

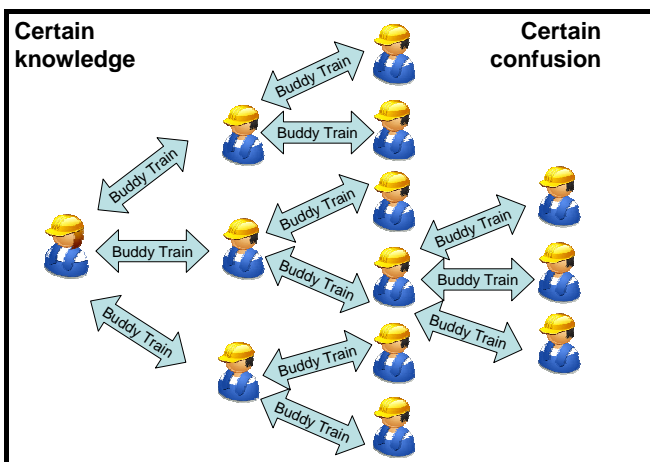
One Point Lessons Help Share Knowledge



When it comes to producing a high quality, lightweight catamaran such as the ones made at Incat, much of the time is spent hand fabricating and manufacturing components and fittings. The final finish and quality of the vessel is the result of the personal care and attention of many dedicated individuals.

But what happens if each individual has a slightly different way of doing things? This is not uncommon in many organisations that utilise a “train the trainer” method of handing down knowledge from one individual to the next. This variation can range from a small change that may result in a task taking longer, to one which could cause significant amounts of rework.

Below: *The impact of Buddy Training on knowledge dilution*



Even when the training is completed to a Standard Operating Procedure (SOP), it is almost certain that the trainer will show the trainee their own particular tips and tricks for helping to get the job done. If there is no SOP, or it is only loosely followed, then the potential for chaos can be even greater.

“Train the trainer” mentoring is also usually carried out only for new starters or when moving into a new role. Once an individual is deemed competent they are competent forever. But this may not be the case, especially if the individual needs to move from one part of the business to the other.

A common organisational method of dealing with such issues is to bury the problem with a mountain of paperwork. Detailed SOP’s and work instructions are written for every step of the process, and people are counselled in situations where non compliance is discovered.

Whilst this can be very productive for increasing the size of an administrative department, it often does very little for the people on the shop floor who are left to muddle their way through and interpret a vast number of often difficult to understand instructions. Often people make a mistake or do the wrong thing without any knowledge of doing so simply because of the accumulation of tips, tricks, and varied instruction.



On an even more serious note, this also tends to push the compliance issue underground. People may have difficulty following a procedure and find short cuts, which managers and supervisors rarely hear of, sometimes with disastrous consequences for product quality and personal safety.

Another method of dealing with the issue of different work practices is to instead use One Point Lessons (OPL's). This is what Incat chose to do. OPL's are a simple instruction on a page. They are not intended to take the place of a multistep work instruction, but they may be used to illustrate specific steps within a work instruction. Each OPL is designed to stand alone and to be delivered by the team leader or leading hand in a one on one 10 minute training session.

There are significant benefits associated with OPL's:

- They are easy for operators and shop floor people to develop – anyone can make one!
- They are easy for operators and shop floor people to deliver – anyone can be a trainer!
- They don't take long to develop or deliver
- They facilitate discussion between team members
- Ownership of the training, skills, and knowledge passes from trainers, the training department, and managers to people on the shop floor
- People *want* to share their skills and knowledge rather than hoarding it

This is not to say that OPL's will, or should, replace Work Instructions or SOP's. However well designed OPL's owned by the shop floor can do a lot to help support and simplify these instructions and procedures.

To address the issue of skills and knowledge within the 2D Pre-fabrication area, Incat established a Skills and Training Team. This team first completed a quick audit of perceived skill gaps within the 2D team based on anecdotal feedback from supervisors, team leaders, and personal knowledge.

