Resurrection in Moscow...

Following Burial in South Bend

Packards with a Russian Accent

by Griff Borgeson

Photos courtesy of the author

ONE OF THE most fascinating aspects of the economic history of our time is the role played by the capitalist system in support of the communist system. Unfortunately for us and for posterity, the story of this strange symbiotic relationship never will be fully told. This is because each side, in the interest of good politics and good business, has obliterated the facts systematically and as quickly as they have taken form. One has to scratch hard, therefore, to retrace some of the steps which have led from the Packard factory in Detroit to the Stalin factory in Moscow and to the vast Gorki works on the Volga.

It was not long after war ended in Europe on May 7, 1945, that photos of Packard limousines taken in the Red Square began to appear in the international press. The cars were not identified as Packards, however, but as examples of the new, Moscow-built ZIS-110. The Soviets had been known to copy other products of western industry, and it was generally taken for granted that this was another case of frank imitation. The Soviet choice of such a bourgeois status symbol amused many observers, who recalled Lenin's preference for Rolls-Royce cars. Most Americans were scandalized.

While in Los Angeles in the spring of 1952, I was invited to inspect "a Russian Packard." It had been captured in the Korean War, and an American officer had shipped it to his home in North Hollywood. It turned out to be a perfectly banal and good 20th Series Packard Super 8 limousine. It was an exact duplicate of big Packards which were made in Detroit between August 25, 1941, and the end of that year, when civilian automotive production ceased due to the United States' entry into the war. This precision of identification was made easy by the six chromed bars located low on the fenders, on either side of the radiator grille. Packard stylists had added them in order to try to give the traditional senior-line coachwork something in common with that of the brand-new Clipper line. The Soviets kept the bars for their intrinsic ornamental value.

It was difficult to find much to say about the car. It had seen much use and was badly in need of an engine overhaul. It was obvious that it was built at least as solidly as its Detroit counterpart, from which it differed in only a very few small details. These included a star on the radiator ornament and on each wheel cover, Cyrillic lettering on instruments and nameplates, and a wheelbase 0.75 inches longer than the 148 inches

of the standard big Super 8 160/180. The carburetor, with the name Stromberg cast on its side, seemed to be of purely American production. It seemed inconceivable to the experienced eye that the Soviet car had not been made from original Packard tooling, but lacking any further facts, I did not write a report on what now seems to have been the only ZIS-110 ever to reach the United States. It received a little scornful attention in the local press, which branded it "a crude communist copy," and was heard of no more.

Packard policy seems to have been simply to say nothing about this deal with the Soviet Union, and the American specialized press has avoided the subject with care unto this day. In his 1965 book, *The Packard Story*, Robert Turnquist explains the deal in terms of President Franklin D. Roosevelt having coerced a reluctant Packard management into selling its precious 160/180 tooling and dies to the USSR for patriotic reasons. *Automobile Quarterly's* almost unbelievably definitive new book on the Packard marque refers to the sale of the dies to the Soviets, but otherwise steers clear of the whole shadowy subject of the ZIS-110.

In Soviet references to the car, Packard is not mentioned. In his book, *From the Self-Propelled Carriage to the ZIL-111*, published in Moscow in 1961, author A.S. Issaiev devoted some pages to what he calls the ZIL-110. These are the initials of the Moscow factory after it was de-named for Stalin in 1956 and re-named for its long-time director, I.A. Likhatchev. The author recounts that the factory:

"...received from the government the mission to prepare the production of this comfortable first-class car already in 1943, while the enemy was still close to Stalingrad. In this way, along with accomplishing the mission of fabrication for Soviet military production, the collectivity at the same time organized the supply of passenger cars.

"Immediately after the ratification of the validation of the models conceived, the factory began to organize preparation for the fabrication of ZIL-110 cars. In a very short space of time the collectivity fabricated 2850 different dies, around 3000 jigs, 50 complicated molds, as well as the equipment and special tooling for approximately 10,000 different purposes."

