Longshoremen are “hard-timing” the TraPac terminal at the Port of Los Angeles, in other words working much slower than normal. But though the action comes just a day after the expiration of the current six-year West Coast longshore contract, the action has nothing to do with the contract negotiations taking place in San Francisco between the International Longshore and Warehouse Union and the Pacific Maritime Association.

TraPac, a unit of Mitsui O.S.K. Lines, is the first container terminal on the West Coast to automate the cargo-handling process, a right granted under an earlier ILWU contract, and longshoremen are reportedly working much more slowly than usual. They are reportedly hyper-analyzing safety and repair issues to force TraPac into preserving some of the jobs that automation is designed to eliminate.

In that respect, the implications of what is happening at TraPac could be even more far-reaching than what will come out of the contract negotiations under way in San Francisco. The new contract may run for only three years versus the six-year contract that just expired, and it is not expected to produce any watershed agreements on manning or jurisdiction. Implementation of container-handling automation at TraPac, however, could establish a model for other terminals on both coasts that choose to automate.

“The problem with automation is not the automation. It is the culture of the union,” said Tom Ward, senior maritime planner at Parsons Brinkeroff.

Contract negotiators failed to agree to a new contract to replace the existing one that expired at 5 p.m. on Tuesday. But the ILWU and PMA issued a joint statement saying that “cargo will keep moving, and normal operations will continue at the ports.” Reports from up and down the coast indicate that in fact there have been no noticeable work slowdowns — except at Trapac.

There is no doubt that the work slowdowns at TraPac are costly to the terminal operator. They could also be having an impact on stakeholders such as truckers. The Harbor Trucking Association since the beginning of the year has been tabulating truck turn times at all 13 container terminals in Los Angeles-Long Beach. At TraPac, the turn times increased from 45 minutes in March to 58 minutes in April and 68 minutes in May.

However, it should be noted that many terminals in the harbor are experiencing congestion because of chassis dislocations, problems on the intermodal rail networks and related factors, so it is difficult to single out TraPac. Also, even with its problems, TraPac’s gate times are still
better than at a number of terminals, the HTA numbers show.

TraPac’s problems have been bubbling up steadily for the past month as the terminal went live with the automated modules at its Los Angeles facility. When the automation process is completely implemented, TraPac will use automated straddle carriers to move containers from the berth to the container stacks, and automated stacking cranes to move the containers within the stacks and on to chassis to be pulled away by truckers. This will make it among the most automated terminals in the U.S.

Also, TraPac, because of the unique configuration of its terminal, will be the only terminal in the U.S. to automate the movement of containers to an on-dock railyard.

Longshoremen naturally resist automation because it eliminates jobs. Each automated guided vehicle, or AGV, eliminates the use of a traditional yard tractor (bomb cart) manned by a longshoreman, eliminating dozens of jobs.

The automated stacking cranes are also unmanned, although dockworkers in the tower remotely control the last move of the ASC as it places the container onto a chassis.

However, that move is only about 40 seconds of the ASC’s four-minute duty cycle, so one dockworker in the tower can safely control three or four ASCs, if not more, Ward said. At manual terminals, every rubber-tire gantry crane is driven by a longshoreman.

Some terminals in Europe have used AGVs and ASCs for 20 years, and the results are impressive in several areas. Safety is greatly enhanced because very few humans work on the terminal itself, and are therefore out of harm’s way caused by heavy machines moving heavy containers, Ward said. At all U.S. ports combined, about four to six longshoremen are killed each year, and others are seriously injured, Ward said.

“How can you justify that when automation allows you to get them away from the machines?” he said.

Automated container handling also allows a terminal to significantly increase the number of containers it moves on the same terminal footprint in a short period of time. This is becoming increasingly important as mega-ships calling in Los Angeles-Long Beach generate 5,000 to up to 10,000 container moves per vessel call.

Nevertheless, an important reason why a terminal automates is to reduce labor costs.

Automating a terminal can cost $200 million to $500 million or more, and huge volumes of 1 million 20-foot container units or higher each year are required to cover the cost of this level of automation.

This is where the clash exists between the terminal operator and the ILWU. Automation eliminates dozens of high-paying jobs, and the ILWU wants to preserve those jobs.

The tension is further elevated by the potential loss of maintenance and repair jobs. Ward said the automated machines, with their computer controls, diagnostics, electronics and fiber optics, bear no resemblance to the machines the ILWU mechanics were trained to repair. “These jobs are not for wrench turners,” he said.
From the terminal’s perspective, though, automated units are far superior to traditional units manned by longshoremen because they experience much less damage and downtime. When humans operate machines, they are naturally harder on the equipment than an electronically controlled machine is with no human involvement.

Therefore, with automation, M&R involves much more sophisticated maintenance work and not much repair work, he said.

Therefore, Ward said that when he reviewed the 2008 ILWU contract in which employers agreed that new machines introduced through automation would fall under the jurisdiction of the ILWU, he was shocked. “They didn’t know what they were giving away,” he said.

The next fully automated terminal that will start up on the West Coast will be Middle Harbor in Long Beach. Other terminals are watching closely what happens. If automation at TraPac and Middle Harbor produce the efficiencies, safety improvements and reduced costs that those terminals are predicting, other terminals will have to introduce automation to varying degrees, or they will lose their competitive edge.

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