



ORACLE



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Chair Talk

Greetings Fellow GWAC Members and Logisticians! This issue of the GWAC ORACLE Newsletter includes information about upcoming events; Chapter Officer reports; Management Team meeting minutes; a Part II article on *Total Ownership Cost (TOC) Considerations in Key Performance Parameters and Beyond*, a dinner announcement from the Council of Supply Chain Management Professionals and a November GWAC Luncheon announcement.



GWAC October Awards Luncheon Results

The 25 October GWAC Awards Luncheon was a great success. Fifteen logisticians from the Military, Government and Industry received logistics awards. The prestigious and highly competitive Logistician of the Year Award was presented to Lt. Col. Claxton Johnson, HQ USMC (see photo below). The Guest Speaker for the Awards luncheon was the world renowned Dr. Jedizmir Knezevic of the MIRCE Academy in Exeter, England. The speaker topic was "From Logistics Processes to the Logistics Profession". The room was filled with

many well-wishers including the President of SOLE, Dr. Lloyd Muller, CPL, and the new District 2 Director, Mr. Jon Buder, DML. Please join me and the Greater Washington Area Chapter of SOLE -The International Society of Logistics in congratulating these deserving awardees. For more photos and information on specific individual and team awards, see page 8.

26 October GWAC Logistics Seminar

The speaker for our 29 November Luncheon is Ms. Babette Colquitt, Global Business Communications Advisor, ExxonMobil Fuels Marketing Department. The speaker topic is "The Story of Gasoline" (see the Flyer announcement on page 9).

26 October GWAC Logistics Seminar

GWAC held its one-day Logistics Seminar on 26 October in Washington DC The topic was "The Fundamentals of Supportability Engineering" presented by Dr. Jezdimir Knezevic from the MIRCE Academy, Exeter England. This is the first GWAC Seminar that I have been involved with since I have been serving with GWAC. It was well received. (continued on next page . . .)



Dr. Knezevic, accompanied by Chair Dave Floyd, CPL, presents the Logistician of the Year Award to Lt. Col. Claxton Johnson

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Dr. Knezevic challenged the attendees to think “out of the box” in terms of Reliability, Maintainability and Supportability (RMS). For example, he said that a typical formula used to calculate Operational Availability, shown below, treats failure rates as constant (e.g., materials are 100% fit, quality is 100%, and there is no aging or fatigue); all repair rates are constant (e.g., a repair time of one minute and a repair time of one year are treated as equally probable; and that components are treated independently (e.g., if an engine fails, the gear box continues to operate).

$$\frac{MTBF}{MTBF + MTTR + MLDT}$$

He said that in the real world this is not the case and that the formula shown below should be used for operational availability where operational availability is represented as $A(t)$ which is the time t , that the machine (equipment) is in a state of function (e.g., operational availability or uptime) as compared to a state of failure (e.g., downtime). To see a full copy of

$$A(t) = \sum_{k=0}^{\infty} A(t | k)$$



Chair Dave Floyd, CPL presents a certificate of appreciation to Dr. Knezevic at the GWAC Seminar held on 26 October 2996

Dr. Knezevic’s presentation, go to our GWAC Web site at www.gwacsole.org.

As stated earlier, the Seminar was well received. Of the 19 attendees who submitted feedback forms, 15 if them rated the Seminar as five out of a possible five, three rated it four out of five and only one rated it a three. Written comments overwhelmingly indicated that attendees would like to participate in another Seminar next year that might include one of the following topics: RMS, Life Cycle Costing, Supportability Analysis and Designing to Logistics.

There is room for improvement next year. It pays to work closely with SOLE Headquarters early on in providing the capability to accept credit cards and DD 1556s. Also, SOLE Headquarters was helpful in clarifying tax law and regulations pertaining to payments to foreign nationals which applied in this case.

A Fond Farewell to Lincoln Hallen

For personal reasons, Lincoln Hallen, an advisor to GWAC, has chosen to become inactive in SOLE. Linc is a former District Director, a founding father of the Mid-Atlantic Logistics Conference, a former GWAC Chapter Chair and a lifetime member of SOLE. Linc was instrumental in making the Seminar possible. He will be sorely missed.