The audit showed that the biggest training need was for those people who required simple refresher training in a key skill or who were not completing a task in quite the right way. Rework, standards, and simple things were highlighted as being the big issues – excellent candidates for One Point Lessons!

The next step was to start writing some of these lessons. Key points on the OPL could be key safety, quality, or other features that the OPL is emphasising or demonstrating. This took some time as the team members got used to the format and what was required. At all times, simple hard copy A0 posters, photos, and markers were used. The focus is on the content, not on the formatting! These lessons were then refined and tested a number of times before a final draft was agreed to by the team.

The team then decided that they wanted some assistance to help with more professional presentation of their One Point Lessons. One point lessons were then written up and printed out into A3 form. It is important to emphasise that this is not essential, and a well hand written One Point Lesson is more than adequate and can often be more effective in communicating a message due to the ownership that it provides.

This was when the real testing started. Sure, the OPL had been delivered by the author to some trainees, but how would the team leaders and leading hands go with them? A leading hand was approached to test out the One Point lesson. The idea here was to ask the leading hand to teach the One Point Lesson to one of their employees. Almost immediately, the One Point Lesson went back for revision with some additional improvements from the leading hand. Before long it was finally ready for delivery.

Delivering a One Point Lesson is easy, but this does not mean that it should be done with any less care than longer training.

The delivery process is quite simple:

- Trainer goes through OPL highlighting key points and explaining reasons why
- Trainer demonstrates OPL emphasising key points
- Trainee articulates key points as shown on the OPL
- Trainee practices until demonstrating competency
- Trainee explains the significance of the key points
- Trainer provides feedback

The outcome of the testing process was a success. Not only did the trainee enjoy receiving the OPL as it clarified the question that they had, the leading hand also enjoyed delivering it.

This is a common experience with utilising OPL's – they can actually enhance the relationship between supervisors and their reports, and provides an opportunity for mentoring and feedback.

Whilst the cycle of TPM³ activity may have come to an end, the task of the Training and Skills team has only just begun. They have collectively identified over 50 urgent OPL's that need to be developed to clear up some of the most significant issues at the site. Most of these focus on job task and quality elements. OPL's however can go further and explain specific technical elements such as how welders work, or the structure of aluminium, or details of lubrication, for example. The opportunities for OPL's are endless!



For further information about Lean & TPM or One Point Lessons please contact Tim O'Shea, CTPM Senior Navigator TAS on 0428 525 349, CTPM Australasia Head Office on 02 4226 6184 or

visit our website www.ctpm.org.au

POWER SOURCE **PLUGGED IN CORRECTLY**

HOW TO DO IT:
 LIFT LID OF POWER POINT.
 PUSH POWER PLUG HARD IN AND SCREW UP RIGHT HAND THRED NUT TIGHT



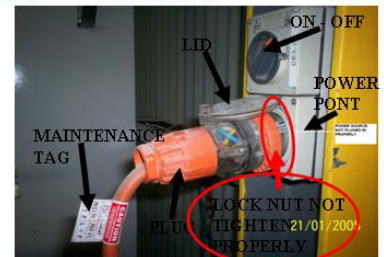
CHECK LIST:

- CHECK MAINTENANCE TAG IS IN DATE
- MAKE SURE LOCK NUT IS TIGHTENED PROPERLY
- MAKE SURE POWER IS TURNED OFF BEFORE PLUGGING IN
- TURN POWER ON WHEN SAFE TO DO SO

POWER SOURCE **NOT PLUGGED IN CORRECTLY**

EFFECT / WHY:

- CAN DAMAGE PLUG
- CAN DAMAGE POWER POINT
- NEVER PLUG IN POWER WITH WET HANDS
- NEVER PLUG IN POWER WHEN POWER POINT IS TURNED ON



Above: The final result

Below: The initial One Point Lesson (OPL) Draft

