF/Director, CSAF's Cyberspace Task Force, Washington, D.C. (Accompanied in travel party)**
- 4.) **MAJ Peter Fesler – Aide de Camp to the Chief of Staff, USAF (Accompanied in travel party)**
- 5.) **General Duncan McNabb – Commander, Air Mobility Command – Scott AFB, Illinois**
- 6.) **General Norton A. Schwartz - Commander, U.S. Transportation Command - Scott AFB, Illinois**
- 7.) **BG John “Trapper” Winters – Mobilization Assistant to the USAF Warfare Center Commander – Nellis AFB, Nevada**
- 8.) **BG Stephen Hood – 57<sup>th</sup> Wing Commander – Nellis AFB, Nevada**
- 9.) **COL Gregory Neubeck, Jr. – Commander, 414<sup>th</sup> Combat Training Squadron (RED FLAG) – Nellis AFB, Nevada**
- 10.) **COL Christopher Chambliss – Commander, 432<sup>nd</sup> Wing - Creech AFB, Nevada**

- 11.) **COL David Stilwell – Commander, 57<sup>th</sup> Adversary Tactics Group, 57<sup>th</sup> Wing – Nellis AFB, Nevada**
- 12.) **COL Alan Hunt, Jr.,– Commander, 375<sup>th</sup> Airlift Wing – Scott AFB, Illinois**
- 13.) **COL Scott “K-9” Kindsvater – Commandant, USAF Weapons School – Nellis AFB, Nevada**
- 14.) **COL Michael Schwamm – 561<sup>st</sup> Joint Tactics Squadron Mission Briefer – USAF Warfare Center National Guard Bureau – Nellis AFB, Nevada**
- 15.) **COL Steven Seroka – Commander, 98<sup>th</sup> Operations Group – Nellis AFB, Nevada**
- 16.) **LTC Scott Graham – Deputy Director, USAFWC’s Coalition and Irregular Warfare Center of Excellence (CIWC) – Nellis AFB, Nevada**
- 17.) **LTC Thomas Porterfield – Commander, 563<sup>rd</sup> Rescue Group Operating Location-Alpha – Nellis AFB, Nevada**
- 18.) **LTC John Harris – Deputy Commander, Joint Air Ground Operation Group (GREEN FLAG) – Nellis AFB, Nevada**
- 19.) **LTC Paul Caltagirone – Commander, 3<sup>rd</sup> Special Operations Squadron – Predator Operations Center – Nellis AFB, Nevada**
- 20.) **LTC Daniel Turner – Director of Operations, 3<sup>rd</sup> Special Operations Squadron – Predator Operations Center – Nellis AFB, Nevada**
- 21.) **LTC Scott DeThomas – Commander, 17<sup>th</sup> Airlift Squadron - Charleston AFB, South Carolina**

**3. TUTORIALS: Air Combat Command (153,000 personnel 2000+ aircraft) NELLIS AFB and Air Mobility Command (136,000 personnel and airlift assets) SCOTT AFB:**

- Personal seminars and hands-on training conducted by BG Trapper Winters at Nellis AFB and General Duncan McNabb at Scott AFB---and their senior teams.
- Hands-on planeside seminar with the F-22A Raptor. (LTC Rose. Desert Storm MIG killer)
- Faculty, students, training techniques, mission briefs and planeside seminar with A-10 Thunderbolt II (modernized), seminar with instructors of the AIR FORCE WEAPONS SCHOOL. (Top 5% Air Force officers in all weapons specialties to include cyber-warfare, space, support, intelligence.)
- Class onsite with MQ-1 Predator and MQ-9 Reaper UAV’s--- and then mission seminar with Nellis Global Combat Control Center.
- Air mission with Jolly Green CSAR combat experienced crew.
- Air mission class on C-17 Globemaster III. (Low-level terrain following flight, CDS equipment parachute drop, air-to-air refueling, combat assault landing, etc.)
- Air mission hands-on instruction in KC-135 air re-fueling of B-2 Bomber at 35,000 feet.

