# Collateral Billets and the First-Tour Aviator Submitted by Captain EJ Whiteman

to

Major CJ Bronzi, CG 12

19 Feb 08

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Form Approved OMB No. 0704-0188 According to the Marine Corps' Aviation and Readiness

Training Manual, "Marine Aviation plays a crucial role in the MAGTF's ability to conduct Maneuver Warfare. The ultimate goal of Marine Aviation is to attain the highest possible combat readiness to support Expeditionary Maneuver Warfare while at the same time preserving and conserving our Marines and Equipment."

Like many other highly-skilled professions, the learning curve is steep for aviators during their first tour in the fleet. It is crucial during this initial tour to build a strong tactical knowledge base that will serve as a foundation for years to come.

Imagine an airline pilot who boards his aircraft, takes the controls and during his initial announcement to his passengers, admits that he has spent the last 6 hours writing evaluation reports on his subordinates, composing the duty roster for 40 other pilots, and studying the emergency procedures for the plane he's flying because he has been flying this model for less than one year. This announcement would not evoke confidence from the passengers, nor should it. Yet in the military aviation community, balancing collateral billets with flight preparation is exactly what is expected of aviators. An aviator is expected to possess a detailed technical knowledge of their airframe and

¹Department of the Navy. NAVMC DIRECTIVE 3500.14 AVIATION TRAINING AND READINESS (T&R) PROGRAM MANUAL. URL:<a href="http://www.usmc.mil/directiv.nsf/984522ce4f0247b785257090004fac8b/d513601aa67ff72c85257178006e734a/\$FILE/NAVMC%20DIR%203500.14.pdf">http://www.usmc.mil/directiv.nsf/984522ce4f0247b785257090004fac8b/d513601aa67ff72c85257178006e734a/\$FILE/NAVMC%20DIR%203500.14.pdf</a> Accessed 15 February 2008, 1-3

its tactical employment as a weapon system, while managing a completely unrelated collateral billet within the squadron such as the S-4 shop or the substance abuse counseling program.

A first-tour aviator divides his time between standing duty, studying tactics, completing his collateral duties and attending to personal issues such as family. The juggling act of balancing these responsibilities does not allow a first-tour aviator to adequately focus on the tactical employment of the aircraft and is detrimental to the squadron as a unit and the safety of the aviation community. First-tour aviators should not hold collateral billets because competing priorities place undue stress on aviators, decrease an aviator's ability to focus on his airframe-specific tactical skill set and decrease a Marine's overall performance as an aviator and as an officer.

#### Background

The Navy defines a mishap as the following:

...an unplanned event or series of events, directly
involving naval aircraft or UAVs which result in any
of the following:

- (1) Damage in the amount of twenty thousand dollars or more to naval aircraft or UAVs, other aircraft (DOD or non-DOD), or property (DOD or non-DOD). Property damage includes costs to repair or replace facilities, equipment or material.
- (2) An injury as defined in paragraph 307. OPNAVINST 3750.6R CH-1 29 Nov 01 3-4.2

<sup>&</sup>lt;sup>2</sup>Department of the Navy. OPNAV INSTRUCTION 3750.6R *Naval Aviation Safety Program*. URL:<a href="http://safetycenter.navy.mil/instructions/aviation/opnav3750/default.htm">http://safetycenter.navy.mil/instructions/aviation/opnav3750/default.htm</a>> Accessed 15 February 2008, 3-3

In an attempt to reduce mishaps and preserve assets, the Navy and Marine Corps spend millions of dollars over the course of two years training each prospective student aviator; making flight school the longest and most costly military occupational specialty (MOS) school in the Marines Corps. During flight school, a student's sole task is to learn to be safe and proficient in the skills of basic airmanship, navigation, and communication.

Upon successful completion of flight school, a newly-winged aviator reports to the Fleet Replacement Squadron (FRS) to begin training in his specific airframe (F/A-18, CH-53, et al) for typically one year, then he reports to his first fleet squadron for typically three years. During this time an aviator's tactical training is governed by Naval Aviation's Training and Readiness (T&R) Program Manual. The T&R Program Manual delineates the training required as follows:

Individuals must gain and maintain proficiency in core skills in order to execute the unit core capability. ...Mastery of 200-300 level core skills results in highly trained personnel who contribute to the unit's overall warfighting capability and enables a combat unit to accomplish its assigned mission. ...T&R programs are designed to build and maintain both individual and unit proficiency in core skills... (and) utilize a tiered progression of increasingly challenging training events... The second tier (200 level) contains basic core skill training essential to wartime employment of the unit platform/system. This phase should move an individual from basic understanding of core skills to proficiency in basic core skills.

