

**SPECIAL BOARD OF ADJUSTMENT NO. 1141**

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**Between**

**BURLINGTON NORTHERN AND SANTA FE RAILWAY CO.,  
CONSOLIDATED RAIL CORP.,  
KANSAS CITY SOUTHERN RAILWAY CO.,  
NORFOLK SOUTHERN RAILWAY CO.,  
and  
UNION PACIFIC RAILROAD CO.**

**And Their Employees**

**Represented By**

**BROTHERHOOD OF LOCOMOTIVE ENGINEERS**

**And Their Employees**

**Represented By**

**UNITED TRANSPORTATION UNION**

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**Board Members**

Board Chairman: Gil Vernon  
Deadlock Neutral: James R. McDonnell  
BLE Member: Don M. Hahs  
UTU Member: Byron A. Boyd, Jr.  
Carrier Member: Robert F. Allen

## I. FINDINGS

This Neutral, upon the whole record and all of the evidence, finds that the Employees and Carriers involved in this dispute are respectively Employees and Carriers within the meaning of the Railway Labor Act as amended and that the Board has jurisdiction over the dispute involved herein. The Neutral was established pursuant to Section 3, Second of the Railway Labor Act 45 U.S.C. Section 153, Second.

## II. QUESTIONS AT ISSUE

The dispute before the Neutral is presented pursuant to an Arbitration Agreement signed by the parties on June 25, 2002. Sections 6 and 14 of that agreement set forth the jurisdiction of the Neutral. These sections read as follows:

6. The Board shall have jurisdiction only over the dispute(s) shown on Attachment "A". No other claims, issues or disputes shall be submitted to the Board except by mutual consent of the parties to this Agreement. The Board is not empowered and has no jurisdiction to act or decide the matter(s) before it as an "interest arbitration" board. The Board shall not have the authority to create any new rules, add contractual terms or change existing agreements governing rates of pay, rules and working conditions.

14. In its Award, the Board shall confine itself strictly to decisions as to the questions specifically submitted to it.

Attachment "A" of the agreement set forth the questions, one from each of the three parties, to be addressed by the Neutral:

BLE:

The assignment of other than locomotive engineers to operate locomotives via

remote control in connection with the movement of cars, trains and/or engines in terminal operations is a violation of the exclusive rights of locomotive engineers to perform such service pursuant to existing BLE Agreements and established practice.

UTU:

Were the involved carriers proper in their assignment of trainmen (yard conductors and yard helpers) to perform remote control operations in their terminals?

CARRIERS:

The Carriers have implemented remote control locomotive technology, which eliminates any need for an on-board locomotive engineer, in connection with work assignments that involve the gathering and distribution of freight and/or equipment in and around terminals.

Under the Carriers' collective bargaining agreements with the Brotherhood of Locomotive Engineers and the United Transportation Union at issue in this case, may the Carriers assign use of remote control technology to ground service employees represented by the UTU, thereby eliminating the locomotive engineer position?

### III. BACKGROUND

The dispute before the Neutral in general terms is centered around technology that allows the movement of a locomotive to be controlled from a remote location, rather than the locomotive being operated from inside the cab of the locomotive by use of the traditional throttle and brake system. The remote control unit (RCU) is smaller than the size of a shoe box and can be hung on an operator's belt. The unit is referred to as "belt pack" by one of the two manufacturing firms that offer this technology for sale. It contains knobs and switches which relate to the movement of the locomotive. The remote control

device sends commands via radio to a computer/microprocessor that is installed on board the engine which translates the radio signals into electronic commands that operate the locomotive's brakes and throttle systems.

As various rail carriers considered use of remote control technology, both the UTU and the BLE claimed that RCUs should be operated by the employees they represent. The BLE represents engineers who traditionally operate locomotives. The UTU represents, among others, switchmen who control the movement of an engine in yards and terminals by hand signals and radio voice communication, usually on the ground, in the process of moving freight cars and related activities of coupling cars, uncoupling cars, throwing switches, coupling air hoses, aligning couplers and setting hand brakes.

Ultimately, the Carriers signed a Letter of Intent dated September 26, 2001 with the UTU regarding the implementation and utilization of remote control technology, which stated that the UTU employees would be assigned the task of operating the remote control devices. The BLE responded to the Letter of Intent by threatening a strike, which the federal court in Chicago enjoined, finding the issue was a "minor dispute" under the Railway Labor Act, subject to exclusive arbitral jurisdiction and issued an opinion January 15, 2002 in *Burlington Northern and Santa Fe Ry. v. BLE* ("*BNSF v. BLE*"), 2002 WL 47963 (N.D.Ill.), appeal pending, 7<sup>th</sup> Cir.

Following the issuance of the injunction, the BLE initiated negotiations with the Carriers for an arbitration agreement to establish a board to resolve the dispute. Shortly after those negotiations began, UTU relayed to the Carriers in writing that it held an interest in the outcome of the arbitration and demanded to participate as a full party in the proceeding. BLE did not oppose UTU's involvement in the arbitration. As noted, the Arbitration Agreement was signed June 25, 2002.

On August 20, 2002, the Carriers concluded a final Remote Control Agreement with UTU. That agreement addresses issues concerning labor protection, compensation, training, certification, and the bidding and protection of positions occasioned by the implementation of remote control operations.<sup>1</sup>

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<sup>1</sup> The BLE suggests the labor protection is limited to UTU members. The UTU disputes this in a footnote on page 6 of their rebuttal brief which states:

*The labor protection provisions (UTU Opening Submission, Ex 4, Att A) stipulate that for 6 years after establishment of an RCL assignment at any location, a remote control protection ("RCP") slot will be established to be paid at yard conductor/helper rate, subject to reduction by buy-outs, abolishments of RLC positions or establishment of RLC reserve board positions for train or engine employees, and the side letter provides that a carrier may offer up to one-half of buy-outs offered or reserve board positions created to engine service employees. Moreover, engineers may move to RCO and/or RCP slots in the normal operation of "ebb and flow." All of this belies the implication at page 3 of BLE's Opening Submission that engine service employees were cut out of the benefits of the Remote Control Agreement. That agreement goes as far as possible given that UTU has no authority to negotiate directly for most engineers. Moreover, as BLE notes at page 1 of its Opening Submission, the carriers' strike injunction action was held in abeyance pending a membership vote on a BLE merger with UTU. The failure of the BLE membership to agree to merge prevented the full participation by the BLE in the Remote Control Agreement process.*

