



Asphalt Laydown Technician Training Summary Report

Tom Gamblin, Industrial Learning Resources Ltd.

April 29, 2014

Description

Asphalt Laydown Technician Program was sponsored by the *Nova Scotia Road Builder Association* in partnership with *Atlantic Cat*.

Training took place at Perenia Park in Bible Hill, NS, and Atlantic Cat in Dartmouth, NS. This year two “field” trips were included to Will-Kare Paving in Truro, NS. The participants went on a guided tour of the asphalt plant and participated in a small equipment session conducted by Classic Rentals of Truro, NS. Thank you to Andrew Lake for providing the facility and barbeque at the end of each session.

The program was a four week program from March 31 thru April 25, 2014.

“With everything I learned from this course I hope to return to our crew and spread my knowledge ... the amount of information I’ve learned in safety alone will have a great impact for me on the job.”

Participants

Fifteen participants representing seven companies participated in the training program of 120 hours. Participants represented a variety of experience in the paving industry, including crew foremen, MTV operators, paver operators, asphalt plant production, screed operation, and quality control. Participants represented backgrounds in highway and commercial paving. The diversity of company, experience and background (commercial and highway) contributed to the overall success of the training.

Name	Company
Brad Wheaton	Basin
Ellis Carroll	Cumberland
Tony Lunn	Dexter
Todd Seymour	Dexter
Timmy Tardiff	Dexter
Marco Theriault	Dexter
Kyle Marinelli	Northern
George Moore	Northern
Zach Verschuren	Northern
Jaime Hart	Nova
Chris Sinclair	Nova
Stan Fisher	S W Weeks
John Munroe	S W Weeks
Jeremy Tattrie	Will-Kare
Garth Wier	Will-Kare

Trainers

The following trainers presented the program:

Tom Gamblin Howard Chandler	Industrial Learning Resources Inc. Dexter
Mark Medeiros Todd Mansell Nelson Hunt	Caterpillar Global Paving Caterpillar Global Paving Caterpillar Global Paving
Josh Visser	Weiler
Mark Delaney Jonathan McInnis Randy Crosby Evan Redman	Tremble Sitec Atlantic Classic Rentals, Truro, NS Will-Kare Paving, Truro

Contributors

Thank you to the following for their support and contribution to the success of the ALT training:

Dexter construction for providing and supporting Howard Chandler.

Will-Kare Paving for providing for our “field trips” and acting as Truro hosts.

Aubrey Laguff James Bond Allison, Colleen, Kimberly Harry Hart	Atlantic CAT Atlantic CAT Atlantic CAT Loader Operator
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Participant feedback

The following are examples of some of the feedback received from the course participants:

“I am glad I took the course. I thought I knew about paving. I have learned a lot more in this course.”

“Very interesting and well taught course.”

“I don’t have any suggestions for course improvement. It was very good the way it is.”

"This is an amazing course! Would like to have a refresher every 2 or 3 years."

"There is not anything I would change. The course is great and I took a lot of info away from it."

"I picked up a lot from this training and can't wait to start paving and using some of it."

"Being someone with no previous experience, I feel more comfortable with joining a pave crew this summer."

"It was all good. I really got something from segregation, spread rates, rolling patterns and mat defects info."

"I enjoyed the class learning and group activities. Discussing stuff with classmates ensured that everyone understood the subjects (outcomes)."

"This training will change the way I do things. I found the course well laid out and the instructors very knowledgeable"

"Stick time supported the class work. Would like to have more stick time."

"I know we missed a full day, but more stick time would be better."

"The food was fantastic. Always good healthy selection."

"Would like to have had more time on shuttle buggy."

"I liked the safety info especially about the hazards and the math part. Also liked about team building the crew and the commercial paving section."

All participants were positive about the value of the training. Participants would have liked more stick time at CAT. This year we only had three days compared to four days last year. Of the three days weather forced participants inside and a full day on machines was lost. Damp weather also made the MTV difficult to use as crusher dust was "clumping" up inside the machine. None of the participants were able to get time on the MTV.



Class Evaluation

	Total	Average
Meeting your expectations	58	3.9 /4
Level of instruction	57	3.8 /4
Length of presentation	56	3.7 /4
Usefulness of participant guide	58	3.9 /4
Effectiveness of visual aids (Ppt, etc.)	59	3.9 /4
Effectiveness of learning activities (discussions, group work, handouts, etc.)	58	3.9 /4
Overall effectiveness of the training presentation	58	3.9 /4

Trainer Evaluation

	Total	Average
Knowledgeable in the subject	58	3.9 /4
Preparation for training presentation	59	3.9 /4
Professional demeanor	60	4.0 /4
Providing opportunities for discussion of material	59	3.9 /4
Organization	59	3.9 /4
Overall skills of the trainer	60	4.0 /4



Previous Knowledge Assessment

1. Participants indicated their perceived level of knowledge prior to the training session.
2. Participants indicated their perceived knowledge after the training.
3. Each area is representative of the Learning Outcomes for the training program.
4. Percentage growth represents the participants' perceived growth in knowledge for the outcome.