Chair Dave Floyd, CPL presents a certificate of appreciation to Linc Hallen for his lifetime contributions to SOLE.

Chapter Officers

Chair	
Dave Floyd, CPL	571-218-3342
Immediate Past Chair	
Lyle Paulson, CPL	703-412-9319
Vice-Chair, Admin	
Mary Johnston	202-646-5518
Vice-Chair, Finance	
B.J. Silvey	703-860-5141
Vice Chair Member Services	
Tom Griffiths	703-383-3150
Vice-Chair, Professional Development	x325
LCDR Ron Hooks	202-475-3135
Vice-Chair, Education	
Gary Glick, CPL	703-697-4271

Advisory Members

Joyce McCallister, PMP, CPL	703-217-8431
Richmond Miller, CPL	202-314-1149
Ken Gary	703-692-5920
Lincoln Hallen	301-460-5060

Committee Chairs

<u>Bylaws</u>	Open
<u>CPL Coordinator</u>	
Gary Glick, CPL	703-697-4271
<u>Education</u>	
Dr. Lloyd Muller, CPL	703-751-1060
<u>Elections</u>	Open
<u>Historian</u>	
Dave Floyd, CPL	571-218-3248
<u>Job Referral</u>	
Linc Hallen	301-460-5060
<u>Logistics Education Foundation</u>	
Dave Floyd, CPL	571-218-3248
<u>Membership</u>	Open
<u>Nominations</u>	Open
<u>Oracle Newsletter Editor</u>	
Dave Floyd, CPL (Acting)	571-218-3248
<u>Public Relations</u>	
Dave Floyd, CPL	571-218-3248
<u>Retail Sales</u>	Open
<u>Speaker Editor</u>	Open
<u>Training</u>	
Gary Glick	703-697-4271
DCCEAS Delegate	
Dev Raheja	301-483-4525
<u>Other</u>	
<u>District Director</u>	
John Buder	703-445-1616
<u>SOLE Headquarters</u>	301-459-8446

The ORACLE

The ORACLE is published 12 times a year. The deadline for articles and announcements is the second Monday of the month to be published. Authors, please reference "Editorial Objectives and Guidelines" under the "ORACLE Newsletter" Link at www.gwacsole.org for more details. GWAC assumes no responsibility for statements made by advertisers or for statements of fact or opinion expressed or implied in this publication.

December 11-12, 2006, DoD Architecture and Frameworks Seminar to be held in Washington, DC. Contact: www.TechnologyTraining.com.

December 11-12, 2006, Systems Engineering Workshop to be held in Washington, DC. Contact: www.TechnologyTraining.com.

December 12-13, 2006, Lean Six Sigma For Defense to be held by the Institute for Defense and Government Advancement (IDGA) at the Hilton Alexandria, Old Town, Alexandria, VA. Contact www.IDGA.org.

December 14, 2006, PBL Dinner Presentation to be held in Arlington, VA. See the Flyer on page 10 for more information.

January 29-31, 2007, 2007 Defense Logistics Summit to be held in Washington, DC. Contact www.defenseperformance.org or call 703-894-8481.

February 26-27, 2007, Future Military Data Links Seminar to be held in Washington, DC. Contact: www.TechnologyTraining.com.

Financial Report

by BJ Silvey at
silveybjmarbj@comcast.net

As of 31 October, 2006

Beginning Balance: 4535.51

Income: Luncheon

Total Income: \$4125.00

Expenses: (\$4004.49)

Total Expenses: (\$4004.49)

Ending Balance: \$4656.02

VC Programs

by LCDR Ron Hooks, USCG, at
dhooks@comdt.uscg.mil

The speaker for our 29 November Luncheon is Ms. Babette Colquitt, Global Business Communications Advisor, ExxonMobil Fuels Marketing Department. The speaker topic is "The Story of Gasoline".

VC Technical

By Gary Glick, CPL at
glickg@starpower.net

CPL Exam Update

The November 2006 CPL exam was held on 2 November. There were no GWAC members taking the exam this cycle as far as anyone knew and therefore we did not have a representative proctor the exam.

SOLE Searchers

Check out the updated "Jobs" page hyperlink at the GWAC Web site at www.gwacsole.org, or contact Tom Griffiths at 703-383-3150 x325.

