

## In This Issue

- TOC-Lean Institute News
- Project World
- New coaching approach
- Speaking Events
- **NEW CAR BODY SHOP SOLUTION**
- TOCICO Exams
- Briefings



Dr Ted Hutchin  
Institute Director

[www.toc-lean.com](http://www.toc-lean.com)

## Contact Us

TOC-Lean Institute  
22 Digby Drive  
Melton Mowbray  
Leicestershire  
LE13 0RQ

Tel: +44 (0)1664  
502860

Fax: +44 (0)1664  
502870

## TOC-Lean Institute News

### Report on the 2007 Project World conference held in Philadelphia in September.

This conference, organised by our partner Realization in the USA, saw people from a number of organisations from the USA, Europe, India and Australia come together to present their case studies in the implementation of Critical Chain, the TOC approach to project management and using the highly acclaimed software system developed by Realization known as Concerto. The keynote speakers were Stephen Covey and Eli Goldratt who both entertained the conference with their views on organisations and how to develop the people within them.

The companies presenting results included Delta Airlines, BHP Billiton, a number of USAF sites such as the Warner Robbins Air Force base and Ogden Air Force base, Action Park, Alna Software, Erickson Air Crane, Boeing Space and Intelligence, Tata Steel and many others.

Here are some extracts from the papers presented:

**Delta Engine repair and overhaul:** This is an organisation employing some 6,500 people and has a \$1.1 billion operating budget. They have 6 engine lines and also cover landing gear and other parts of the aircraft. Their primary conclusion is that any complex operation can be simplified with the Theory of Constraints, Drum-Buffer-Rope (DBR) and CI tools and techniques such as Lean and Six Sigma. The core issue as they saw it was that competing management objectives drove increased uncertainty that impacted capacity. They implemented a combination of TOC applications, primarily DBR and Critical Chain. The summary of changes included:

1. The creation of all plans with buffers for the engine lines
2. Control WIP and the release of engines into the system based on the WIP levels and the rule of not starting assembly until all parts were available
3. Manage the system using buffers
4. Implement exception management using buffer management

And the results? A 25% increase in engine capacity up from 40 engines per month to 50+ engines/month, 16% - 25% reduction in engine turnaround time (TAT), engine assembly and disassembly times reduced by 18% - 38%, 4 weeks piece part cycle time down to 2.5 weeks, 25% increase in piece part throughput.

This was an impressive performance and everyone at the conference took note.

**Ogden Air Force Base:** This is a base that carries out depot maintenance on the F-16, A-10 and C-130 aircraft. They have 677 people on site and they look after the maintenance and overhaul of six models of C-130. They have 12 maintenance docks and run a 3-shift operation. Their throughput in terms of aircraft was set at 48 per year not including unscheduled maintenance.

They told us that the workload was increasing and that they had to change the way they did work. Ogden implemented Critical Chain with the objective of doing 6 more aircraft (C-130) within the same time period. The key changes they implemented were as follows:

1. Aggressive plans with buffers
2. Pipelining and Release Control
3. Buffer Management
4. Parts Management
5. WIP flushing

And the results? Ogden announced that they had released 10 more aircraft back to Warfighter, that the number of aircraft delivered on-time or early was 25 out of 26, that they were now cumulatively 191 days early over the time period, that the strip and inspect phase is completing in about 20 days of on-dock and the level of parts shortages has come down from around 40+ to 4.

*If you would like to receive a complimentary DVD of all of the project Flow presentations, they can be requested from [dvd@realization.com](mailto:dvd@realization.com)*

Some of the lessons learned and promoted by those attending included the following:

1. To get results you must focus on results: Cultural change will come about only if we get results first; it has to impact the bottom-line. Results can be achieved quickly by changing rules, policies and measurements.
2. Success is achieved when executives are intimately involved in the implementation.
3. Critical Chain is about managing execution effectively.
4. True buy-in comes from realising that the current rules of managing are highly wasteful and need to change.
5. It is important to create an environment that demands and encourages superior execution.

Overall the conference was very exciting, and the presentations from Dr Covey and Dr Goldratt were the icing on the top.

If you would like to know more about how the Critical Chain approach is vital for the management of resources in project driven environments and how it can be applied to your organisation then contact Ted by e-mail at [tedh@toc-lean.com](mailto:tedh@toc-lean.com) or come on one of our short briefing sessions on CCPM.

## **Coaching for success: a new approach from the TOC-Lean Institute with respect to developing people, and the team**

In 1997 I completed a research study looking at why people who have developed the solution to the core problem of their organisation find themselves stuck during the implementation. The full study forms the core of my book "Unconstrained Organisations", and since then I have worked with a large number of people who find themselves blocked in some way from progressing towards their goal in life. This has led me to develop the lessons and knowledge I gained in writing my book and translate it into a programme of coaching and mentoring for people at any level within an organisation.