Before Training		Self-assessment of Your Knowledge and Skills Related to:	After Training			
Total	Avg/5		Total	Avg/5	Growth	Growth %
38	2.7	Paving industry in Canada and in Nova Scotia	61	4.4	23	61%
27	1.9	History of paving and future trends	63	4.5	36	133%
46	3.3	Basic asphalt road construction	68	4.9	22	48%
33	2.4	Asphalt production and production plants	59	4.2	26	79%
35	2.5	Five processes of placing asphalt	65	4.6	30	86%
33	2.4	Quality control	63	4.5	30	91%
44	3.1	Your rights and responsibilities under the OHS Act	68	4.9	24	55%
52	3.7	Asphalt safety and work site safety	70	5.0	18	35%
40	2.9	Hazard recognition and control hierarchy	64	4.6	24	60%
47	3.4	Heat stress and heat stroke	69	4.9	22	47%
48	3.4	Responsibilities of paving crew members	68	4.9	20	42%
44	3.1	Safety warnings and labels	65	4.6	21	48%
45	3.2	Inspecting hydraulic hoses and connections	63	4.5	18	40%
37	2.6	General maintenance of paving machines	67	4.8	30	81%
41	2.9	Read and interpret ISO symbols	65	4.6	24	59%
37	2.6	Paver factors that influence mat thickness	66	4.7	29	78%
35	2.5	Screed factors that influence mat quality	67	4.8	32	91%
33	2.4	<i>Adjusting and setting up the screed</i> *	66	4.7	33	100%
37	2.6	Rolling longitudinal joints	67	4.8	30	81%
38	2.7	Rolling transverse joints	67	4.8	29	76%
25	1.8	Milling machines and operation	54	3.9	29	116%
25	1.8	MTV operation.	51	3.6	26	104%
51	3.6	Handwork – Raking, luting and shoveling	63	4.5	12	24%
52	3.7	<i>Other small equipment used in paving</i> *	64	4.6	12	23%
41	2.9	Recognition of mat defects	69	4.9	28	68%
40	2.9	Prevention and correction of mat defects	66	4.7	26	65%
35	2.5	Segregation; causes, prevention and controls	66	4.7	31	89%
30	2.1	Paving by the numbers - 14 Steps	65	4.6	35	117%
30	2.1	TopCon paving	56	4.0	26	87%
26	1.9	<i>Importance and calculation of spread rate</i> *	62	4.4	36	138%
28	2.0	Machine guidance control for paving	59	4.2	31	111%
34	2.4	<i>Setting up of screed</i> *	65	4.6	31	91%
22	1.6	Milling by the numbers	49	3.5	27	123%
20	1.4	<i>Calculating spread rates</i> *	63	4.5	43	215%
55	3.9	<i>Operation of small power tools</i> *	66	4.7	11	20%
47	3.4	Paving parking lots (commercial paving)	65	4.6	18	38%
38	2.7	Paving supervision	64	4.6	26	68%
26	1.9	Calculating weight of asphalt required	63	4.5	37	142%

Recommendations

The following recommendations are offered for consideration:

1. Early promotion of the ALT Training through the NSRBA newsletter or web page. Include a description and course outline. Publish pictures of the training and high lite participant comments from past training.
2. Return to the format of four days at Atlantic Cat as in 2013. The paving scenarios offered by the Global Paving instructors were very valuable in the participants learning. This year Easter Monday cut into the CAT week.

Summary

Every year the ALT Training Program has improved. This year was particularly more interesting as there were seven different companies represented, bringing a more diverse point of view to the classroom discussions.

Unfortunately, due to scheduling and weather there was not a full experience on the equipment at Atlantic CAT as in past years. Two full days were missed of “stick time”. In anticipation of poor weather, there was more “stick time” in the two days than in other years.

The experience for the participants was successful as indicated by the written comments and positive remarks during the summary session. Thank you to the employers and members of NSRBA that attended the session.

Thank you to Grant, Carol and the NSRBA for the support you continue to provide to the ALT Training Program and to myself and Howard.

Tom Gamblin
Industrial Learning Resources Inc.