DCCEAS

Mr. Dev Raheja, a chapter member and an attendee at the GWAC Seminar, has volunteered to take over responsibility as the

GWAC SOLE delegate to the DC Council of Engineers, Architects Societies (DCCEAS).

DCCEAS welcomes participation in their monthly meetings and they are scheduling featured speakers on topics of broad interest to all Affiliate Societies in order to make it worthwhile for them to attend the meetings.

DCCEAS meetings are held in the University of DC's Van Ness Campus (at the intersection of Connecticut Ave. and Van Ness St. NW), in Room 212 of Bldg. 42. Parking is available in the UDC garage at the reduced rate of \$3.50 by telling the attendant that the meeting is sponsored by Dr. Onye, Director of the Center.

Chapter Website

Contact our new webmaster at webmaster@gwacsole.org with your comments and/or input. Files added during the last month to the functional areas include the following:

General.

- October Membership Committee Meeting Agenda and Minutes
- Updated Calendar of Events

Administration.

- Membership Spreadsheet, Password protected (contact webmaster@gwacsole.com)
- October ORACLE Newsletter

Finance.

- October Financial Report

Chapter Events List 2006-2007

Date

Nov 29

Dec 13

Jan 10

Jan 31

Feb 14

Feb 28

Event

GWAC Luncheon

GWAC BoD Meeting

GWAC BoD Meeting

GWAC Luncheon

GWAC BoD Meeting

GWAC Luncheon

GWAC Management Management Team Meeting Minutes

CALL TO ORDER:

Chair Dave Floyd, CPL, called the meeting to order at 5:45p.m. on 8 November, 2006 at the Hamburger Hamlet in Crystal City, Arlington, VA.

CHAPTER OFFICERS PRESENT:

Dave Floyd, CPL	Chapter Chair
Lyle Paulson, CPL	IPC
Tom Griffiths	VC Member Svces
Richmond Miller, CPL	Board Member
Ken Gary	Board Advisor

OLD BUSINESS:

Past Minutes. The GWAC Management Team reviewed and recommended approval of the October 2006 Management Team Meeting minutes and Financial report for the month of October.

VC/COMMITTEE REPORTS:

VC FINANCE:

Finances were an increase of over \$120 to \$4656.02 from the previous month. The amount reflected gains from the October Awards Luncheon and a slight loss from the Seminar. Chair Dave Floyd, CPL reported that he anticipates disbursement from SOLE of MAL 2006 funds in the next few weeks.

VC MEMBER SERVICES:

Chair Dave Floyd, CPL received the GWAC Chapter membership survey forms from Tom Griffiths and said he would summarize results in the next Newsletter.

VC PROGRAMS:

Luncheon Speakers. Mr. Lyle Paulson, CPL, made reservations for the Fort Myer Pipe and Drum room for our November luncheon. The speaker for our 29 November Luncheon is Ms. Babette Colquitt, Global Business Communications Advisor, ExxonMobil Fuels Marketing Department. Ms. Colquitt will be speaking on

“The Story of Gasoline”.

VC ADMINISTRATION:

Our VC Administration, Ms. Mary Johnston, is out of action for the next six weeks due to surgery. She will be sorely missed. Any first time attendees at SOLE luncheons are free (except for the Awards Luncheon). The qualifier is you cannot already have attended a luncheon within the last three years to qualify. You must also identify yourself as “new” when you RSVP. Any full time students get a lunch free.

VC EDUCATION:

The November 2006 CPL exam was held on 2 November. There were no GWAC members taking the exam this cycle as far as anyone knew and therefore we did not have a representative proctor the exam.

NEW BUSINESS:

Mr. Dev Raheja, a chapter member and an attendee at the GWAC Seminar, volunteered to take over responsibility as the GWAC SOLE delegate to the DC Council of Engineers, Architects Societies (DCCEAS). Tom Griffiths volunteered to take over the resume Jobs Link on the GWAC Web site from Linc Hallen. He also said he would verify with Mike Connor that all Web sites tools were included in the turnover. The discussion of holding another GWAC Seminar next year came up and it was unanimously approved. Next year we will be going through SOLE HQ for processing Credit Cards and DD 1556s to make it easier for government participants to be reimbursed. Lyle Paulson, CPL said he thought SOLE HQ could offer a Seminar on “Sense and Respond Logistics”.