#### 4. THE BOTTOM LINE: REBUILDING GLOBAL AIRPOWER.

- US defense strategy is unbalanced, incoherent, and under-funded--- does not focus on the next generation deterrence and war-fighting missions--- and is distorted by the drain of US defense modernization dollars and manpower resources being funneled into the ground combat meat-grinder of the civil war in Iraq. (\$12 billion per month).
- The looming challenge to US national security and foreign policy sovereignty issues in the coming 15 years will be posed by the legitimate and certain emergence of the People's Republic of China as a global economic and political power with the military muscle to challenge and neutralize the deterrence capacity of the US Navy and Air Force in the broad reaches of the Pacific maritime frontier. China will indeed soon have the military capacity in less than one generation to pose a national survival threat to US defensive capabilities and to challenge our ability to project power along the Pacific littoral.
- The US national security strategy to counter this threat should primarily be based on unrelenting and transparent diplomacy, multi-level and balanced economic engagement, strong international multi-nation arms control and mutual cooperation engagement, new treaties and political relationships with other Pacific Rim partners that bring in the Chinese, and most importantly extensive and heavily funded people-to-people programs with tourism, military exchanges, student scholarships, partner city programs, and unrestricted mutual media access and transparency---as well as heavy doses of wisdom and tolerance by senior US and Chinese political elites.
- However, there is little likelihood of US smart engagement power having adequate deterrence impact on Chinese unilateral military capabilities unless we maintain the enormous technological lead to command the air and sea operational maneuver areas surrounding our regional allies: Japan, Korea, Taiwan, the Philippines, Thailand, Vietnam, and Indonesia...and the Alaskan sea frontier. The PRC clearly is not the only military presence we must consider. By 2020 we will face resurgent and expanding Russian Federation military power projection capacity as well as the likely emergence of other major maritime and air nuclear powers. (India, Iran, Pakistan, and Japan.)
- The US Air Force is badly under-funded, its manpower is being drastically cut and diverted to support of counter-insurgency operations, its modernization program of paradigm shifting technology is anemic--- and its aging strike, lift, and tanker fleets are being ground down by non-stop global operations with an inadequate air fleet and maintenance capabilities.
- The debate over the disaster of the war in Iraq may soon be replaced by a greatly diminished defense budget as a tired, cynical and exhausted joint military force winds down our combat presence in the coming 36 months. We may swing from the eerie immaturity of the Rumsfeld era focus on the magic of technology as the sole determinant of national security--- to an equally disastrous concentration of building a ground combat force which could have won Iraq from the start--- absent the bad judgment of the Rumsfeld Pentagon and compliant Generals.
- As a central proposition--- we should create a US national security policy based principally on the deterrence capabilities of a dominant, global Air Force and Naval presence which can: near guarantee the defense of the continental United States; provide high levels of assurance for the security of our key allies from air, missile, space, cyber, or sea attack; and which can guarantee a devastating punitive air, sea, and cyber strike using conventional weapons capable of devastating the offensive power of a foreign state ---and which can hold at risk their vital national leadership and economic targets. (This is not an argument to under fund nor undervalue a powerful, high intensity ground warfare capability or a fully modernized and global-reach special operations force capability.)
- The resources to create such air power capabilities are not available in the current historically weak wartime defense funding environment of 4% of national GNP--- where the understandable national security priorities are to sustain US forces engaged in a bitter ground struggle ---which has generated 34,000 US casualties and cost \$600 billion.