Over the past 10 years I have seen many people within all manner of organisations, not just manufacturing, who have been struggling with the pressures of managing complex organisations, being faced with a wide range of constraints, choices and demands and having to try to see their way through all this to make the right decision. In many cases they are using the TOC approach, but this is a different kind of problem where one-to-one coaching pays handsome dividend.

Of course this is not new and there are many highly effective coaches working in all kinds of industries today. They use the same tools as I do – Belbin, Honey and

Mumford etc. – in order to try and unblock the individual and allow him or her to achieve their goal in life. However, I have developed the use of the TOC tools for personal focus, giving the ability to search behind the issues and determine what is blocking the person from moving forward. This is all about recognising the importance of developing people within the organisations we are working with. Whilst this has taken many forms, in almost all cases what we have been doing is coaching both the individual and the team in order to help them achieve the goal. In that time we have researched and written about the importance of managing change properly, helping the individual to achieve and helping the team to achieve.

For more details of this new approach contact Ted by e-mail: [tedh@toc-lean.com](mailto:tedh@toc-lean.com)

## TOC-Lean Institute Speaking Events

The TOC-Lean Institute are increasingly being asked to speak at conferences and network/special interest groups. Some of our recent presentations have been:

- Providing the second full day session in the series on Constraint Management for the IMechE in London (Dr Hutchin)
- Speaking on TOC-Lean at the Championing Innovation conference for the Food Industry at Northampton University (arranged by the Food Processing Faraday Partnership) (Tony Lumb)
- Delivering an evening session on Critical Chain Project Management for the IMechE regional group in Derby (Dr Hutchin)
- Speaking on Critical Chain Project Management at an evening meeting of the Coventry branch of the Association of Project Managers (Tony Lumb)
- Presenting to the IET Conference in London on examining the TOC implications for supply chains and balanced score card (Dr Hutchin)
- Giving a talk to the Women in Management group in Leicester speaking about the importance of managing change successfully and demonstrating the TOC approach to change (Dr Hutchin)

Should you wish to have any copies of the presentation material for these events please contact our office on 01664 502860 or e-mail [dianej@toc-lean.com](mailto:dianej@toc-lean.com).

Forthcoming events that the TOC-Lean Institute is speaking at include:

- Speaking on TOC-Lean for the West Midlands Excellence Network on 13<sup>th</sup> November (Tony Lumb) – [www.midlandsexcellence.org.uk](http://www.midlandsexcellence.org.uk)

Should you wish to have one of our speakers at an event you are planning please contact our office on 01664 502860 or e-mail [dianej@toc-lean.com](mailto:dianej@toc-lean.com) and we will send you a brochure outlining our speakers and the topics we offer.

## New Products

I&J Munn Ltd, our linked consulting practice, have developed a new product aimed at the Car Accident Repair Sector, and at Car Body Repair Shops in particular. The "TOC-Lean Body Shop Solution" aims to bring to this sector the benefits of 100% on-time delivery, in a much shorter lead time, with greater overall business productivity.

If there is sufficient interest in education in this new product then the TOC-Lean Institute may add open courses, focused specifically for this industry sector, to our regular quarterly programme of briefings.

For more details contact Tony Lumb by e-mail at [tonyl@toc-lean.com](mailto:tonyl@toc-lean.com).



## TOC-ICO Exams

The next examinations will also be held at our training centre in Melton Mowbray on the following dates:

Fundamentals exam .....	12th November
Supply Chain Logistics exam.....	13th November
Thinking Process exam.....	14th November
Project Management exam .....	15th November
Financial Management exam.....	16th November

For more information contact Diane Jeary in our training office on +44 (0)1664 502860 or e-mail [dianej@toc-lean.com](mailto:dianej@toc-lean.com)

Dates for 2008 will go up on our web site and also the TOCICO web site before the end of November.

## Briefings

The dates for our next set of Briefings are as follows:

The Goal Breakfast Briefing .....	10th December, 7.30am – 9.30am
Critical Chain Project Management.....	10th December, 1.30pm – 5.00pm
Operations Management.....	11th December, 9.00am – 1.00pm
Financial Management.....	11th December, 1.30pm – 5.00pm
TOC-Lean Breakfast Briefing .....	12th December, 7.30am – 9.30am
Sales & Marketing .....	12th December, 1.30pm – 5.00pm
Lean Manufacturing Principles .....	13th December, 9.00am – 1.00pm
Supply Chain Management .....	13th December, 1.30pm – 5.00pm

For more details contact the training office on 01664 502860 or e-mail [dianej@toc-lean.com](mailto:dianej@toc-lean.com)