Referring to this vast undertaking, Soviet writer Margus Kuuse remarked in *Autocar* for June 23, 1979: "The most brilliant design and the most accurate dies are just the starting point towards a complete and well-working automobile. For solving countless technological problems several members of ZIS' design group were awarded the State Prize, the highest acknowledgement possible."

Returning to Issaiev's book, he goes on to say that, "The first five cars were built in August 1945, and as of this moment the intensive work began of assuring regular automotive production, this goal being completely achieved in 1946.

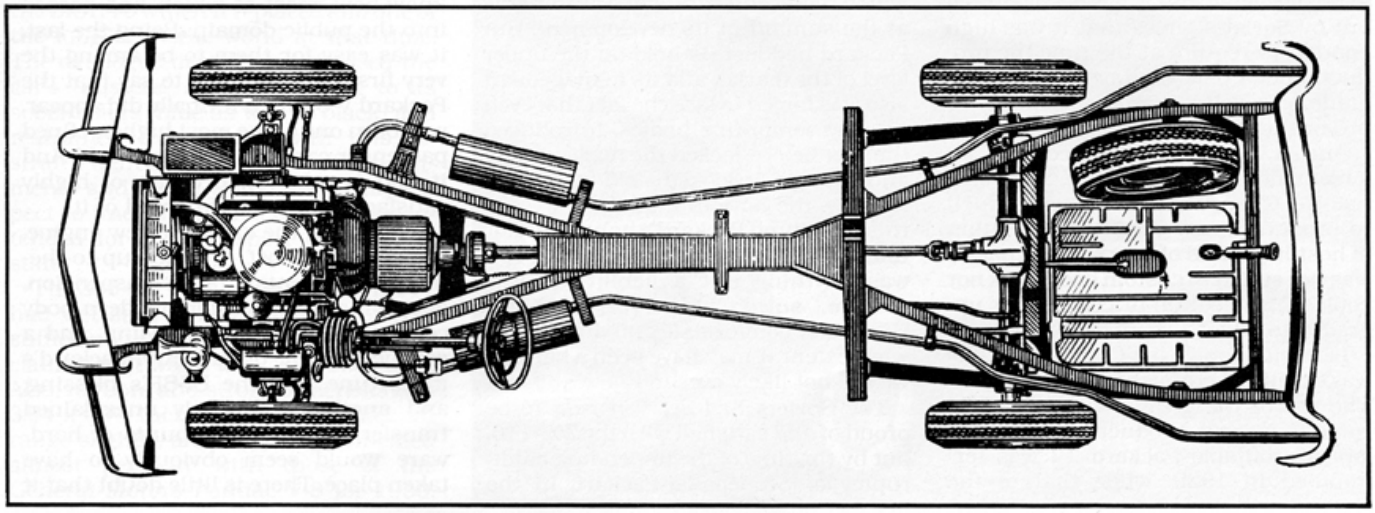
"In 1947 the Moscow factory built the first ZIL-110s with open bodies, of the 'cabriolet' type.

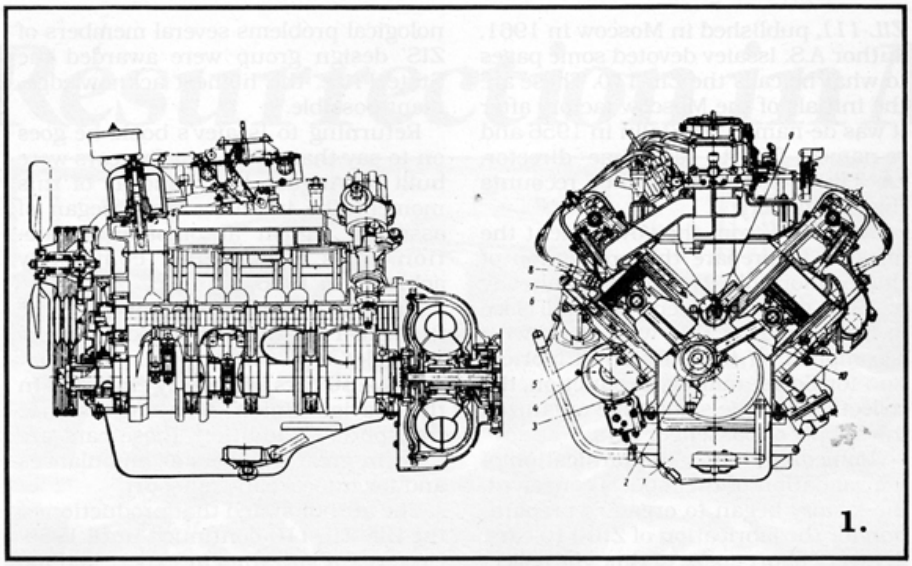
"ZIL-110 cars are largely employed in the Soviet Union for long-distance transport. In addition, these cars are used in great numbers as ambulances and for interurban transport."

