



Photos by U. S. Army, P. G. C.

Switching Operations in the Yard at Andimenshk

Sgt. Carmen Serrienne, of Niagara Falls, N. Y., the conductor, signals engineer, T/5 Donald Kukull, of Hartford, Wash., while the brakeman, Pvt. Donald Welton of Youngstown, O., operates the switch—Watching the operation is T/Sgt. Stanley T. Jakubowski, of Milwaukee, general yardmaster.

30 Months of M.R.S. Railroading in Iran



Dropping a Piston Into a Cylinder of an American-Built 1,000-hp. Diesel-Electric Locomotive

(At left): T/Sgt. William Hess of Millsboro, Pa., non-commissioned officer in charge of the Diesel platform in the Ahwaz car shops; (Kneeling): Pfc. Andrew L. Edwards (center) of Big Fork, Ark.; and Pfc. William J. Vines of Woodville, Miss.

A SMALL number of rear echelon troops now remains at the various army-railroad camps along the 685-mile single-track Iranian State Railway which, after two and one-half years of American operation, lately has reverted to the control of the Iranian government (see *Railway Age*, July 14, page 67).

In the 30 months since the Americans went in, the 3rd Military Railway Service has delivered from Persian Gulf ports to the capital city of Teheran, Iran, nearly 3,000,000 long tons of lend-lease war materials to Soviet Russia, over what Headquarters calls "one of the world's longest and most tedious supply lifelines." Railroading in Iran meant working in weather ranging from intense heat in the desert to freezing temperature in the mountains.

At peak strength the 3rd M. R. S. totaled 4,026 enlisted men and 194 officers. Carrying capacity of the line was increased by constructing terminal storage yards, additional sidings, repair shops and fuel storage facilities, rehabilitating the entire route and replacing track, particularly in the mountainous tunnel section.

Motive power was increased by U. S. army railroaders with the addition of 180 locomotives. Of these, 57 were 1,000-hp. Diesel-electrics, 8 were 45-ton Diesel switching locomotives, 24 were 25-ton Diesel switchers bought by the

Iranian State Railway, and 91 were 2-8-2 steam locomotives lend-leased to the British. To the rolling stock was added 5,175 freight cars of which 2,304 were lend-leased to the British. Air brakes were installed on most cars, and almost half of the nearly 8,000 cars in service at peak operations were equipped with heavier couplers that lessened danger of accidents.

Conglomeration of Power

Soon after the army railroaders took over, January 1, 1943, an average of 10 trains a day entered the Andimeshk yards, to be reassembled into half as many more for the long trip north through mountainous territory. "Those early days were a railroader's nightmare," recalls T/Sgt. Stanley T. Jakubowski, of Milwaukee, since 1943 yardmaster at Andimeshk, and formerly train clerk for the Chicago, Milwaukee, St. Paul & Pacific.

"When we first took over, we had all kinds of motive power—American, Swedish, British and German. Some of the engines were coal-burning. Others were oil-fired. We even had some wood-burning switch engines. Later we got some American-built 1,000-hp. Diesel-electric locomotives, and for some time we had to switch by the light of fire-boxes," the yardmaster added, thinking about the engines without headlights.

Nor was that all, according to Sergeant Jakubowski. "Rolling stock had been built to varying standards by a half-dozen countries. Some cars were vacuum-braked, some air-braked and some hand-braked. Others had no brakes whatever. Some were un-braked but piped so that they could be placed between air-braked cars."

In making up a train, length, tonnage and brake distribution always had to be considered. High-octane gasoline and explosives had to be isolated, and clearances for the mountain tunnels considered. The maximum train length was set at 43 cars, because sidings at way stations, each spaced 9 to 15 miles apart, could not accommodate a larger consist unless it was broken.

Adding to the switching problems was the fact that no more than two power or hand-braked cars were permitted between those that were air-braked. At the height of operations, trains crammed with supplies would be strung out along the railroad south of Andimeshk for miles, waiting to get into the yards.

More Than a Tunnel a Mile

Chief dispatcher at Andimeshk was Capt. Lester Trout of Oskaloosa, Ia., and Roanoke, Va., former traveling freight agent for the Colorado & Midland. Two former railroaders served as assistant dispatchers—T/Sgt. William N. Neubeck, of North Collins, N. Y., agent for the Erie, and T/Sgt. Leighton R. Niles, of Cedar Rapids, Ia., former dispatcher for the Waterloo, Cedar Rapids & Northern. There were, in addition, seven dispatchers, at Andimeshk, who had a thorough knowledge of their territory. In the Luristan mountains, the grade averaged 1.5 per cent and in one stretch the railroad moved through 133 unventilated tunnels, having a combined length of 40 miles, in 106 miles of roadbed. The dispatcher sat before a selector which enabled him to call any of the way stations with a chest telephone and headpiece. Trains were moved in positive blocks under line-clear tickets. When a train approached a station, the operator called the next station and received authority to move the train.

During the height of operations an average of 12 trains a day were moved over the division.

In the car shops at Ahwaz, 13 members of the 762nd Railway Shop Battalion, under Foreman T/3 Edward H. Young, of East McKeesport, Pa. (former inspector for the Westinghouse Air Brake Co.), and his officer in charge, 1st Lt. Verner B. Adair (also of Westinghouse), installed, maintained and repaired air-brake equipment on steam and Diesel locomotives and rolling stock. Whereas at first only 12½ per cent of their equipment had air-brakes, applications were increased to the point where "runaway trains became a rarity" on the mountainous downgrade known as the "Dive Bomber" division.