It may be helpful in understanding this aspect of the dispute that since 1985, most employees hired as engineers by contract with the UTU come from UTU ranks. Moreover, engineers have

Pending arbitration, the BLE came to believe that remote control operators (RCOs) were controlling locomotives from inside the cabs of locomotives, often from the seat formerly occupied by the locomotive engineer. BLE filed a motion asking the court to clarify that the injunction it issued against BLE on January 16, 2002 did not cover such situations. Following a hearing in which counsel presented argument on the motion, the judge scheduled an evidentiary hearing on the issue. Prior to the evidentiary hearing, the parties agreed, without prejudice, to any party's position with respect to BLE's motion or this arbitration that pending a final decision by this Board, RCOs would be instructed that they "shall not use remote control operating units to effectuate locomotive movements from inside the locomotive cab, except in an emergency."

Ultimately, the Board conducted hearings, subsequent to receipt of submissions and reply submissions, in Chicago on November 18 and 19, 2002. It is pursuant to the hearing, the submissions, the evidence and the agreement that the Neutral issues this Award.

#### **IV. OPINION AND DISCUSSION**

The BLE's statement of the question before the Board recognizes that for

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the option to maintain membership in the UTU (UTU-E) or the BLE. The BLE, however, is the exclusive representation for purposes of bargaining contracts concerning the wages, hours and conditions of employment of engineers.

the Neutral to answer its statement of the issue in the affirmative, there must be a finding that the BLE has the exclusive right to perform RCO work by virtue of existing written agreements and/or established practice. The Neutral agrees that this is the appropriate analytical framework.

Whether there are BLE agreements or whether there is a related practice which restricts the Carrier's discretion concerning which craft to assign to RCO duties needs to be broken down into parts. The first of these sub-questions involves whether there exist applicable uniform national agreements which address the issue. If no uniform national rule exists, the question is whether a practice exists along these lines. The BLE also raises questions about whether such agreements and practices might exist on individual properties. Individual properties will be addressed later.

#### A. NATIONAL RULES AND AGREEMENTS

First, with respect to the national question, the Neutral notes the BLE makes a number of arguments and references to national agreements. They assert that General Order No. 27 and the 1944 and 1945 Diesel Agreements stake out an exclusive work jurisdiction for BLE engineers which would prohibit assignment of the RCO duties to employees represented by another labor organization.

It is the opinion of the Neutral that none of these agreements can be

reasonably interpreted to specifically and exclusively reserve the work in question to the BLE. General Order No. 27, issued by Director General of Railroads during the government's operation of national railroads during World War I, was the basis of later-negotiated language between various carriers and the BLE.

However, this language does not define "engineer's" work and it is indeed an overly broad reading to say General Order No. 27 granted jurisdiction to the BLE over the use of any locomotive for any purpose. The purpose of General Order No. 27 is much more modest. The purpose is to simply grant engineers (as opposed to other crafts) preference for positions as engineers. It does not attempt to define engineers' work or specify an exclusive jurisdiction.

As for the 1944 and 1945 Diesel Agreements, these agreements grew out of the transition between steam engines and diesels. At times, during the steam days certain trains required more than one engine and because the operation of a steam engine required the physical operation of on-board valves and such, each engine physically required a separate engineer. The development of diesel engines which had electric-based controls raised the possibility that a multiple engine unit could be coupled together with appropriate hard wiring and operated from a single set of controls.

If anything, the Diesel Agreements, which were based on a Presidential



Emergency Board report dated February 20, 1943, recognized that technology could create operational changes that legitimately, in the words of the Emergency Board, "dispensed with" the need for engineers in the operation of certain locomotives in certain situations (i.e., multiple engine consists). There was little dispute and indeed the two unions involved (the BLE and the Firemen) seemed to acknowledge that one engine crew for each locomotive was not needed. Instead of one crew for each locomotive, the consensus was there should be one extra man in addition to the normal two-man (engineer and fireman) crew on multiple consist/engine operations. More importantly, there was a dispute between the firemen's union and the BLE whether this extra man should be an engineer of some status or a fireman.

It was recommended by the Board that an extra man was only needed in certain circumstances and, if needed, the employee could be from the firemen ranks. In converting these recommendations to voluntary agreements on individual properties, the following language was typical:

In the application of this agreement, it is understood that the existing duties and responsibilities of engineers will not be assigned to others. It is further understood that a second engineer is not required in multiple-unit service where the engineer operates the locomotive with one set of controls.

In the context of the dispute's history, this simply means, beyond the recognition that technology could mean a loss of position, that the assignment of a

fireman as an extra man in certain multiple engine units would not infringe on the existing rights of engineers. The Diesel Agreements have no restrictive application to the RCO set of facts.

The BLE also made arguments concerning the 1985 Incidental Work Rule which appears in both the UTU and the BLE National Agreements. It reads as follows:

Road and yard employees in ground service and qualified engine service employees may perform the following items of work in connection with their own assignments without additional compensation:

(9) Use communication devices; copy and handle train orders, clearance and/or other messages.

The BLE contends that the RCU is not a communication device; therefore, the 1985 UTU Agreement in its opinion does not authorize the assignment of RCO duties to switchmen. It is also submitted by the BLE that the RCU is not a communication device but a set of engine controls. Moreover, it is its position, even if the "belt pack" is considered a "communication device," Side Letter 9 precludes the Carriers from assigning its operation to non-engineers because to do so would infringe on the work rights of the locomotive engineers. The BLE notes Side Letter 9 to UTU's 1985 Agreement provides that the Carriers may not rely upon the provisions of the Incidental Work Rule to assign work to UTU-represented workers if the work belongs to another craft as established on any

railroad.

First, contrary to the suggestion of the BLE, it is the opinion of the Neutral that the Carrier need not affirmatively demonstrate that there is a national rule with the UTU such as the Incidental Work Rule (part of the October 31, 1985 National Agreement) or with the BLE that allows or authorizes the disputed assignments to engineers. While the Neutral is not persuaded by the Carrier and UTU argument that the Incidental Work Rule affirmatively authorizes the assignment of RCO duties to switchmen, the threshold question is whether the BLE contract prohibits assignment of RCO duties to non-engineer crafts. It does not.