The author stated that production of the ZIS-ZIL-110 continued until 1959. However, a government expert told me in Moscow in 1961 that these cars, which he described as being intended only for the use of dignitaries, still were being produced in small numbers.

While Packard quoted the output of its big 356-cid engine as being 165 bhp at 3600 rpm, the Soviet rating was 140 bhp, with top speed given as 87 mph. The Stromberg carburetor which I had observed was renamed the MKZ-LZ and Issaiev quoted the car's fuel consumption as being 10.25 mpg. The Packard

Opposite: *The first batch of five ZIS-110 limousines under construction in August 1945.* ***Bottom:*** *Chaika GAZ-13 convertible sedan needn't take a back seat to any car in the excessive-use-of-chrome-trim sweepstakes.* ***Left:*** *One of the few ZIS-110 limos outside the USSR is in the hands of a New Jersey collector.* ***Below:*** *Chaika chassis is strong-looking, conventional X-form.*





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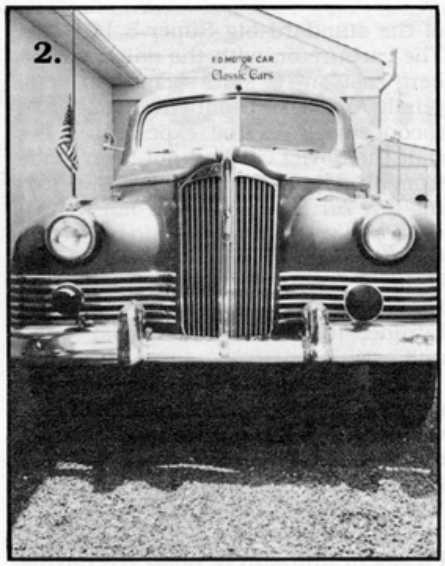

***1.** Chaika V-8 develops 198 hp at 4400 rpm. Engine uses wet cylinder liners. Dimensions and design are very close to Packard V-8. **2.** and **3.** Packard origins are blatantly obvious in ZIS-110 which is essentially the 20th Series Packard 160/180 intended for the 1942 model year.*

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160/180 owner's manual did not specify battery capacity, but a 150 amp/hr unit was called for for the ZIS-110. This enormous capacity presumably was dictated by the Russian climate.

The compression ratio of the ZIS-110 is not specified, but it has been pointed out by Soviet sources that it was high enough to require at the time the production of a new, high-octane (74 MM) grade of gasoline, made specifically to power this car.

Author Turnquist lamented that, "As a result of this agreement, Packard only had the Clipper Series dies with which to produce a new car at the cessation of hostilities, and of course, this chassis was not suited to custom body work nor could this medium-priced car be upgraded to a true luxury car."

Left with "only" the Clipper to build, was exactly where Packard wanted to be. The era of the great luxury cars had come to an end. Production of the no-longer-profitable Packard 12 was terminated in 1939, while that of the senior-line 160/180 was set up in the junior-line factory. For the first time ever, both lines were made under a single roof.