Individuals should normally complete this phase of training within the first year of assignment to a fleet aviation unit. The third tier (300 level) contains advanced core skill training. This phase should move an individual from proficiency in basic core skills to proficiency in more advanced/complex core skills. Crews proficient in this phase of training should be capable of planning/leading/directing flights of numerous aircraft in a contingency operation...<sup>3</sup>

As stated above, the goal for an aviator's first year in his fleet squadron is to transition from a technical knowledge of the aircraft to a tactical skill set of employing the aircraft as a weapon system. Unfortunately, almost immediately upon arrival aviators are assigned collateral duties which are administrative in nature but essential to daily operations of their unit. In non-aviation units, these billets would be filled by Marines trained in each specific MOS. In aviation units these billets are given to aviators in order to decrease the number of officers required to operate the unit. An aviator may receive several relatively low-tasking assignments, such as maintaining the unit's history, or he may receive a single relatively high-tasking assignment, such as managing the Intelligence Department.

Regardless of the assignment, aviators must divert precious time away from studying, mission planning, and scenario-based

<sup>&</sup>lt;sup>3</sup>Department of the Navy. NAVMC DIRECTIVE 3500.14 AVIATION TRAINING AND READINESS (T&R) PROGRAM MANUAL. URL:<a href="http://www.usmc.mil/directiv.nsf/984522ce4f0247b785257090004fac8b/d513601aa67ff72c85257178006e734a/\$FILE/NAVMC%20DIR%203500.14.pdf">http://www.usmc.mil/directiv.nsf/984522ce4f0247b785257090004fac8b/d513601aa67ff72c85257178006e734a/\$FILE/NAVMC%20DIR%203500.14.pdf</a> Accessed 15 February 2008, 1-5

training in order to fulfill their collateral duties. This division of an aviator's time, energy, and mental resources places an unnecessary burden on aviators and therefore decreases safety and readiness within Naval Aviation. From 1994 to 2002 Navy aviators with between 100 and 500 hours, first-tour aviators, accounted for 36% of mishaps for fixed-wing aircraft and 43% for rotary-winged aircraft. These mishaps can be attributed to the aviator's lack of experience which is only magnified by the division of attention caused by holding a collateral billet.

#### Increased Stress

First-tour aviators should not hold collateral billets in the squadron because the competing priorities place undue stress on aviators. When aviators reach their first fleet squadron they must assimilate into their new unit and begin training to employ their airframe in a tactical manner per the T&R manual. Typically, aviators are given 60 days before being assigned a collateral billet. When given a collateral billet, a new aviator will attempt to complete these additional duties to the best of his ability out of professional pride and a desire to be seen as a strong contributor to squadron activities.

<sup>&</sup>lt;sup>4</sup>Naval Safety Center "Flight Experience and Aircrew Mishap Rates" URL:<a href="http://safetycenter.navy.mil">URL:<a href="http://safetycenter.navy.mil">http://safetycenter.navy.mil</a> Accessed 15 February 2008

According to the Naval Safety Center, over 80% of all mishaps have human error as causal factors. It becomes easier to understand why if an average work day for an aviator is dissected. A fleet aviator averages one hour of flight time per work day, which requires four hours for preparation and two hours for debriefing per flight, totaling seven hours per work day. Likewise, collateral billets can be expected to occupy on average, 20 hours per week or four hours per work day. Seven hours for flight-related duties plus four hours for collateral-related duties equals eleven hours per work day but does not include standing duty, physical training, unit social events, combat workups, or a Marine's family time.

The effort required to sustain this schedule cannot be maintained indefinitely. When an aviator's collateral billet and flight preparation begin to compete with one another for time, one of them will become the secondary priority - which one depends on the deadline involved and the visibility of their efforts. The fatigue and stress this situation generates has a direct effect on flight safety according to Human Factors for Pilots (2d)

In many occupations long term quantitative overload has been shown to be related to stress symptoms. This is a factor which must be considered when organizing the flying roster and other aspects of company policy.