- The US Air Force is our primary national strategic force. Yet it is too small, has inadequate numbers of aging aircraft, has been marginalized in the current strategic debate, and has mortgaged its modernization program to allow the diversion of funds to prosecute an inadequately Congressionally supported war in Iraq and Afghanistan.
- **NOTE:** The Active Army is too small and should be at 800,000 troop strength to support the ground combat burden generated by the Rumsfeld intervention concept employed in Iraq and Afghanistan; Army National Guard equipment is broken; ammunition and equipment reserve stocks are marginal; training for the complete range of possible combat missions has been stopped for three years; recruiting incentives and advertising are inadequate for the challenge of a war not supported by the American people; and special operations forces are stretched to the breaking point.)
- The next Administration must fix the manpower, aircraft, and funding shortfalls of the US Air Force or we will place the American people in enormous peril.

## **5. SEVEN IMPERATIVES FOR US GLOBAL AIR POWER:**

### **1st -- The F-22A Raptor.**

- There is no single greater priority for the coming 10 years for the US Air Force than funding, deploying, and maintaining three-hundred and fifty (350+) F-22A Raptor aircraft to ensure air-to-air total dominance of battlefield air space in future contested areas. The Air Force has been forced to trade away their modernization budget because the aircraft has minimal value in low-intensity ground-air combat operations such as Iraq and Afghanistan. (The current 91 aircraft are simply inadequate for anything but special missions).
- This combat aircraft is sheer magic. It cannot be matched by anything the world can produce for 25 years. It is vital that we never let this technology be eligible for any FMS sales.
- F-22A provides a national strategic stealth technology to conduct--- LONG RANGE (Cruises at high supersonic speed without afterburner) PENETRATION (at altitudes greater than 15 kilometers) ---UNDETECTED into any nation's air space ---at Mach 2+ HIGH SPEED—and then DESTROY KEY TARGETS (aircraft or missiles on the ground, radar, command and control, nuclear stockpiled weapons, key leadership targets, etc) --- and then EGRESS WITH MINIMAL THREAT from any possible air-to-air or air-defense system. It cannot be defeated in air combat by any known current or estimated future enemy aircraft (thrust vector technology).

### **2nd -- The C-17 Globemaster III.**

- We must create the strategic national military airlift and air-to-air refuel capability (600+ C-17 aircraft) to project national military and humanitarian power in the global environment. We currently have an inadequate capability with 150 aircraft supported by an aging refueling fleet. The C-5 aircraft must be retired—these planes are shot. The Army must back off the dubious proposition that they will size their ground combat force around the volume and lift metrics of the C-130 --- and instead use the C-17 as the sizing template.
- The Rumsfeld doctrine postulated bringing home deployed Army and Air Force capabilities from Europe, Okinawa, and Korea. This seismic strategic shift was unexamined and not debated by Congress or the American people. We are bringing home ground and air strike assets thousands of miles--- from basing infrastructure paid for by allies--- to unprepared US launch platforms. If we are to pose a serious deterrent capability in the dangerous world arena--- then we must credibly be able to project power back into future combat areas to sustain allies at risk.
- The C-17 represents the capacity to carry out this strategic power projection mission ---as well as providing intra-theater logistics and humanitarian lift for pin point distribution of thousands of truck load equivalents of supply per day.
- The C-17 is a global national transportation asset--- not merely a military or Air Force system.

### **3rd -- Air Force Global UAV ISR and STRIKE Capability.**

- Primary control of these assets should be exercised by centralized Joint Air Component command and control.
- We have already made a 100 year war-fighting leap-ahead with MQ-1 Predator, MQ-9 Reaper, and Global Hawk. Now we have loiter times in excess of 24 hours, persistent eyes-on-target, micro-kill with Hellfire and 500 lb JADAM bombs, synthetic aperture radar, and a host of ISR sensors and communications potential that have fundamentally changed the nature of warfare.
- We are confusing the joint battle space doctrine. Air Component Commanders should coordinate all UAV's based on Combatant Commander situational war-fighting directives.

### **4th -- Create and Maintain Air Force Space Primacy Capabilities.**

- Our global communications, ISR, and missile defense capabilities cannot operate without secure, robust, and modernized space platforms. We will drop back to WWII era capabilities if we suddenly lose our space advantage. Space is an under-resourced and inadequately defended vital US technical capability.