The 160/180 power plant was new when it was introduced in August of 1939, and it was the most powerful eight-cylinder passenger-car engine then being built in the United States. With nine-main-bearing crankshaft and zero-clearance hydraulic tappets, it was a marvel of smoothness and silence which represented the side-valve engine at the summit of its development. But Packard had lost its hold on the upper level of the market and its management also was forced to face the fact that even its new senior-line bodies, introduced the year before, lacked the magic of yore and already looked old-fashioned. Happily, the Soviets were there to take this liability off Packard's hands. But for that developing country the 160/180 was anything but a liability. It was simple, solid, powerful, elegant, supremely comfortable and durable. To what extent it may have been a bargain we are not likely ever to know.

The Soviets had every reason to be proud of and satisfied with the ZIS-110, but by the time of the impending bankruptcy of Studebaker-Packard in the mid-fifties, they again felt the need for a new prestige car. Once again, the needs of the one suited perfectly the needs of the other.

The new Packard engine which was released in 1955 was the last of the wave of short-stroke, overhead-valve V-8s which had permeated the American industry in the postwar period. Its designers therefore found themselves in a position to benefit from a vast accumulation of hard-won experience and know-how, most of which had passed into the public domain. Being the last, it was easy for them to be among the very first, and it is safe to say that the Packard V-8, when it finally did appear, was born one of the most highly refined passenger-car engines in the world. And it had years, even decades, of highly satisfactory service life ahead of it.

Along with the excellent new engine, there was a host of other up-to-the-minute elements: frame, suspension, automatic transmission, modern body construction, advanced styling, and a cornucopia full of gadgetry. Packard's misfortune was the USSR's blessing, and another completely unexplained transfer of colossal amounts of hardware would seem obviously to have taken place. There is little doubt that it

included the latest Packard body dies and tooling; the evidence is there for the world to see. As for other elements, such as transmissions and engines, we have only conjecture and coincidence to guide us. There are no clues in Issaiev's book, which concludes with the first rays of the dawn of the ZIL-111/Chaika era.

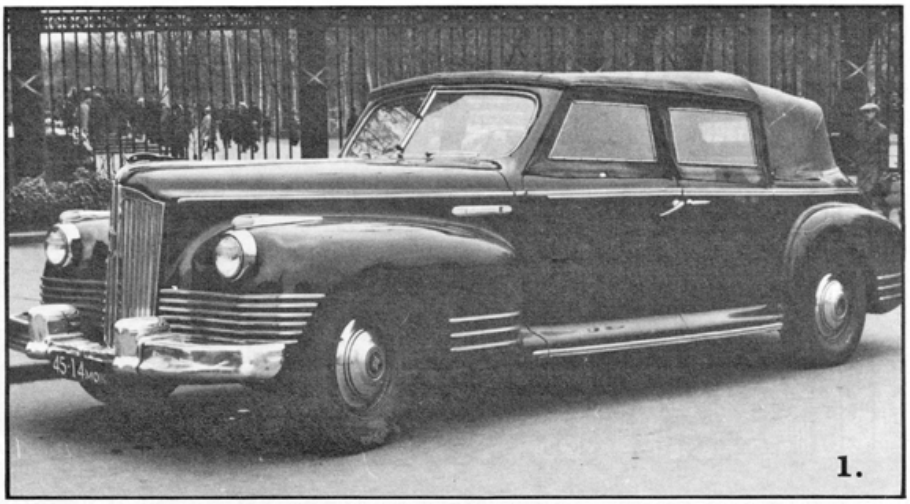
"In 1956-1958," he wrote, "the I.A. Likhatchev factory in Moscow prepared a new car, the ZIL-111, for the replacement of the ZIL-110. The replacement of the engine was projected with [a unit] one-and-a-half times more powerful, and at the same time more economical and more durable, with fuel consumption inferior to that of the ZIL-110.

"The factory built the first model of the ZIL-111 and introduced it in 1956 at the Industrial Exposition in Moscow, but after this it was modified and altered. The factory did not begin to produce the new ZIL-111 cars until 1959."

