

A great Engineer: Paul Riboud

(Ecole Polytechnique Class of 1891)

By Albert Caquot

(Ecole Polytechnique Class of 1899 and Member of the French Academy of Sciences)

Our dean, an eminent servant of France, has left us in his hundredth year.

He had throughout retained the remarkable demeanor of a man whose wisdom controlled all actions and who was interested in all elements of life. The last time he and I talked, we discussed the current problems of Western nations, and the solutions that could be foreseen.

Paul Riboud was born on boulevard Voltaire in Paris, on December 16, 1872. His father, a P.L.M. employee, carefully watched with his mother over his education and instruction, which began in the small private school next door. Then, with the advice of his school principal, to whom he had spontaneously given German lessons, he was able to enter the Charlemagne School on a half-scholarship in 1882. He had a brother three years older who died of croup in 1878, which distressed him a great deal.

This period, after the unhappy war of 1870, is characterized by the reaction of all French people, even modest ones, to help the nation free itself from its war debt. The general public mood was far from the utopian conception of the welfare state.

He entered Ecole Polytechnique at the top of the first year class. He was particularly grateful to Edouard Lucas, his teacher in the classes dealing with road construction.

His three years in Versailles at the School of Application allowed him to live near his parents, but in 1897 he was appointed to a post in charge of a group of national and local roads. He moved away from Versailles to

establish his own home, but then had the misfortune of losing his young wife and the expected child.

At his request, he was appointed in 1901 to an important post dealing with local roads and railroads under the management of the Chief Engineer Limasset, the navigation of the Aisne River under the command of Chief Engineer Bourgin in Reims, and the navigation of Oise River, which was under Chief Engineer Duzusea in Compiègne.

He was able to redo his home with a remarkable woman, Mlle. Marie Paris, who was a wonderful companion throughout her working life.

His career in Soissons was brilliant. He was much loved by his chiefs for the quality of his construction and his rigorous punctuality. He was working a lot, visiting sites, administering three departments, and checking out or doing the long calculations of the structures. This is how the projects were carried out by him for these railways and local engineering works.

These projects used the new technique of reinforced concrete, and included the bias bridge of Soissons, and other bridges at Pontavert and de Guignicourt, and the Château-Thierry Bridge. The latter was remarkable for the low curvature of its arcs in spite of its force loads, as well as its moderate price. Destroyed in the center of the Battle of the Marne, it was rebuilt using the same drawings. These projects served the labor-intensive sugar beet region of Soissons.

After President Combes had imitated Louis XIV for the French people, during election time local newspapers in all the constituencies competed with each other using biased and false reporting. Railways under construction were a topic of interest to readers, so engineers were basely slandered.

The CLA Director of Personnel Veille, despite his political nature, had particular esteem for the high moral and professional Paul Riboud, and he offered new positions to this brilliant engineer. ·

Paul Riboud headed for the eastern network on the advice of Chief Duzuseau, who introduced him to the eminent engineer Descubes. They understood

each other at the first interview, and Paul Riboud was immediately taken out of his prior responsibilities.

On October 16, 1908, he became Principal Engineer. He was placed at the head of the railway district of Troyes, where he made the acquaintance of the engineer responsible for all the railway bridges in the Aube department.

I knew his reputation from those of my classmates on mission in Soissons, and our acquaintance became a deep friendship when the disaster of 1910, affected our services. In January, with no flood forecast, Troyes, located too far upstream in the valley for the design of this period, had its dikes surmounted and several neighborhoods flooded. Five of the seven railway lines using its station were completely cut off.

In the main bed of the dam, the discharge structures had no deep foundations and had crumbled. Even an important work of art on the minor bed, such as the Arso val-Jaucourt bridge on the railway line from Paris to Belfort, was destroyed.

Paul Riboud proved to be an exceptional director in the disaster recovery effort. All rail and road circulation was restored in a few weeks by implementing either direct repairs or temporary aprons. And this was all done with a remarkable economy.

Then, when the most important arrondissement in France, that of Paris, became available with the retirement of engineer Muntz, Paul Riboud was appointed Chief of the district in September of the same year 1910.

He was a tireless worker, being at his desk one hour before the office opened and being the last to leave, and he gave a strong push to all railroad track modernization efforts.

On February 16, 1914, he was appointed Deputy Chief Engineer of the railroad. This network was the remarkable tool which had allowed General Joffre to quickly regroup the French armies in World War I and it allowed the victory of the Marne.