### **5th -- Air Force Defensive and Offensive Cyber-Warfare Capabilities.**

- We must expand exponentially the resources, R&D, and human talent devoted to the massive and on-going war against our US communications-computer-control systems. This is the "poor man's" Weapon of Mass Destruction. Every classified brief I receive underscores the absolute certainty that all our potential adversaries, terrorist organizations, and many private criminal groups conduct daily electronic reconnaissance and probes of the electromagnetic spectrum and devices which are fundamental to our national security strategy. We lead the world in technical creativity in these associated engineering and scientific areas. This calls for a serious Joint Combatant Command status with a heavy Air Force component lead.
- We must sort out clearly the international legal and policy considerations upon which we will base widely understood Joint Directives governing the centralized employment of offensive cyber-warfare. This is the first sword to unsheathe in time of modern combat.

### **6th -- Next Generation Long-Range Bomber.**

- We need a follow-on long-range system to the B-2 Spirit Bomber. The B-52 needs to be retired within the decade. The B-2 is inadequate and too vulnerable as a long-range strike platform. The B-2 at \$ one billion (+) a copy--- with only 21 combat aircraft--- is too difficult and too outmoded a technology to again start up a production line.
- Our offensive capability should include not only long-range ICBM missiles with conventional capabilities and sea launched missiles--- but also a fully modernized stealth heavy strike bomber with global range.

### **7th -- Ballistic Missile Defense.**

- It is extremely gratifying to see the enormous scientific and engineering successes of the on-going deployment of a layered national ballistic missile defense. I have been to Ft Greely in Alaska and verified the genuine shoot down capability we now have for mid-course and terminal engagement. The US Air Force Airborne Laser is just short of operational deployment. The Navy Aegis Systems now have valid intercept and radar integration into the defensive concept. The system needs substantial continued R&D investment and continued operational incremental upgrades in the coming 15 years.
- Ballistic Missile Defense will be a central aspect of any possible successful arms control strategy to convince North Korea, Iran, and other rogue states to eventually back off the proliferation of missile delivered nuclear weapons.

Notwithstanding the continued debate among national security experts--- it is my firm judgment that there is no higher defensive responsibility for the US Armed Forces than the deployment and continued upgrade of a coherent, global, treaty-based BMD system.

## 6. SUMMARY:

- The visit organized by USAF Secretary Wynne and Air Force Chief Buzz Moseley was one of the most rewarding and educational experiences of my 43 professional years of watching US air power with pride and admiration. I will continue to examine and speak to Air Force issues in the coming 24 months and report periodically to the USMA Department of Social Sciences, the US Congress, and senior Joint Military leadership.
- During four combat tours and 32 years of active military service I learned to count on the professionalism, courage, and support of the most technically sophisticated Air Force in the world. Air Force fighter-bombers and AC-47's kept my Vietnam 1st Cavalry Division rifle company alive under intense combat conditions. Air Force FAC's were instrumental to both my company and battalion surviving desperate engagements. I have been med-evaced to Air Force hospitals-- and twice flown to safety by Air Force medical flights. My combat 24th ID Desert Storm division was supported with Air Force delivered logistics-- and responsive and crucial intelligence support. As a Joint Combatant Commander I have had Air Force Security and medical units organize and sustain detainee and refugee operations. I have personally parachuted from several types of Air Force transports too numerous to list.
- This is the most effective, dedicated, and well-trained Air Force we have ever put into combat. Their courage and leadership are simply awesome.
- We have under-resourced this proud and crucial fighting force. We lack the equipment, Airmen, and money to adequately defend America in the coming 15 years. We are placing our national security at enormous risk if we do not soon act to correct these crucial shortfalls.

Barry R McCaffrey  
General USA (Ret)  
Adjunct professor of International Affairs  
Dept of Social Sciences USMA  
West Point, NY