The 1956 prototype pictured in Issaiev's book bore a superficial resemblance to the big Packards of the mid-fifties but was by no means a replica nor an aesthetic success. However, the eight-passenger limousine which was adopted as the definitive ZIL-111 at the start of the 1959-1965 seven-year plan was indeed a quite faithful replica of the 1955-1956 big Packards, complete with "cathedral" headlights and dual exhaust-pipe openings incorporated in the rear bumper. There were numerous modifications to decor, including the blunting of the ubiquitous bullet-shaped American front-bumper projections. Contrary to his treatment of other vehicles, including the ZIS-110, Issaiev gave no technical information on the ZIL-111 and Chaika, both of which probably still were undergoing development when his book was written. But he did state that the ZIL-111 pertained to "the upper class."

This was emphatically the case. While the Packard Patrician and Executive models were limited to a wheelbase of 127 inches, the ZIL-111 boasted one of 148 inches—just a shade under that of the ZIS-110 which it replaced and one of the longest in the world at that time. The catalogue description stressed the car's "austere" aspect, referring to its sober colors (blue as well as black) and restrained trim. Along with this restraint went all of the quality of appointments and finish which one would expect to find in a formal conveyance intended for the transport of heads of state.

The 365-cid V-8 engine of the ZIL-111 had wet steel cylinder liners, which is sufficient to crush the often-repeated claim that it was a Packard power unit. Also, its bore and stroke dimensions of 3.94 x 3.74 inches missed the Packard range slightly, although they coincided almost perfectly with those of the General Motors Pontiac V-8 for 1959.



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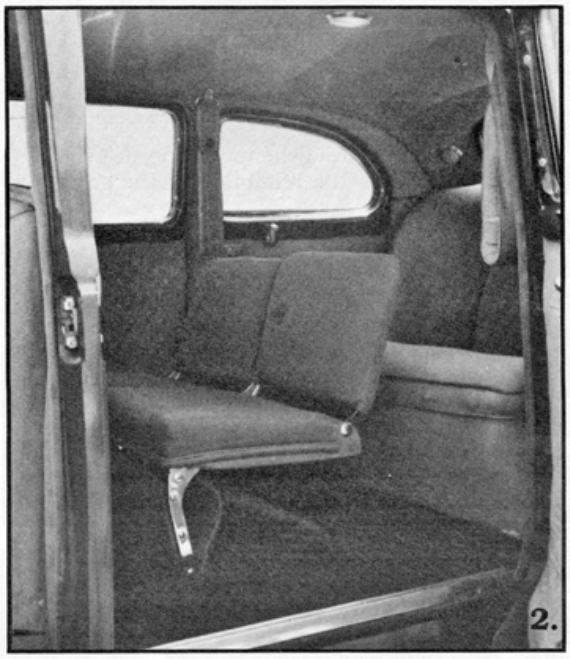
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1. First ZIS-110 convertible sedans were built in 1947. This well-used specimen appears to have lost its roll-up windows as side curtains were not a standard feature. 2. ZIS-110 interior is typical of any Caddy or Packard limo of the prewar era. 3. The Chaika GAZ-13 as introduced in Brussels in 1958 brought a great leap ahead in Soviet styling with two-tone color schemes.