ADJOURNMENT:

There being no further discussions, Chair Dave Floyd, CPL, adjourned the meeting at 7:10 pm. The next board meeting will take place at the Hamburger Hamlet Restaurant in Crystal City on 13 Dec, 2006. GWAC members are welcome to attend as guests.

ARTICLE (Part 2)

TOTAL OWNERSHIP COST CONSIDERATIONS IN KEY PERFORMANCE PARAMETERS AND BEYOND

**By: MICHAEL W. BOUDREAU AND BRAD R. NAEGLE
THE BEST EFFECT—UP FRONT AND EARLY**

Capability Documents. Key Performance Parameters (KPPs) are identified within the weapon system's capability documents and represent those minimum attributes or characteristics considered most essential for an effective military capability. Depending on the nature of the weapon system, the KPPs may be validated by the Joint Requirements Oversight Council, the Functional Capabilities Board, or the DoD Component. KPPs that appear in the Capabilities Development Document or Capability Production Document are then inserted, verbatim, into the Acquisition Program Baseline (APB). These KPPs typically represent minimum or threshold performance requirements that are not considered for trade-off during CAIV analyses.

The KPPs bring the DoD and Service leadership to a crossroads. If CAIV is critical within the DoD, then a forceful way to express its importance is to designate TOC limits as a KPP. In a February 2003 report (GAO-03-57, pp. A-10 & A-11) entitled "Best Practices: Setting Requirements Differently Could Reduce Weapon Systems' Total Ownership Costs," the Government Accountability Office (GAO) has recommended use of TOC KPPs as a way to mirror commercial best practices, yet the Office of the Secretary of Defense (OSD) does not require making LCC or TOC a KPP. To be more precise, by its definition of KPP, the Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01C allows, but does not require, LCC to be a KPP (Office of the Joint Chiefs of Staff, 2003). Use of KPPs establishes constraints to possible solution sets and other risks; therefore, KPPs should be kept to a minimum.

A PROMISING EXAMPLE OF THE USE OF KPPs

The Joint Strike Fighter (JSF) provides an example of KPPs that addresses TOC. The JSF has six KPPs; three of the six address supportability/affordability (Hudson, 2003), and are as follows:

1. *Mission reliability* directly impacts O&S costs for parts replacement and the associated expenditure of maintenance man-hours.
2. *Logistics footprint* influences both program acquisition costs and O&S costs; the smaller the footprint is, the smaller the acquisition cost will be and the less expensive it will be to transport and maintain.
3. *Sortie generation rate* depends on maintenance man-hours per operating hour and heavily influences design for maintainability.

These three JSF KPPs have brought about the use of autonomies, which includes onboard diagnostics/prognostics, and have improved the cost effectiveness of maintenance. They also impact affordability and could be at least partially redefined in terms of Average Procurement Unit Cost (APUC) and O&S costs.

THE NEXT BEST TOC OPPORTUNITY—EARLY IN SUSTAINMENT

If TOC is not fully integrated into a system's design during the developmental phases, an opportunity is missed, but all is not lost. This is where R-TOC kicks in. The reality is that programs never get LCC 100 percent right during the development phases. The R-TOC provides the process *tool box* for working on cost improvements once the warfighting system is in production and/or sustainment. The R-TOC focuses on the reduction of APUC and weapon systems sustainment costs (i.e., the O&S costs). It is employed while the warfighting system is produced and placed in service; during this time, the cost drivers are identified and isolated. Two examples of R-TOC illustrate how the Value Added Change Proposal (VECP)

(Reprinted with permission; continued next page)

Is used. One use might be to reduce the cost of manufacturing a component by improving the process yield (the percentage improving the reliability of an expensive subsystem or component. Often RTOC initiatives result in secondary benefits that enhance performance (i.e., improved reliability and operational availability); however, the forcing function is generally the reduction of O&S costs, the largest constituent of TOC for most systems.

