

maligned (and probably rightly so) cycle-ergonometry test. Run with them, ruck march with them, and that perception will start to fade. PT is slowly—very slowly—becoming part of our culture. As with doctrine, the Army and Marines are way ahead of us. There's work to be done, but the Air Force is on the right path.

The fourth key to success is to demonstrate your expertise. The quickest way to lose credibility in a Joint environment is to show up unsure of how to do your job. That said, a learning curve is inherent. The challenge is to make that curve shallow and short in duration. Make contact with the LRO you're replacing and find out what kind of things you can do prior to deploying (such as getting a Global Transportation Network account). The quicker an LRO can insert him or herself into the fray and demonstrate competence, the better. Unfortunately, the LRO concept has made this key a difficult one to accomplish. Simply put, the depth of knowledge is different now than under the old 21S/T/G construct. Your Joint peers don't care. They expect you to know what you're doing 100 percent of the time. To them, you are the expert in your field.

The fifth and final key may seem superfluous, but it's not. LROs need to be well-read. In dealing with the officers from the other Services, you will find that they are, as a whole, very well-read and very articulate. This is a result of the importance that the Army and Marine Corps place on their reading lists and internal professional military education programs. It is a rarity to find a senior company grade officer or field grade officer in

those branches that isn't versed on military history or current events. During my year at Quantico, I was blown away at the breadth of reading that my classmates had done. They actually read from their Commandant's reading list, and it pays dividends. Pick up a book by Thomas Barnett or Thomas Friedman, or fall back to a classic—*On War* by Clausewitz.

LROs have proven to be highly sought after individuals in today's Joint environment. We have demonstrated the ability to undertake various tasks and complete them in exemplary fashion. In fact, we've done so well, that we've become victims of our own success. Our 365-day taskings continue to increase while our personnel numbers stay the same or are reduced. Arguably, the LRO is the most visible and tangible link between the Air Force and the current fight against terrorism. Our Joint commitment will not diminish, nor will the expectations placed on us by our Joint colleagues. Take the steps necessary to show them that we deserve their respect and confidence.

*Major Andrew Hunt is currently the operations officer for the 60<sup>th</sup> Logistics Readiness Squadron, Travis Air Force Base, California. A graduate of the United States Marine Corps Command and Staff College, Major Hunt has deployed in support of three separate Joint task forces, most recently CJTF-76 in 2004. He is an alumnus of the Air Force Logistics Management Agency, and a former associate editor of the Air Force Journal of Logistics.*



## Bass Boats and a Man from Green Bay

Duane Anderson, USAF

### Introduction

If you happen to drive onto Tinker Air Force Base on a summer Saturday morning, you will notice a strange phenomenon. On the south side of the flag pole, taking up two parking spots, are a large number of F150s, F250s, Dodge Rams, and Chevy Super Cabs, hitched to boats of all kinds, but mostly bass boats. Since I am a new Air Force civilian employee (having only worked a bare 10 years), I have been told by seasoned employees that there used to be many more boats in the parking lot on Saturdays, and that the bass boat population has especially declined.

Why all the boats? The answer is overtime. Often, overtime becomes more like base pay, simply part of the overall paycheck, subsumed by the family budget to cover groceries, clothes, shoes, and sports fees for the kids. It is also common for maintenance and other employees to work overtime to pay for leisure time amenities.

While this is good for the Bass Pro Shop, it may be another story for the Air Force. Civilian mechanics working overtime results in more expensive repair and throughput. Perhaps more important, overtime may lead to a loss of productivity and an increase in sometimes fatal safety incidents, for both civilians and our men and women in blue.

I have found that there is only a certain point to which an *outsider* can dig into the data concerning overtime—it is culturally sensitive at the depot. In quiet conversations I have learned that overtime is funded from a separate *bucket* than normal man-hours and is budgeted (at Tinker) at approximately

13 percent of total labor costs. This stovepipe creates many problems—one of which is for supervisors. Whether for fear of not using up all the bucket of money (and thus not being funded next year) or simple pressure from above to meet a production schedule, overtime may be scheduled somewhat loosely. "Why," the mechanic may ask himself, "should I bust my tail Monday through Friday, when, if I don't, I can make overtime on the weekend?" This is certainly not the norm, nor do I intend to express that mechanics themselves are trying to somehow *beat the system*. Rather, the system itself is set up to reinforce this sort of behavior.