Even so, the Neutral finds that the Incidental Work Rule in the context of this particular dispute does not lend support to anyone's position. It does not authorize the Carriers to assign the RCO work to UTU members; nor does it restrict the Carrier. It is not applicable because the Neutral is not convinced that this language contemplated this kind of technology. Any contention that the Incidental Work Rule cuts one way or the other begs the basic question.

The Neutral's conclusion that there is no national rule which specifically reserves remote control operations to the BLE or that prohibits the Carrier from assigning such work to other crafts or that prohibits the elimination of engineer

jobs as a result of technology is supported by the recent history of national bargaining. In 1988 many railroads were served with Section 6 notices that asked the Carriers to adopt a new rule providing that:

- A. Only qualified engineers will man and operate trains *regardless of propulsion or control.*
- B. [Engineers] [w]ill not be required or requested to relinquish controls.

In 1994 the BLE's Section 6 notice to one major Carrier, for example, sought a rule providing that:

No Carrier supervisor, official, non-engine craft employee, *radio transmitting device or other device* will be used to supplant or substitute in the exclusive work of any employee working under BLE agreements.

The above quoted language is illustrative of similar language of Section 6 Notices in the current round of negotiations in the notice it served on CSX Transportation. The BLE proposes that “[t]echnologically advanced locomotives or motive power *equipped for remote control* will be operated and/or controlled by a Locomotive Engineer.” Similarly, on the Union Pacific, the BLE proposed language as follows:

Should technology advance in the industry to the point where the traditional job of controlling and operating locomotives from an on board location change so that the actual train operations (movements) are controlled from a remote location it is understood that the craft of Locomotive Engineers shall be considered as the fundamental affected craft to flow to such new assignments.

It has been held so often, as not to require citation, that when a Union asks for, but does not receive, exclusive rights through the Section 6 process, it weighs

in favor of the proposition that the Union does not have such rights in its existing written agreements.

## **B. PRACTICE**

The BLE recognizes that the agreements in effect between various carriers and the BLE at the time of the Diesel Agreements did not stipulate or delineate many particular duties and responsibilities of locomotive engineers. It suggests this was because—although not articulated in writing—there was a well-entrenched understanding as to the exclusive duties of engineers and conductors, brakemen, switch tenders and yardsmen from virtually day one. Its basic point is not questioned by the Neutral which is that custom and practice are therefore important in determining the issue before the Neutral.

The importance of practice is even more critical given our finding that neither General Order No. 27 nor the Diesel Agreements nor any other uniform written national agreement restricts the Carriers with respect to the operation of technologically born devices, or the assignment of personnel in connection therewith, such as the remote control devices in question.

It is not farfetched to say that there has evolved, through custom and practice, a distinct core set of exclusive duties of engineers and groundsmen (switchmen, brakemen, conductors and switch tenders) in the yard and terminal

operations. The parties, however, disagree as to exactly how to characterize the traditional duties of engineers. Even more sharply disputed is the nature of remote control operations and the nature of remote control operator positions compared to that of traditional engineer work. While described in enormous detail in their submissions, the basic positions of the parties on custom, practice and the nature of the work can be succinctly summarized.

### 1. The BLE Position

The BLE contends that the function of the RCO is in all essential respects, based on custom, practice and the nature of the technology, engineers' work. The RCO, in its view, is operating the engine's throttle and brake and acting as an engineer. Therefore, it is argued, the assignment of the RCO to UTU personnel is a violation of the BLE contract. Indeed, the BLE notes that engineers have even operated engines by radio remote control when engines were added to a train.

They describe as a hoax the idea "that a computer has replaced the engineer." In short, the engineer, in essential form, operates the throttle and the brakes. When controlled from the belt pack, the identical movement is accomplished in virtually the same manner. The operator releases the independent brake moving the independent brake switch on the RCU to the release position.

The RCO then moves the direction control switch to forward and he can select

different speeds. As he approaches his spot, the RCO moves the power control lever to decreasing speed settings, or places the power selector in coast. He brings the locomotive to a stop by manipulating the multi-position independent brake switch or he places the power selector switch in the stop position, and the brakes apply. Accordingly, it is the position of the BLE that the addition of some microprocessors as component parts of a locomotive has not changed the general class and character of the engineer's work. The microprocessor does not let a locomotive decide for itself when to go, which direction to go, what speed is appropriate, when to accelerate or decelerate, or when and how to stop. All of the judgments that a locomotive engineer must make concerning the dynamics of train handling must still be made, and the Carriers have simply assigned that responsibility to a ground service employee.

## 2. The Carriers' Position

The Carriers contend that with remote control technology, the engineer's function is now performed by the on-board computer which has taken over the task of operating the locomotive's throttle and brakes, automatically adjusting for the weight of the train, track grade, and a myriad of other factors. Using the small belted radio transmitter, the RCO directs the computer to move the locomotive at the speed and the direction required just as, in the Carriers' opinion, ground

service employees in conventional operations direct locomotive movements by hand or radio signals to an engineer. The Carriers maintain no violation of the BLE contract has occurred. The RCO is not acting as the engineer—the computer is. The Carrier maintains that the BLE contract does not prohibit the elimination of jobs due to technology.

### 3. The UTU Position

The UTU's position is similar to the Carriers' with respect to the nature of the switchmen's function, the engineers' function and that the latter function has been eliminated by remote control technology. By using the remote control device, the switchman is doing what he has always done and that is signaling the engine to move or stop. Rather than giving this signal by hand or by voice over a radio to an engineer, the signal is sent to a microprocessor on the locomotive which then performs the work formerly done by the locomotive engineer. The relationship between speed, grade, time, distance, weight, throttle setting, and brake applications are essentially determined by a microprocessor and software programming that may be adapted to accommodate any particular operation. A yardman initiates a request and the computer takes over. The mental calculations, previously performed during conventional operations by highly trained and skilled operators, are now performed by the microprocessor. The UTU notes too that



such a finding occurred in arbitration involving identical technology and competing jurisdictional claims in Canada.