Operating and Support Costs. The O&S phase includes most sustainment and administration costs incurred during the weapon system's operation in the field or fleet (e.g., repair parts or the labor cost associated with engine repair). It also includes labor costs for uniformed and civilian personnel. Operations and Maintenance (O&M) appropriations pay a large part of O&S costs (including civilian personnel but not military personnel) and pay for disposal costs as well (Department of Defense [DoD], 2003). O&S costs may be dramatically reduced by identifying O&S cost drivers (i.e., those components that, through Pareto analysis, are recognized as major contributors to the cost of the operation) and correcting them often, but not always, through redesign. The most efficient time to accomplish this is during the preacquisition and predevelopment phases (i.e., when the system is only a paper design and can be changed relatively inexpensively). However, cost drivers that are discovered during the production and sustainment phases may also lead to redesign or other actions that can save or avoid significant expenditures. The DoD pilot programs exhibit many useful examples of RTOC, such as the Abrams Tank engine Partnership for Reduced Operation and Support Cost Engine (O&S) Costs (PROSE), the SH-60 Affordable Readiness Initiatives, Aviation Support Equipment Reliability Improvement Initiatives, the EA-6B Inertial Navigation System, and the SLAM-ER Data Link Pod (Institute of Defense Analyses, [IDA], 2005).

A HIGH-PAYOFF OFF EXAMPLE OF THE USE OF R-TOC

The AEGIS system (U.S. Navy phased array radar-based combat system) provides an example of a very successful R-TOC effort, which began in the mid-1980s and is still paying off like a *gilt-edged bond* today. Each ship requires microwave-producing equipment that includes a device called a Crossed-Field Amplifier (CFA). Early in AEGIS deployment, the CFA proved to be a cost driver with relatively expensive failures attributable to an arcing condition between the cathode and anode in the microwave tube. This arcing caused the CFA to fail at about 6,000 hours Mean Time Before Failure (MTBF). A change to anode metallurgy, along with other minor changes, reduced arcing and increased MTBF to between 40,000 and 45,000 hours. These changes drastically reduced the frequency of corrective maintenance, maintenance man-hours, stockage-level requirements, and also simultaneously improved the reliability and availability of the microwave system. This dramatic improvement was the result of a team effort among the AEGIS Program Office, Communications and Power Industries (CPI) (vendor that provided the CFA and was formerly part of Varian), Crane Naval Surface Warfare Center (the Navy In-Service Engineering Agent for AEGIS microwave tubes), the Navy ManTech Office, and Raytheon (the prime contractor, located in Sudbury, MA). This R-TOC affects 27 AEGIS cruisers, each having 76 CFAs; and 40 AEGIS destroyers, equipped with 38 CFAs. In 2002 dollars, the annual cost avoidance averaged about \$1.9 million per AEGIS cruiser and \$950 thousand per AEGIS destroyer. Eventually, the R-TOC will benefit an additional 22 AEGIS destroyers, which are yet to be completed and deployed; each will have 22 CFAs (K. Hoffer, personal communication, November 17, 2003).

TOOLS, TECHNIQUES, AND CONCEPTS SUPPORTING EFFICIENT TOC SOLUTIONS

As a system progresses from early concept through prototyping and production and finally reaches the sustainment phase, the opportunities to significantly reduce TOC diminish. Clearly, TOC reduction efforts are most effective early in the developmental cycle, when changes are the least expensive, easiest to implement, and have the widest effect. Looking from the perspective of the warfighter, the possible effect of a balance between capabilities and affordability is that *more warfighting assets may be available to the warfighter*. To that end, TOC stakeholders have a vested interest in influencing the system design and development, especially early in the process, so a suitable, effective, and *affordable* solution will be generated. The challenge is how to accomplish this goal. (*To be continued . . .*)



**Greater Washington Area Chapter
of SOLE – The International Society of Logistics**



ANNOUNCEMENT OF LOGISTICS AWARDS

The following individuals were presented logistics awards at the GWAC Annual Awards Luncheon, held on October 25, 2006, at the Ft. Myer Officer's Club: The GWAC SOLE Logistician of the Year award was presented to Lt. Col. Claxton Johnson, HQ USMC.