### The System Needs to Change

Unlike some civilians, I worked *on the outside* for a few years as a front desk supervisor and then later as an assistant general manager at a hotel. They were terrible jobs. In those days, managers were tied to pagers the way they are to Blackberries today. I can remember many a night when the pager would go off at 2 in the morning, and I knew I was headed to the hotel to fill out a police report, or to tell a group of drunken hoodlums that it was time to hit the road or pay the price. The general manager, my boss, was a meat-handed high school educated man who had once worked 10-hour shifts loading trucks in the dead of winter in Green Bay, Wisconsin. He was not a man with whom you wanted to argue. He had risen to his position by sheer force of will and hard, hard work. His suits were bought from Goodwill (which he bragged about), and somehow he never learned to tie a tie, so the end of it was always somewhere between his belly button and the middle of his chest.

I can remember my interview with him. I was dressed in my black conservative suit, complete with tie tack and cuff links. He wore a pair of dirty jeans and a T-shirt, because he had been helping the maintenance crew rip out carpet from some of the rooms. I'm not sure what questions he asked me, or how I answered, but one thing I will never forget is that, at the end of the interview (after he told me I had the job), his next sentence was "I don't ever want to see overtime on yours or anyone else's timesheet. Hire as many people as you like, but no overtime and we will meet our labor percentage each month."

Based upon this fairly severe direction from a 6 foot 4 inch, 320 pound boss, I set about creating a front office staff that was flexible and well trained. I hired full time employees, scheduled them at 40 hours, and made sure they went home when they reached their 40. I hired college kids to work 24 hours a week. I hired moms who could work from 5 to 9 or from 9 to 3, just as long as they could get their kids to school. I hired retired folks who would happily work 15 hours one week and 30 the next. I trained housekeepers to check in and check out guests and I trained front office clerks to flip a room. So, when someone quit or didn't show up, or we had an especially busy night, I could call up Joe, Michelle, or even Suzie from housekeeping, and still service the customer, without overtime.

This is the type of flexibility we need in the Air Force. This is the type of surge capacity we need.

Now, I am not proposing we go out and hire some college kids to fix airplanes. But, I am suggesting that if four mechanics work 50 hours per week, at \$20 per normal hour and \$30 per overtime hour, their combined gross pay is \$4,400 dollars for 200 hours of work. If five mechanics work 40 hours per week at \$20 per normal hour, the gross pay is \$4,000—a cost avoidance of \$400 per week (assuming all other costs are equal). If you apply this to 10,000 civilian mechanics, the *simple savings* is \$250,000 per week, or a *roughly estimated* \$13M per year (recognizing this is not completely linear).

Reliable and scalable studies have also shown that productivity decreases as the amount of overtime is increased, as illustrated in Table 1. The results of a very large study showed that efficiency was impaired as the work schedule exceeded 40 hours per week. The average efficiency for 50 hours, 60 hours, and 70 hours (per week) was 0.92, 0.84, and 0.78, respectively.<sup>1</sup>

The loss of productivity as overtime increases results in an even larger cost increase. In the simple example used earlier, the use of overtime results in 184 effective man-hours of productivity, at a cost of \$4,400. With no overtime, the results are 200 effective man-hours at a cost of \$4,000.

Number of Mechanics	Hours Worked per Mechanic	Gross Pay	Baseline Productivity	Actual Productivity Hours
4	50	\$4,400	92%	184
5	40	\$4,000	100%	200

Table 1. Productivity Decrease

Number of Mechanics	Normal Hours	Overtime 13%/Week	Total Hours Including Overtime	Total Gross Pay/Week	Productivity Baseline	Basic Pay per Hour	Overtime Pay per Hour	Total Productivity Hours
10,000	40	5.2	45.20	\$9,560,000	0.95	\$20	\$30	380,000
9,500	40	0.0	40.00	\$7,600,000	1.00	\$20	\$30	380,000

Table 2. Total Productive Hours Compared with Productivity Baseline

Expressed as a ratio of actual productivity baseline hours divided by gross pay, in the example where no overtime is worked, the simple cost per productive hour is \$20. In the example where 50 hours are worked by each mechanic, the simple cost per productive hour rises to \$23.91.

In fact, if productivity performance at 45 hours is 95 percent, you could not only decrease the number of mechanics, but also keep your total productive hours at the same level, as illustrated in Table 2, using 13 percent overtime in the calculations.