Paul Riboud ensured steady railway service for the region. As manager

he was also in charge of coordination with the Thur valley recovery effort in Alsace, as well as liaison work with military engineers responsible for the strategic rail lines, station management and the design and repair of works of art. He inspired dedication and respect through his hard work and efficiency.

On April 21, 1915, he was made Knight of the Legion of Honor.

On May 15, 1919, the Director of the Network, Gerardin, made him his deputy and, when he retired in 1921, proposed to the Network Council that Paul Riboud be his successor.

The successive Presidents, Gomel, Renaudin, and Marlio, all appreciated Paul Riboud's knowledge, high intelligence, total independence, and the new Director's rigorous sense of social justice.

The Eastern railroad network, strongly structured, with a lean management, was alone during this period to in making contributions to the national finances as well as other rail networks.

Simultaneously, Paul Riboud was providing his railway workers with important benefits. On June 11, 1931, the model house of Séricourt was inaugurated for treatment of employees suffering from tuberculosis. Continued devaluation and the economic dislocations created by Parliament no longer allowed for the necessary housing for the new generation. Yet Paul Riboud built 39 towns for railway workers, most of them with social services.

France owes him a debt for having foreseen the importance of communications and the country's industrialization. He understood ahead of others what was economically valid and necessary.

His attention focused on France's eastern border when Hitler published Mein Kampf and the Nazis gradually took power. He doubled the size of the Gare de l'Est and all of its tracks and it is the only train station in Paris that has been able to meet the demand for since that time. This magnificent achievement, inaugurated in December 1931, was made possible by Chief Engineer Descubes. It was he who had welcomed Paul Riboud and had had the greatest confidence in his engineering skills and the decency and moral standards of this eminent builder.

In 1930, suffering from a problem with his retina, Paul Riboud offered his resignation. It was refused by the Network Council. Despite the embarrassment and suffering, his willpower overcame the hardships and he continued his leadership until August 1, 1935, when this time President Marlio finally accepted his retirement.

It is not without emotion that we reread the deliberation of the Network Council of the Company where the two Presidents Renaudin and Marlio thanked their Director and conferred on him honorary status.

Family trials were not spared him. He then had the misfortune to accidentally lose Nicole, his third child, a sweet and beautiful young girl.

High intelligence, great authority, total personal modesty, this is what I remember and keep in mind when I think of my incomparable friend that we have just lost.

To recall the milieu of the East Company in the past, I refer to the testimony of two ministers of public works. Roy, who ranked the East first of all the networks, and my friend Monzie. He said of Paul Riboud, with his great spirit of finesse, that he was a moral plumb line.

A Commander of the Legion of Honor, Paul Riboud was honored with numerous foreign awards.

During his 27 years spent in the Eastern network, he had lived intensely through three catastrophes: the flood of January, 1910, the war of 1914-1918, and the terrible accident at Lagny in December, 1933. That had particularly affected him as he had paid constant attention to improvement of security.

Paul RIBOUD was also interested in any national effort. When in 1921, under the presidency of Marshal Liautey, we wanted to save the future of aviation after the economic policies of the government and laws of parliament had rendered it moribund. Despite its magnificent role in victory, great French people like General Marchand (the hero of Fachoda), Edouard Michelin, Javary and Paul Riboud wanted to awaken public opinion. And some people responded to this call.

To make aviation active, they thought of a commercial network and created a company, SODAC, entrusting its presidency to Paul Riboud. But he couldn't get deliveries from the Post Office and the Ministry of Control of the railway networks hampered any serious effort. Thus, SODAC could not develop the essential structure of the aerodrome network it was studying. In 1933 the company had to dissolve.

The highly contested the politics of France between the two wars led us directly, by lack of preparation and lack of understanding, to the disaster of 1940.

Paul Riboud remained very active after his retirement. At the request of Raoul Dautry, he directed a general review of the railroad routes to prepare for progress in the next twenty years. It set a high standard that each part of the review is a teaching marked by the precision of its presentation and the logic of its solution.

He left us on September 25, 1972, in Aloxe-Corton (Côte-d'Or). He was with his children, in his hundredth year, and rests in Chindrieux (Savoie) near the house he had built for all his family.

We can only offer to his children, Mr. and Mrs. Louis-Noël Latour, Mr. and Mrs. Jacques Riboud, to their many children and grandchildren, our veneration and profound sorrow in the fond memory of this great Frenchman.

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