#	Name	Award	Company/Org
1	Dennis Cooper	Logistics Training	UNISYS
2	Reginald M. Madden	Supply Chain Logistics	Joint AIT Office, U.S. Army
3	Leroy (Lee) Weaver	Information Systems	Joint AIT Office, U.S. Army
4	Paul Krumhaus	Business Logistics Management	Caliber
5	COL Gerald Bates Jr.	Maintenance Management	AMC, HQ U.S. Army
6	Linda Nordstrom	Sustainment Maintenance Operations	AMC, HQ U.S. Army
7	Rick Burnham	Logistics Modeling and Simulation	TSC
8	F. Michael Slay	Logistics Research and Development	LMI
9	Robert Kline	Provisioning	LMI
10	Carol A. Gilmore	Financial Management	ODCS-4, HQ U.S. Army
11	MAJ William Balestreri	Logistics Transformation Management	HQ USMC
12	Lt Col Claxton Johnson	Logistics Modeling and Simulation	HQ USMC
13	Mr. Dean Fish	Team Award for Logistics Engineering	Booz Allen
14	Mr. Dale Carpenter, CPL	Team Award for Logistics Engineering	Booz Allen
15	Mr. Russ Gimmi	Team Award for Logistics Engineering	Booz Allen



The 2006 GWAC SOLE Chapter Logistics Awardees are honored and recognized in a group photo with Dr. Knezevic and Chair Dave Floyd, CPL



Chair Dave Floyd, CPL and Dr. Knezevic (L-R) pose with recipients of the Logistics Team Award: Dean Fish, Russ Gimmi and Dale Carpenter, CPL



*Please Join the Greater
Washington Area Chapter (GWAC) of
SOLE – The International Society of Logistics*

On Wednesday November 29, 2006

at the Fort Myer Officer's Club, Arlington, VA

Fife and Drum Room from 11:15 am to 1:00 pm

for a buffet lunch and talk. The event is \$20.00 pay at the door

(Note: First Time Attendees are Free!)

RSVP to bunnystreet@yahoo.com

**Ms. Babette E. Colquitt
Global Business Communications Advisor,
ExxonMobil Fuels Marketing Company**

**For
A presentation on
“The Story of Gasoline”**

Have you heard about Performance Based Logistics (PBL)? What is it about and what's behind the "buzz"? What are the realities and what are the myths? Come learn about this misunderstood logistics support concept and its potential benefits.

Come join the Council of Supply Chain Management Professionals (CSCMP) for a presentation on Performance Based Logistics.

Guest Speaker: Jim Beggs

Booz Allen Hamilton

Date: Thur., Dec 14, 2006

6:00 pm - Registration / Social

6:30 - Dinner

7:15 - Presentation

8:30 - Meeting concludes

Location: Hunan One Restaurant

3033 Wilson Boulevard

Arlington, VA 22201

(703) 528-1177

Entrance @ Garfield and Wilson / Clarendon Metro, Orange Line

Cost: CSCMP-NCAR Non-Member Rate \$30

Member Rate \$25

Student Rate \$15

Register online: <http://www.cscmp.org/Education/Events.asp> To utilize Member or Student rates, you must log in to the CSCMP site.

Please contact Rob Williams, Robin.Williams@nextell.com if you require assistance with registration.

Upcoming Events

Jan 11, 2007 - Guest Speaker, Defense Logistics Agency (DLA), (TBA)

Feb 8 - Michael Rackley, Director of Operational Excellence, Ryder System, Inc., LEAN Supply Chains, Dinner Meeting

March 14 - Guest Speaker, Mark Kozak-Holland, Senior Business Architect/Consultant with HP Services, "Winston Churchill and the Supply Chain Created by His Administration That Helped Win Battle of Britain." Joint dinner meeting with D.C.-APICS

April 10 - Site Tour, FedEx Dulles, VA Hub

May 18 - Special Seminar featuring Michael Ford, TQM Works Consulting, featuring world famous "SCM Beer Game", a supply chain simulation (TBC)

Questions about programs? Contact: Leslie Downey, CSCMP NCAR Program Chair, Leslie.Downey@RFIDRevolution.com

Check out NCAR Roundtable events at www.cscmp.org

CSCMP Membership

Have you joined or renewed your membership to CSCMP? Membership gives discounted registration fees at CSCMP events and access to members only data on the website. It's a bargain. Check out www.cscmp.org.