At the start, their handicap was lack of tools, Foreman Young recalls. There

was no test rack, so one was built from salvage material. Toward the last, the job consisted mainly of maintenance and repair, with about five sets of brakes being checked into the shop each week.

2nd Lt. W. E. Lott, of Louisville, Ky. (former engineer on the Indianapolis division of the Pennsylvania), "knows every rock formation between Andimeshk and Teheran," having been continuously on the road investigating and checking engines. One angle of his work has been instructing classes (these were compulsory) in the operation of Diesel locomotives used exclusively in the mountain territory. For classes, two engines were placed on a siding at

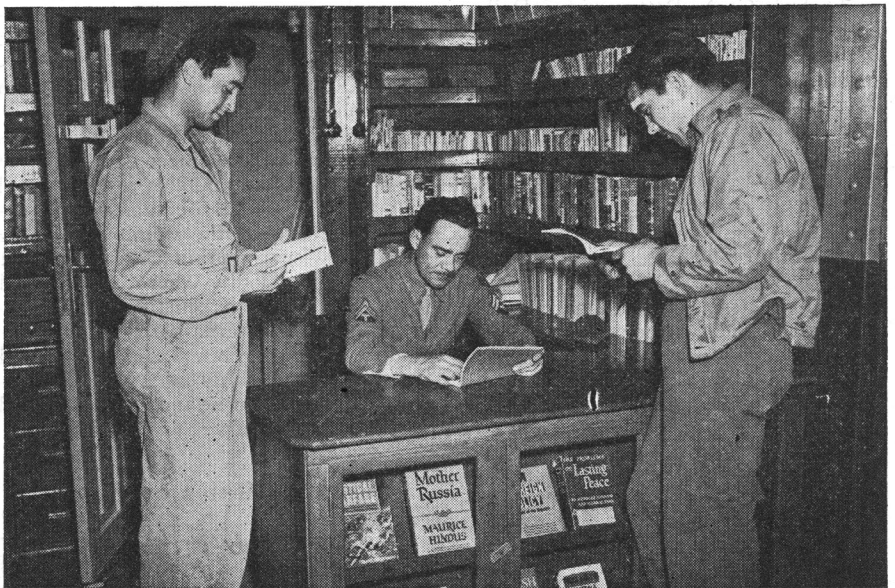
Andimeshk. The procedure was for two crews to go over the locomotives repairing the man-created defects. As Lieutenant Lott explained it, "Dirt is placed in electrical contacts, a bad fuse replaces one that is good and so on. There are dozens of defects that will stall an engine and which can be adjusted without the aid of tools. The men go over the engines and try to locate the sources of trouble. It keeps them on their toes, and, what counts, keeps the trains moving."

High in the Luristan mountains, Tange Haft, was the home stop for 30 army railroaders who worked the "rat hole" division between Andimeshk and



Dispatching at Andimeshk

T/5 William S. O'Dell of Fulton, Ky., a dispatcher, with chest phone and train sheet showing location of the trains. Looking on, T/Sgt. William N. Neubeck, of North Collins, N. Y., one of the three assistants.



Traveling Library and Classroom for Military Railroaders in Iran

The only mobile unit of its kind in any of the war theaters, this rebuilt box-car, which brought news of other theaters and educational opportunities to men in the P. G. C., contained a library, small stage, radio, phonograph, motion-picture projector and folding demonstration panels for maps and charts, and had seating capacity for 40—At the desk is T/5 George E. Schroeber, of Washington, D. C., a member of the 791st Railway Operating Battalion, assistant in charge of the car. Standing are two unidentified army railroaders.



Installing a Main Bearing on the Engine of a Diesel Locomotive

(From left to right): Sgt. Jack Flicker, of Philadelphia; Pfc. Andrew L. Edwards of Big Fork, Ark., and Pvt. Michael Barnetts, of Bethlehem, Pa.

Doroud (so-called because of the numerous unventilated tunnels). There they had their own power plant, water supply and purification system, and three barracks, two of them air-conditioned brick structures. All except two of the men were members of the 791st Railway Operating Battalion. Engineers, conductors and brakemen on the Diesel freight trains from Andimeshk made anywhere from 8- to 16-hr. layover at Tange Haft before proceeding to Doroud. Sgt. C. A. Patterson, of Dallas, Tex., a former Texas & Pacific conductor, was in charge of turn-around barracks at this point.

Safety Record Good

Another distinguishing point about Tange Haft: According to Headquarters, it was known to the army railroaders "as one of the best of all places to get a good meal." T/4 John Brooks of McComb, Miss., was in charge, with three cooks and two helpers.

Two trouble-shooters of Company A, 762nd Railway Shop Battalion, also made their home point at Tange Haft. They were S/Sgt. Victor Rothe, of Kansas City, Mo. (formerly with the Union Pacific) and T/5 Wendell K. Miller, of Kansas City, Kan. Their job was to ride the Diesel electric locomotives on the central division between Andimeshk and Arak, inspecting engines and making emergency repairs.

Four wreck trains were stationed along the Iranian State Railways. Typical of the train consist would be two cabin cars, one equipped to sleep eight; a kitchen car, a tool car, a fuel and water

tender, a 75-ton derrick and the block or idle car under the boom. The wreck crews' biggest job came last September when 27 cars and their cargo left the rails, overturned and burned between Arak and Samagan, ripping 2,000 ft. of track. It took 20 hours to clear the line.

In its operation of the Iranian State Railway, the 3rd M. R. S. never had a soldier killed or permanently injured in a main-line accident.