4. Discussion on the Issue of Practice and the Nature of Remote Control Operations

To resolve the questions before the Neutral, it is necessary, as each party has done, to discuss engineer duties in yards and terminals, as well as switchmen, and compare it to the nature of remote control operations. Of course, to completely understand this relationship, it is helpful to take notice of the evolution of yard operations, particularly as it relates to engineers and groundsmen/switchmen.

The Neutral believes that the historical relationship between engineers and groundsmen and the essential, exclusive duties of each position can be stated in the following shorthand. In sum, the engineer principally operates the engine and the groundman among others principally controls the engine.<sup>2</sup> It is not a perfect analogy, but if yard/terminals are thought of as city streets, the engineer is like a driver and a groundman is one of the traffic cops. At intersections controlled by a traffic cop, a driver does not move until the traffic cop signals the driver to move.

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<sup>2</sup> A similar distinction, at a minimum, was essentially recognized by the National Mediation Board in a representation matter United Transportation Union and The Kansas City Southern Railway Company, 29 NMB 410 (2002) when it stated: "*Simply put, train service employees instruct the engineer on where to go and how to get there while the engineer moves the train.*"

If the traffic cop signals the driver to stop, the driver stops. If the traffic cop signals the driver to turn left or right, the driver turns left or right. Once his movement is authorized by signal, the driver makes his own decisions about how to operate or drive the car to go where the controller (the cop) has directed the driver to go. Much the same thing is true with engineers and groundsmen in yards and terminals; this fact is born out by the following analysis.

The essential functions of yards and terminals are for the collection and/or distribution of freight cars to and from shippers. Switchmen still line switches, identify cars, couple and uncouple cars, marshal cars for different destinations, make up outbound trains, distribute inbound cars, and service industries by switching cars in and out, lace air hoses, set and release hand brakes, bleed cars, and maintain switching list. The engineer operates the engine.

It is absolutely critical to recognize that in the course of performing yard duties, the engineer does not move the locomotive until a groundman, yardmaster, or other authorized party tells the engineer to move. In the years prior to the 1960s, a groundman communicated what moves he wanted the engineer to make with the locomotive by various standardized hand signals. For example, the engineer might be pushing a cut of cars and had been instructed to move them to a track that requires several switches to be thrown. The engineer, because of the

length of the train and/or curvature of the track, will often not be able to see the distance between the lead car and the switch. The groundman protects the forward point of the cut and controls the speed of the movement of the engine so it is capable of stopping upon his command. Since the 1960s, these signals have been transmitted by voice radio. Once given the signal to stop, the engineer then makes the decision how to stop, given track conditions, train weight, wheel slippage, tractile power and brake pressure. When the switch is thrown in the proper direction, the groundman will signal the engineer to proceed. Without this signal, the engine should not move.

It is in this sense that the groundman controls the movement. Another example makes the same point. In conjunction with the same movement described above, the crew might be expected to push the same cut of cars onto a track to couple to another cut of cars. The switchman will give the engineer directions as to how many car lengths he needs to go; in other words, the closing distance to the coupling. He might tell the engineer to modulate his speed from 5 mph to 3 mph. He might say to come ahead 2 car lengths "easy" so the coupling is made without damaging force and then give a stop command. The record contains other such examples that make the point that it is the groundman who controls the movement of the train. Particularly when the engineer's sight is limited, the groundman

decides what movements are necessary and communicates them to the engineer who then executes the commands by manipulating the throttle and the brakes in various combinations, given all the relevant conditions.

Indeed under Rule 1.47 of the General Code of Operating Rules, to put it in plain terms, the conductor is the "boss of the train," or as some might say: the "potentate of moving freight." The conductor's role as controller of the train has long been a source of irritation for engineers, formally and informally.

A close analysis of the BLE arguments reveals that the BLE doesn't particularly dispute that control decisions have to be made in order to operate engines. For instance, they state in their submission. "The locomotive does not decide for itself what direction to go, when and how to accelerate or decelerate, and when to stop." The Neutral completely agrees with this statement, but it does raise the question: If the locomotive doesn't make these decisions, who does?

With regard to this question, the Neutral respectfully disagrees with the BLE and agrees with the UTU and the Carriers that these control decisions in yard and terminal operations, in their most fundamental form, are not made exclusively by the engineer but are made by the groundman. In the 'move' intensive world of yard and terminal operations, the groundman usually makes these decisions rather than the engineer.

There is no doubt, there exists circumstances when moves are made in yard and terminal operations where the engineer's sight is not limited and he does not need to be told by the groundman exactly what to do and when to do it. For instance, he might be able to see that a switch is not properly aligned and he knows he must stop the train short of it and wait for the groundman to throw the switch. There are no doubt times when significant distances are traveled and the engineer makes some of the judgments on speed. However, the breadth of these decisions in a yard is limited given speed limits and/or restrictive rules. The point, however, is that the control of engines in terminals is not by custom and practice exclusively reserved to engineers. Under operating rules, the groundman principally makes these decisions and ultimately the conductor is in charge of the train. This relates to the important fact that in many instances not only does the groundman have the best view, but he is in a position of peril if the engineer moves the train without the groundman's direction and control.

Given the Neutral's view as to the nature and distinction of the engineers' duties and groundsmen's duties and given our conclusion that control, as contrasted with the operation, of the locomotive is not exclusively reserved to engineers, the question is where does the operation of the remote control device fall? Is it a matter of control or operation? The operation of a locomotive is the

exclusive domain of the engineer. The control of the locomotive is not.

The operation of a locomotive involves the receipt and response to signals from ground employees. This response involves initiating forward and reverse train movements consistent with those signals/commands including controlling acceleration and deceleration while allowing for train mass, track grade, track curvature, wheel slippage, tractive power and brake pressure. Controlling deceleration to a stop involves not only operation of the throttle but often involves modulation and operation of two braking systems, dynamic brakes and independent brakes.

All of this is done while monitoring speed, engine and brake performance. For instance, the engineer will also observe the amperage gauge so as not to burn up the engine or incur rail burn, rail damage and wheel slippage. She/he will observe the air brake reservoir pressure, the brake cylinder pressure, the wheel slippage light, low oil lights and low water lights.