It is doubtful that my general manager figured his *no overtime* mantra using this sort of math. The idea is very intuitive. What he did know was that paying someone 9 bucks an hour versus 6 bucks an hour was bad business. The above projections yield weekly cost avoidance of approximately \$2M a week and an annual cost avoidance of approximately \$100M, per 10,000 mechanics in place now.

A second benefit to working less overtime is improving the general quality of life of Air Force employees. Employees in blue collar jobs who work more than 45 hours per work experience a 50 to 61 percent increase in safety incidents.<sup>2</sup> This leads to increased workers compensation, death benefits, disability payouts, more lost or light duty time, and in general, a more hazardous environment. I can't quantify this in cost savings or avoidance, but I have personal experience as a first-level supervisor of how quickly you can burn yourself out. You work 60 hours in a week and you are grumpy, your wife is grumpy, your kids are grumpy, and your home starts to feel like someplace you visit every now and again to mow the yard and *snarf* down a reheated dinner.

Beyond my personal experience, medical studies show that stress level increases in employees who consistently work more than 40 hours per week. This has many effects, including higher blood pressure leading to higher cardiovascular risk, increased mental illness needs, and lowering of employee morale.<sup>3</sup> Again, these savings are qualitative, but I believe self evident.

I have discussed this idea with a number of my colleagues, and even submitted (and resubmitted) it formally to the IDEA program, where it got turned down. The response has typically been, "Well, it makes sense, but it will never happen here." Or, "Yeah, but some senator or general will just shoot it out of the sky, the union will fight it, or it's just too big of a challenge."

Well, maybe they are right. Maybe it is too big of a challenge—too hard. But tell that to a man from Green Bay who used to load boxes onto a truck in subzero temperatures and is now a regional director of a small hotel chain pulling in \$80K a year and a big fat bonus to boot. And, if you happen to see him, tell him the blazers I bought at the flea market look darn good after they get dry cleaned.

Notes

1. H. Randolph Thomas, *Productivity Supporting Information: Effects of Scheduled Overtime on Labor*

2. A. E. Dembe, J. B. Erickson and R. G. Delbos, and S. M. Banks, "The Impact of Overtime and Long Work Hours on occupational Injuries and Illnesses: New Evidence from the United States," *Occupational & Environmental Medicine*, 629, September 2005, 588-597.

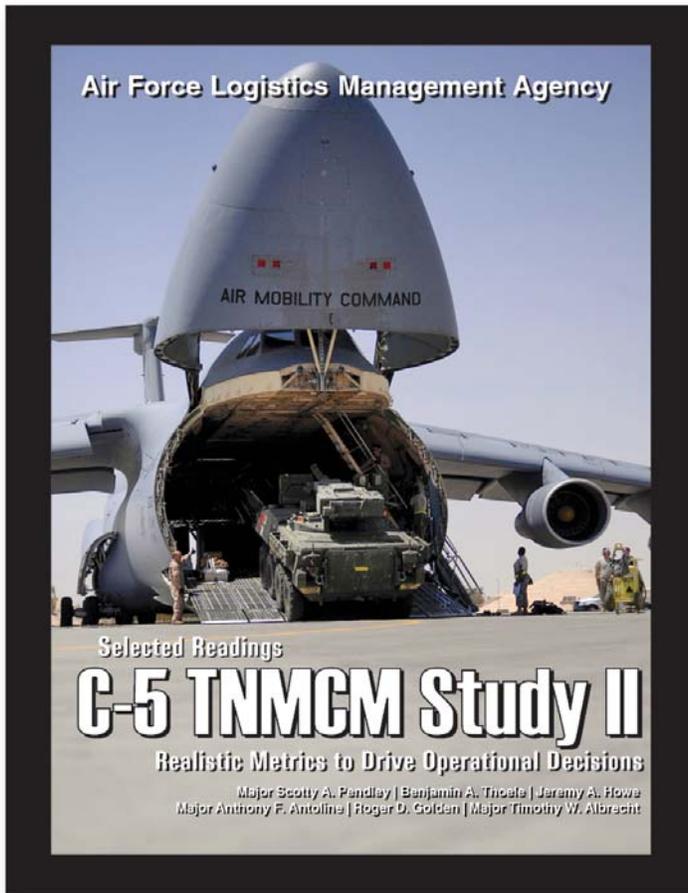
3. *Ibid.*

*Duane Anderson is currently a program manager for the Transformation Technology Team, 429<sup>th</sup> Supply Chain Management Squadron, Tinker Air Force Base, Oklahoma.*



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