<sup>&</sup>lt;sup>5</sup>Naval Safety Center "DoD Human Factors" URL:<a href="http://safetycenter.navy.mil/hfacs/Default.htm">hfacs/Default.htm</a> Accessed 15 February 2008

<sup>&</sup>lt;sup>6</sup>Author's experience, Appendix A.

On occasion this source of stress will lead to errors of omission and lack of care over checking procedures and, hence, affect flight safety.

#### Tactical Skill Set

First-tour aviators should not hold collateral billets in the squadron because competing priorities decrease an aviator's ability to focus on his airframe-specific tactical skill set.

Now more than ever, Marines are forced to do more with less.

Flight preparation, mission planning, and simulator usage must all be maximized to ensure that training standards are achieved for each flight. Anything that detracts from an aviator's flight preparation, including collateral duties, potentially wastes training resources and dulls an aviator's tactical skill set.

Division of attention between daily unit operations and flight duties decreases proficiency. Proficiency, or skills deriving from practice, is essential to an aviator's overall resume. As stated by General Chuck Yeager in his autobiography, "I was better than the average pilot...because I flew more than anybody else." As aircraft age and the Global War on Terror prioritizes parts and fuel for deployed units, resources for training must be utilized in the most efficient manner possible in order to maximize readiness.

<sup>&</sup>lt;sup>7</sup>Roger G Green, Helen Muir, Melanie James, David Gradwell, Roger L Green, Human Factors for Pilots 2d Ed. (Ashgate, 1996), 74

<sup>&</sup>lt;sup>8</sup>General Chuck Yeager, *Yeager: An Autobiography* (Bantam Books, 1985), 319

#### Overall Performance

First-tour aviators should not hold collateral billets in the squadron because competing priorities decrease an officer's overall performance. Performance can be defined as the manner or efficiency by which an intended purpose is fulfilled. An officer's performance of his primary MOS is directly impacted by the amount of time required by collateral duties. This statement may also be applied to the aviator's collateral duty. With the total amount of effort expended being split between the aviator's training and collateral duties, the aviator will not be able to reach the level of performance attainable if he were able to focus solely on one task. Perhaps a few hours of studying for a flight are lost due to a safety report that requires immediate revision, or, vice versa, an impending flight forces the aviator to neglect a schedule that needs to be written.

# Counterarguments

Opponents argue that in order to allow first-tour aviators to concentrate solely on flight duties, each squadron would have to redistribute the collateral duties, equating to nine billets that would have to be filled by someone else. Potentially one third of those billets could be assumed by someone already in

the squadron performing another, related duty; leaving two thirds of the billets to be filled by bringing additional officers into the squadron whose sole responsibilities are these duties (i.e. schedule writer), corresponding to an increase of six officers per squadron.

With 65 active duty flying squadrons in the Marine Corps, the total personnel increase would be 390 officers and an additional 18.7 million salary dollars. Many would argue the Marines Corps does not have the money or the manpower to dedicate 390 officers to duties that, while important, are collateral duties that are currently being filled by aviators. However, the Marines Corps already plans to increase its personnel by roughly twenty thousand people and the costbenefits of increasing personnel in order to allow aviators to remain focused on their primary duty would be realized if just one aircraft, at 35 million dollars each, was saved per year.

Some argue that having collateral billets during an aviation fleet tour makes Marine officers well-rounded and gives them an opportunity to lead Marines. However, the Marine Corps gives aviators leadership experience by rotating them between flying tours in the fleet and non-flying tours with other units. This rotation allows the aviator to focus on becoming well-

 $<sup>^{9}2008</sup>$  pay rates for 0-2 > 4 years, Appendix B

rounded and leading Marines, while not having to concentrate on developing his aviation tactical skill set. Conversely, attempting to rush the leadership experience by assigning collateral billets during the aviator's first tour diverts the aviator's attention from his primary duty and unnecessarily imparts risk into Marine aviation.