Groundsmen, by use of hand signals and radio (voice) signals, control the movements of locomotives in yard and terminal operations. These signals control when a movement is initiated, the direction of the move, and when it stops, and very often involves commands as to the appropriate speed for the movement. The decision when to go and when to stop also involves braking judgments. The

groundman must also, albeit in a more rudimentary way, understand the effect of train mass and speed and the dynamics of stopping. The groundman must moderate the engine speed visually and give the engineer sufficient warning so as to be able to stop without, simply put, crashing into stuff. Groundsmen also throw switches, identify cars, couple cars, lace air hoses, set and release hand brakes and bleed brakes.

As to the critical question, to wit, "Is the operation of the remote control unit (RCU) a matter of control and signaling or is it a matter of operating the engine?," the Neutral is compelled to conclude that the evidence supports the proposition that the operation of the RCU by UTU groundsmen does not constitute an infringement on the traditionally exclusive duties of an engineer. The critical piece of equipment is the on-board computer (CPU) and the RCU is just a control and signaling device that gives commands to the CPU in a manner consistent with the groundsmen's traditional duties to control the movement of yard engines. It is the CPU that operates the engine, not the RCO with use of the RCU. Thus, the RCO is not supplanting the engineer. It is the computer.

This conclusion is based on the detailed evidence in the record as to the function of the RCU and the function of the CPU. There are many examples in the record, when coupled with the analysis of the RCU, that convincingly make this

point. First, some background on the RCU unit controls. To initiate a move, the RCO/groundman decides the direction of the move. He manipulates an on/off type toggle switch on the belt pack which signals to the CPU to move forward or reverse just as if the groundman radioed the engineer to come ahead or move in reverse. The main knob, on the right side of the machine, has positions for stop, coast B, coast couple (1 mph), 4 mph, 7 mph, 10 mph and maximum, which could be anywhere from 10 mph to 15 mph.

The manufacturers' preferred way, as set forth in the training manual, to bring a locomotive to a stop is to use the speed control since when the speed setting is reduced, the CPU also automatically sets the independent locomotive brake. There is another knob on the left of the belt pack for braking should the speed control not be sufficient. There are preset positions: "release" which is the normal setting, "low," "medium," "full" and "emergency" applications for the independent brake or the train's automatic brake functions should the engine be coupled. The reductions between setting is in 7 pound increments.

It should be noted, however, this generation of RCU technology does not, like an engineer with a traditional throttle and brake pedestal, require a continuous manipulation of the brake and throttle to maintain a constant speed. It is essentially "set it and forget it" technology. The RCU also has settings for the bell



which is normally automatically engaged by the RCU. This is a head light switch. Significantly, there is no feedback given to RCO as to train brake conditions or speed. In sum, the belt pack does not replicate the controls and associated feedback devices in the engine.

We now return to one example which, among others, in the record convinces us that the manipulation of the simple settings on the RCU is just a different way of signaling the CPU/engineer and not a matter of operating the engine which is done by the CPU. According to evidence in the record, the following things happen in the CPU and between the CPU and the locomotive, all as the result of the RCU simply taking his hand and moving the speed knob to the 4 mph setting on the RCU.

The CPU reads velocity data from two speed sensors installed on the engine and decides if the two sources of velocity agree and if not the computer applies the emergency brakes. If the sensors agree, the brakes are released. The bell is rung. The CPU compares the velocity of the sensors to the velocity that is requested by the RCO. If the velocity of the locomotive is less than the requested velocity the computer calculates by subtracting the difference. A PID controller factors in the history of the error between actual velocity and requested velocity. A calculation is made and the CPU increases the necessary amount to the throttle as calculated. There is a fail safe too in that the unit is at a stop and does not begin to move within 20 seconds of the 4 mph request, the computer shuts the engine down sensing that the engine has stalled, there is too much gradient, insufficient power or there is some other condition which could burn out the traction motor. Normally, the engineer would make this decision based on his observations of the engine's performance according to various gauges and meters such as the amp meter. The RCO gets none of this feedback and does not have to make any decisions in this regard.

If after 20 seconds, the engine is moving, the computer senses if the direction of the movement is consistent with the control command. If it is not, the

CPU shuts the engine down, based on the logic, the train is rolling back on grade. If the direction is correct, another logic loop is followed.

If when the request for 4 mph is initiated, the actual velocity is greater than the request, the CPU adjusts the throttle downward by disengaging the generator field contractor and calculates and applies new brake settings taking into account all the same relevant factors an engineer does, such as tractive effort and the gradient. The CPU continuously monitors and makes adjustments to bring the actual speed in line with requested speed. The computer utilizes control algorithms which have been developed and programmed into the computer that ensure that these movements are made in a smooth, reliable and repeatable manner. These algorithms will cause the speed to be maintained independent of the effects of train mass and track gradient subject to the limitations of the locomotive itself. The algorithms duplicate all the decision making of an engineer. All this is done as the result of the flick of the RCO's wrist by setting the speed control to 4 mph.

To again tread on the treacherous ground of analogies, it could be said that a traditional engineer operating an engine is like a highly skilled French chef preparing a seven-course meal from scratch (adding various combinations of ingredients and cooking them in various ways) and the RCO in yards and terminals just puts the TV dinner in the microwave, sets the time and pushes the start button (set it and forget it).

The Neutral is convinced that the act of the RCO turning a knob to a preselected setting is indeed like, in essential respects, passing a hand signal or pushing the button of a radio and relaying a desired speed.<sup>3</sup> The locomotive does

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<sup>3</sup>It is not science fiction to imagine that with voice recognition technology that a belt pack could be replaced with a voice-activated controller so the RCO could control the engine by simply repeating the very voice commands he used to give to the engineer on the radio. The point here is that the assertion that the RCU is a signaling device once removed from oral communications is rock solid.

not respond by going 4 mph given all the track and train mass parameters as the sole result of the RCO turning the knob any more than the traditional engineer operated locomotive goes 4 mph as the result of a traditional groundman pressing a radio button and saying "give me 4." In the case of the traditional engineer-operated locomotive, the train goes 4 mph as the result of the engineer's various and multiple manipulations to the electro-motive and braking equipment of the locomotive and in the case of the CPU-operated locomotive , the train goes 4 mph as the result of the CPU's manipulations.

The Neutral will grant that whether the RCO is acting like an engineer when he operates the left side of the RCU device or the braking function is a much tougher call than issues concerning the right knob or the combination brake and speed side. Several factors ultimately convince the Neutral that even the RCO's use of the left side in yards and terminals does not constitute traditional and exclusive engineer duties. First, its use will be limited. As noted, the speed dial includes built-in braking applications. Turning the speed from 10 mph to 4 mph will automatically result in brake applications. Turning the right hand knob to stop will result in the CPU returning the throttle to idle and commanding a full application of the independent brake which are separate operations on the traditional pedestal. As noted even by the BLE, this is the preferred manner to

control the train.

Second, the generally more limited speeds in yard and terminal applications will minimize the need for complicated braking manipulations. It is also noted the RCO also does not have access to the dynamic brake available to the on-board engineer.

Third, even in the traditional operation, the groundman must have some basic operating knowledge concerning the dynamics of stopping a train as opposed to knowledge about the technical application of brakes. He must give signals to the engineer with adequate and appropriate time and distance to stop. So even braking decisions are to some degree not exclusive to engineers. It is also noted that even in the traditional setting that a groundman while riding in the engine has access to the emergency brakes.

Use of the left side of the RCU, if needed, requires only a simple decision as to how much braking force (i.e., low, medium or full) is desirable and does not involve making decisions about alternating or simultaneous applications of brake and throttle in relationship to changes in regular pressure, velocity, track conditions and train mass. The engineer makes all these decisions while having access to, and receiving feedback from, the speedometer and all the various gauges and meters. The CPU makes all these observations and accounts for them in

making its decisions.

Again, the RCO puts the TV dinner in the microwave and makes simple decisions. The RCO, unlike the engineer, is not making decisions about ingredients, how to mix them or how to cook them. The RCO makes a decision on what result he wants—to go, speed up, slow down, or stop and is not making decisions how to operate the engine in order to get it to comply. This has always been part of the groundsman's duties.

The groundman has not stepped outside his traditional shoes. The CPU, the PID controller and its programmed logic are now making all the decisions and operational adjustments for the engineer. The computer is the composite of all the engineer training and experience its designers could muster. The engineer has truly been replaced by the CPU and, as a result, the technology has dispensed with the need for an engineer. The darn computer even rings the bell.

It is unfortunate, but by no means unprecedented, in this industry that technology has been the basis for work elimination. Many crafts, for many years, and more so recently have felt the brunt of this sobering reality. Radio telemetry devices eliminated the need for cabooses and thus the need to have trainmen there. Direct data-inputting technology allowed for the elimination of clerks who used to enter switching data into computers. Instead of switchmen writing switching and

car information on a piece of paper and handing it to the clerk to input, it became possible for switchmen to input the data directly into a an electronic note pad which puts it into computer-usable form. Advances in technology do eliminate work. The instant development is not just a matter of making work easier. It is a matter, in yards and terminals, of making work disappear. The BLE has been fortunate not to have been a victim of technology since the Diesel Agreement eliminated the need for helper engineers in coupled engine units. But technological advances have caught up with this, the most highly skilled craft in the industry, at least in yards and terminals which is all this Neutral is faced with.

##### 5. The Implications of Work Elimination

In the absence of a written agreement(s) or practice unequivocal, consistent, and mutually recognized to a sufficient degree that it rises to a level of being contractually binding, the Carrier retains the discretion to make these assignments as it deems appropriate including making agreements with the UTU.

The Carrier's agreement with the UTU to have UTU members fill RCO positions in yards and terminals and have their wages, hours and other terms and conditions governed by that agreement does not violate the BLE National Agreements because it does not involve the reassignment of duties and responsibilities that are exclusively reserved to engineers by express contract

language and/or custom and practice. The BLE National Agreements do not restrict the assignment of these duties in terminals to a newly created position of remote control operator in the UTU bargaining unit. Moreover, the BLE agreements do not restrict the Carrier from adopting this technological device which eliminates work and dispense with the need for employees.

The BLE did argue that the parties' past practice has been to bargain over the introduction of new technology that involves craft manning and scope issues. It suggests too that the Carrier tried to bargain on this issue and failed in 1999. The Chairman, however, is not persuaded by this argument. Bargaining has indeed incurred in the past over technological issues in many crafts in this industry. However, the fact that compromises have occurred in the past in other complex and materially distinguished circumstances cannot prejudice the position of the Carriers, or for that matter, the BLE, in this issue. Both the Carriers and the BLE are entitled to have the base question, of whether engineer work is being done by the RCO or whether it has been eliminated, addressed on its own merits. Of course, if engineers' exclusive duties were being performed by the RCO, bargaining to alter this would indeed have to take place. With respect to the Carrier's 1999 Section 6 Notices, they are not material to this specific dispute. The particular language of the Section 6 Notice in question was a general "pie-in-

the-sky" initial proposal served by the Carriers on all the crafts. The proposal in effect represented a request to have each of the Unions agree to eliminate all restrictions and allow the Carrier to do whatever it wanted. The proposal was obviously rejected.

It is of some comfort to the Neutral, but not controlling, that the RCO position in terminal operations when personified looks much more like a groundman than an engineer.<sup>4</sup> An RCO, like a groundman, still spends most of his time on the ground. The RCO, like a groundman, judges the direction and speed of train movements from the ground. He still throws the switches, couples cars, handles air hoses, sets and releases hand brakes and bleeds air brakes.

That being an engineer is not the same as being an RCO is demonstrated too by taking note of Federal Railroad Administration (FRA) training requirements. Engineers train for at least 20 weeks (and sometimes up to 12 months or more). RCO training, by contrast, is currently only two weeks. Engineers are trained in a

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<sup>4</sup>It is in this regard that the BLE argued extensively, forcefully and persuasively that the dispute is not over all the RCO work (the sum of the job) but whether the portion of the RCO's job involving control of the RCU is a matter of doing engineer's work. On this point the BLE's analytical framework is supported by the Canadian Award. Arbitrator Picher, after observing he was impressed with the degree that the new RCO position (north of the border it was called "yard operations employee") encompassed the prior duties of the switchman, he stated: "*The above finding would not, of itself, be an answer to the grievance if, in fact, any significant part of the assignment performed by the yard operations employee could be said to be work falling within the exclusive jurisdiction of locomotive engineers.*"



variety of subjects that RCOs learn nothing about, such as the different uses and combinations of the various brake mechanisms, fuel conservation, dealing with slack, and operations on steep grades. When the FRA required the Carriers to establish new training programs for RCOs, it specifically stated that existing engineer programs would not be appropriate because "introduction of remote control operations is a significant departure from traditional on-board locomotive operations." In sum, less is required of an RCO to be certified by the FRA. Moreover, holding an engineer's certification under FRA regulations does not qualify an individual to be a RCO.