#### Conclusion

Naval aviation is an inherently dangerous business that is made more dangerous by over-tasking aviators. Mishaps due to fatigue and human error will continue to plague naval aviation so long as we continue to increase aviator workloads. In 2003 the Secretary of Defense charged the Department of Defense (DoD) with reducing the number of preventable mishaps by 50%. Since then, the DoD has instituted programs designed to identify and address practices that endanger military personnel. Prior to long weekends, supervisors must visually inspect vehicles that Marines will travel in to ensure they are roadworthy. The start of the long weekends is adjusted so that Marines don't travel long distances after working a full day. All of these are common-sense, low cost measures. Yet despite these measures, our aviation community continues to press on while ignoring a

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<sup>&</sup>lt;sup>10</sup>Secretary of Defense. MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS Reducing Preventable Accidents 19 May 2003 URL:<a href="http://www.defenselink.mil/news/May2003/U06916-03.pdf">http://www.defenselink.mil/news/May2003/U06916-03.pdf</a>> Accessed 18 Feb 2008, 1

solution which is both common sense and, considering loss of aircraft and personnel, relatively low cost. This balancing act that is expected from in-experienced first-tour aviators negatively impacts the overall safety of the squadron, Marine Corps Aviation, and therefore that of the MAGTF.

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# Appendix A

Flight calculations per author's experience:

\*1 calendar year = 52 weeks - 2 weeks vacation = 50 weeks 50 weeks x 5 workdays per week = 250 work days per year 250 work days per year - 14 days for federal holidays per year = 236 actual work days per year

Each flight: 4 hours prep + 1 hour flight + 2 hours debrief
=7 hours per actual work day for flight

# Appendix B

## 2008 Military Pay Charts (3.5% Increase)

2008 Officer Pay Chart												
	< 2	Over 2	Over 3	Over 4	Over 6	Over 8	Over 10	Over 12	Over 14			
010												
0-9												
O-8	8748.90	9035.10	9225.60	9278.70	9516.00	9912.30	10004.70	10381.20	10488.90			
0-7	7269.60	7607.40	7763.70	7887.90	8112.60	8334.90	8591.70	8847.90	9105.00			
0-6	5388.30	5919.30	6307.80	6307.80	6331.80	6603.30	6639.00	6639.00	7016.40			
0-5	4491.60	5059.80	5410.50	5476.20	5694.60	5825.70	6113.10	6324.00	6596.40			
0-4	3875.70	4486.50	4785.60	4852.50	5130.30	5428.20	5799.00	6088.20	6288.90			
O-3	3407.40	3862.80	4169.40	4545.60	4763.10	5002.20	5157.00	5411.40	5543.40			
0-2	2943.90	3353.10	3861.90	3992.40	4074.30	4074.30	4074.30	4074.30	4074.30			
0-1	2555.70	2659.80	3215.10	3215.10	3215.10	3215.10	3215.10	3215.10	3215.10			

### Bibliography

Department of the Navy. NAVMC DIRECTIVE 3500.107. FA-18 Training and Readiness (T&R) Manual. 25 May 2006.

URL:<https://www.intranet.tecom.usmc.mil/sites/atb> Accessed 15
February 2008

Department of the Navy. OPNAV INSTRUCTION 3750.6R Naval Aviation Safety Program. 11 Aug 2003

URL:<http://safetycenter.navy.mil/instructions/aviation/opnav375
0/default.htm> Accessed 15 February 2008

Department of the Navy. NAVMC DIRECTIVE 3500.14 AVIATION TRAINING AND READINESS (T&R) PROGRAM MANUAL. 20 Dec 05 URL:<a href="http://www.usmc.mil/directiv.nsf/984522ce4f0247b785257090004fac8b/d513601aa67ff72c85257178006e734a/\$FILE/NAVMC%20DIR%203500.14.pdf">http://www.usmc.mil/directiv.nsf/984522ce4f0247b785257090004fac8b/d513601aa67ff72c85257178006e734a/\$FILE/NAVMC%20DIR%203500.14.pdf</a> Accessed 15 February 2008

Green, Muir, James, Gradwell, Green, Human Factors for Pilots 2d Ed. Ashqate, 1996.

Naval Safety Center "Flight Experience and Aircrew Mishap Rates" URL: <a href="http://safetycenter.navy.mil">http://safetycenter.navy.mil</a> Accessed 15 February 2008

Naval Safety Center "DoD Human Factors"
URL:<http://safetycenter.navy.mil/hfacs/Default.htm> Accessed 15
February 2008

Secretary of Defense. MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS Reducing Preventable Accidents 19 May 2003 URL:<a href="http://www.defenselink.mil/news/May2003/U06916-03.pdf">http://www.defenselink.mil/news/May2003/U06916-03.pdf</a> Accessed 18 Feb 2008

Yeager, General Chuck, Yeager: An Autobiography. Bantam Books, 1985.