The Neutral also does not find it controlling that the FRA and/or Carriers hold RCOs responsible for errors and are subject to decertification and/or discipline. The fact there is accountability does not mean the RCO is doing the engineer's work. The RCOs accountability is more limited as his responsibilities are more limited. That Carriers may have held RCOs more accountable than they should have (more in line with an engineer) does not wag the dog.

There are a couple ancillary national issues which must be addressed. The first is the UTU's request that the Neutral should clarify that RCOs may operate RCUs from inside the locomotive cars. This relates to the more recent litigation (October 17, 2002) concerning whether the January 16, 2002 injunction applied in

circumstances where RCOs operate from inside the cab. The BLE and Carriers agreed to an order—without prejudice to any parties' position in arbitration—that pending the outcome of SBA No. 1114, RCOs should as a general matter spend their time on the ground except in emergencies. However, the every day practical reality is that even in the traditional engineer-operated model, there are circumstances where groundsmen are in the cab of the locomotive for legitimate operator reasons, whether it be for safety reasons or matters of significant practicality and/or compelling convenience. Nothing more than a recognition that such circumstances occur in the traditional engineer/groundman model is appropriate or necessary in this award except that Carriers should act to limit the RCOs' presence on engines to those past circumstances where it has been an accepted operational practice.

There is one aspect of the "RCO in the cab" issue that warrants comment. According to at least one of the BLE declarations (page 9 of the BLE Exhibit 49, volume 1 H), there have been occasions where one RCO sat in the cab and received radio direction from another RCO on the ground. The RCO in the cab then moved the locomotive according to the direction of the on-ground RCO. This is troubling, not for the fact that a RCO is in the cab, but for the fact that a RCO on the ground is not directly controlling the movement but giving control

commands to the RCO on the engine. This then does arguably put the other RCO in the shoes of an engineer and would be impermissible unless there was an emergency such as the on-ground RCO's transmitter not functioning. All members of a ground crew should have transmitters and utilize the pitch and catch features rather than one RCO utilizing a single transmitter to control the movement based on verbal signals of another groundman. It may be helpful to note another line of demarcation illustrated by (page 7 of the BLE Exhibit 49, volume 1 H): RCOs should not convert to conventional operations.

The last ancillary issue is whether RCO operations may be used on "road switchers, locals and other comparable assignments?" The Carrier framed this question in its opening statement to the Board. It was stated :

So the Carriers' question presented comes down to this: May then, the Carriers, assign the remote control operator positions to train and ground crew employees on yard engines, road switchers, locals and other comparable assignments. That's the universe of the operations that you're dealing with.

While this formulation follows the language of the RCO agreement between the Carriers and the UTU, it could be construed to be a somewhat different or broader issue than presented to the Neutral in attachment "A" of the agreement to arbitrate.

Indeed, the BLE expressed concern over the "quantum leap" from defined yard operations (such as automated humps) to road switchers which they view as

just another form of freight service. In such circumstances, the BLE noted, such trains are sometimes in geography where movements are governed by wayside signals and a trainman would not give a signal to effectuate a move.

It is noteworthy that this is not the first time the parties have tripped over the possible chasm between the language in of the letter of intent (and subsequent finalized agreement) concerning locals and road switchers and the idea that remote control operations would take place in the terminals. Terminals or terminal limits as distinguished from switching limits, define the area in which crews must observe yard operating rules and speed limits. Road switchers and locals are not necessarily limited to terminals.

The parties have had some revealing discussions about "terminals," and the fact that the UTU letter of intent covered road switchers. Indeed, in the January 16, 2002 hearing in federal district court concerning the terms of the injunction the Carrier sought to convince the court to use the language of the letter of intent which references "road switchers, locals and other comparable assignments." The BLE objected that this went beyond the focus of that litigation as evidenced by the Carrier's filings. After some discussion on the possibility of limited excursions outside terminal limits, the court refused to base the terms of the injunction order on the language of the letter of intent. However, to allow for what the Chairman

would describes as minor excursions, the court adopted the following key phrase to describe the scope of the injunction (it applied to disputes): “concerning the plaintiff’s use or plans to use remote control technology in the operation of locomotives in their terminal operations in and around terminals, or work assignments in connection therewith.”

The Chairman indeed shares the BLE’s and perhaps FRA’s concern about the Carriers trying to possibly parlay this dispute into a blank check to operate all road switchers and locals via remote control regardless of whether they operate in terminals.<sup>5</sup> Road operations are not ‘move’ intensive and are not as highly characterized as are yard and terminal operations by groundman command of the train. There is the issue of speed as well which raises a host of questions as to just how much decision making an RCO would be making about braking operations in the conduct of assignments outside terminals and how this interfaces with custom and practice. There may be other legitimate questions.

Nonetheless, the Neutral makes no specific finding regarding the use of RCOs, locals and road switchers other than that subsumed by the framing of the

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<sup>5</sup>On October 10, 2002, in a letter to the American Association of Railroads, the FRA’s associate administrative for safety stated: “*Except for minimal light freight movements within the immediate vicinity of yard areas, FRA does not believe that the current state of RCL technology or the current state of RCL operator training programs are suitable to support RCL operations on main tracks. Some examples of main track operations would be intra-yard transfer movements; local freight service; relieving outlawed trains, etc. Of course FRA will continue to work with the railroad industry to further explore this issue.*”

questions before the Board. In this regard, the Neutral notes that all three parties framed their issues in the Arbitration Agreement in terms of remote control operations in the "terminals." Any questions about the type of assignment which can be operated by remote control with an RCO can be resolved based on the natural implied boundaries of the questions submitted to the Neutral.

If a local or road switcher is confined to terminal limits, it contractually can be operated by an RCO. The Neutral is specifically constrained in Section 14 of the Arbitration Agreement to limit itself to the questions specifically submitted to it. Clearly, the issue presented to the Neutral was not necessarily whether the broad language of the Carrier's agreement with the UTU violated the BLE agreement, but it was more discrete and limited to questions concerning the priority of the assignment UTU represented RCOs to perform remote control operations in and around terminals.

### **C. INDIVIDUAL PROPERTIES**

The BLE, in addition to its contentions regarding National Agreements and practices, provided separate submissions on a property-by-property basis. It contends these separate treatments of individual rules and practices also establish that the BLE position should be sustained locally. It submits that because the existing agreements and established practice create an exclusive right for

locomotive engineers to operate locomotives in connection with the movement of cars or trains in terminal operations, the Carriers' assignment of other operating craft personnel to do that work via remote control is improper.

The individual property presentations and the Carriers' related replies are as extensive, if not more extensive, than the National Uniform Rule and practice presentation. This is understandable since several of the individual properties have as many as six sets of agreements with as many separate bargaining committees each related to predecessor railroads which had been subsumed by multiple mergers.

The Neutral acknowledges that the arguments on the individual property and sub-property presentations touched on, among others and not limited to, the following subjects:

- (1) BNSF
  - (a) Former Atchison, Topeka and Santa Fe: The June 1, 1982 Agreement; October 1, 1986 Agreement; Correspondence/Understandings 1992 Concerning Black Boxes
  - (b) Former Frisco Road: Article 2, Section A
  - (c) Chicago, Burlingham and Quincy: 1971 Correspondence/Understandings Concerning Low Speed Speed Regulators; 1988 Correspondence/Understandings Concerning Low Speed Speed Regulators in Havelock, Nebraska; Article III of the 1964 National Agreement as applied on the property; Public Law Board 5464 Award 11; Mediation Agreement A-4359
  - (d) Great Northern Railway: Rule 71; Rule 22-2; Rule 23; Rule 8; Rule 86; January 12, 1943 Memorandum of Agreement
  - (e) Spokane, Portland and Seattle: Rule 42(u)
  - (f) Northern Pacific Railway: May 1, 1955 Memorandum; Article III,

Section 2 of the 1964 Agreement; October 12, 1971  
Correspondence

- (2) **CSX TRANSPORTATION, INC.**
- (a) Louisville and Nashville Railroad: Article 26, Section 13 of the January 1, 1976 Agreement
  - (b) Seaboard Coast Line Railroad: Article 25(j) of the September 1, 1975 Agreement
  - (c) Chesapeake and Ohio Railway: Rule 27; the CSXT Operating Rules
  - (d) CSXT Northern Lines: Article 31, Rule 3, Award No. 1 of SBA 907, Award No. 144 of Public Law Board No. 1305
- (3) **KANSAS CITY SOUTHERN AND NORFOLK SOUTHERN**
- (a) KCS: May 1, 1973 Schedule
  - (b) NS Northern Lines: Article 2; Article 7; Article 33; Appendix 1 to the July 1, 1999 Agreement
  - (c) Alabama Great Southern Railroad: Article 29
  - (d) Central Georgia Railroad: Article 4; Article 14
  - (e) Cincinnati, New Orleans and Texas Pacific: Article 29; Article III, Section 2
  - (f) All Properties: Various Operating Rules and an analysis of engineer and RCO responsibilities
- (4) **UNION PACIFIC RAILROAD COMPANY**
- (a) Northern Region: Rule 13 of the December 1, 1955 Agreement; Rule 8 of the December 15, 1954 Agreement; Article I (c) and Article II (c) (3) of the Chicago Terminal Complex Agreement
  - (b) Eastern District: Rule 1(d)(3) of the May 1, 1954 Schedule; May 1, 1954 Schedule and Rule 117(e); Rule 53(c) and (d)
  - (c) Central Region: September 3, 1981 Agreement
  - (d) Western Region: Article 47 of the February 16, 1943 Agreement; Correspondence Concerning July 6, 1983 Section 6 Notice; Article 33 of the 1958 Agreement; the 1977 Merger Agreement; Rule 127, Rule 76 of the January 1, 1977 Agreement; Appendix 21, Section 1(d) of the April 20, 1968 Agreement
  - (e) Systemwide: The May 31, 1996 System Agreement Attachment (d) Concerning Peer Training

In spite of the detail in the separate submissions, a close study of the extensive arguments reveals that these agreements all fall into one or more of the



following categories: (1) They extend preference to engineers for engineers as did General Order No. 27, which has already been addressed by the Neutral; (2) they are a derivative of or similar to the 1944/45 Diesel Agreements which says existing or exclusive duties of engineers cannot be assigned to others which has already been addressed by the Neutral; (3) they assume engineers work still exists and has not been eliminated and therefore beg the question; (4) they involve different technology and recognition by a particular Carrier whom agrees it merely assisted the engineer and did not replace him; (5) they involve seniority rules which distinguish a yard engineer's entitlement to yard work based on intra seniority (i.e., versus road seniority) considerations rather than inter craft jurisdiction; (6) agreements that are clearly based on timing did not and could not contemplate remote control technology; and (7) a few agreements which are too equivocal and thus do not support the BLE claims.

#### **D. VOTE**

The Chairman votes as follows:

- 1. The BLE statement of the issue is answered in the negative.**
- 2. The UTU's question at issue is answered in the affirmative.**
- 3. The Carrier's question at issue is answered in the affirmative.**

Each of the partisan members of the Board will serve his vote upon all

members of the Board within 5 business days of the issuance of the neutral member's vote and, in the event a majority exist, the majority vote is adopted and ordered as the AWARD of this Board pursuant to its authority under the Arbitration Agreement and Section 3, Second of the Railway Labor Act, 45 U.C.S. Section 153, Second. Consistent with Section 16 of the Arbitration Agreement, the Award shall become effective 14 calendar days after a majority vote is established or a deadlock is broken under the procedures outlined in the Arbitration Agreement, and shall be final and binding on the parties, subject to the provisions of the Railway Labor Act, with respect to the matters covered.



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Gil Vernon, Chairman and  
Neutral Member/Arbitrator  
Special Board of Adjustment No. 1141

Dated this 13<sup>th</sup> day of January 2003.