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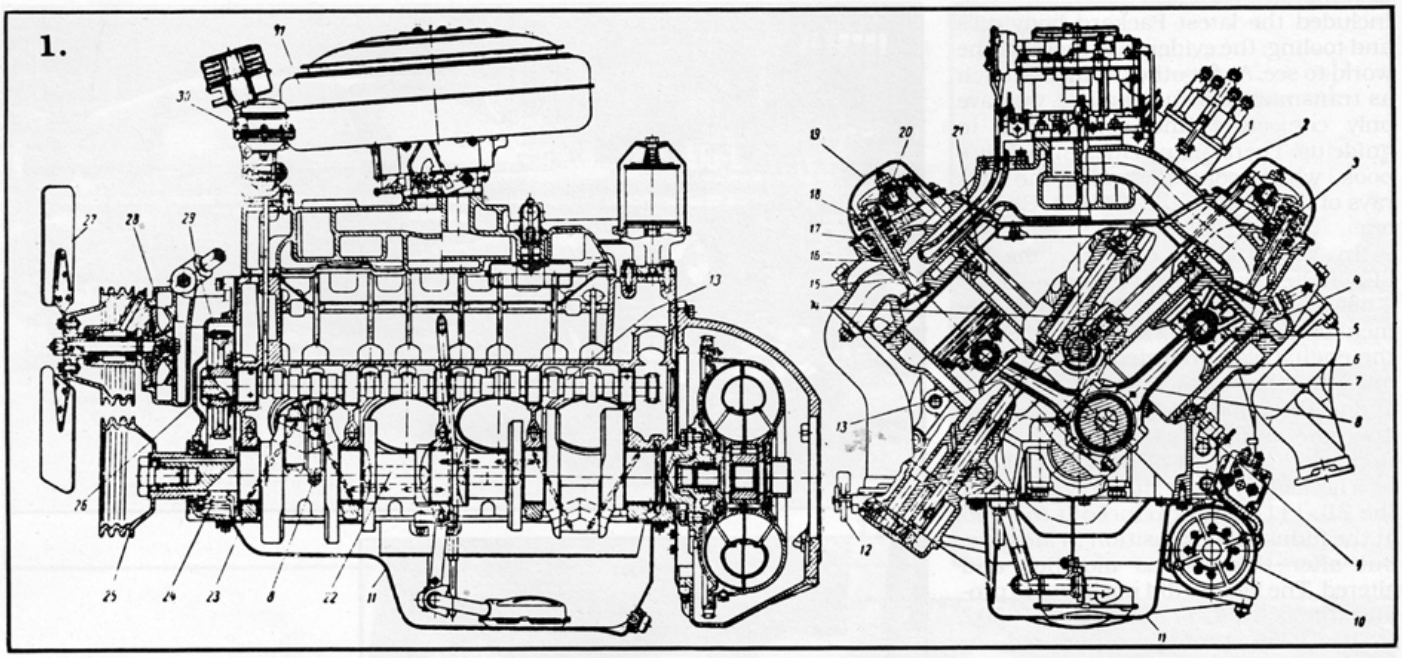

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The engine may have been designed totally in the USSR, but it clearly was patterned after one or more good Detroit V-8s. With a four-throat carburetor and 10.5-to-one compression, the ZIL-111 engine was credited with 200 bhp at 4200 rpm. The 1959 Pontiac, with the same compression ratio and carburetor type, developed 300 bhp at 4800 rpm.

G.A.Z. are the initials of the Gorki works, the Soviet Detroit on the Volga and the country's largest producer of passenger cars. The first Chaika, or GAZ-13, was presented at the Soviet Pavilion at the Brussels World Fair in 1958, where it is said to have been awarded the Grand Prize. In appearance it was identical, except for length and trim, to the superior-class ZIL-111. With its wheelbase of 127.95 inches, it was even more identical to the last big Packards, with their wheelbase of 127 inches. The Chaika was offered in bright and gay two-color combinations, far from the uniform black of previous prestige-car tradition. It bristled with almost every luxury feature which Jim Nance had intended that his Packards should have, including power steering and brakes, and electrically operated windows and radio antenna.

The pushbutton torque-converter automatic transmission of the ZIL-111 and GAZ-13 appears to have been of pure Chrysler Powerflite origin, circa 1956, and to have undergone no development over the long intervening years. It is the most frequent source of trouble in these more modern cars, which are generally conceded not to possess the reliability of the great old 110.

All GAZ-13 variants have employed an X-shaped oval-tube frame similar to the classical type which was introduced on the Mercedes-Benz Type 170V in 1934, and which of course is excellent. The frame of the very long-wheelbase ZIL-111 seems to have been a conventional American type with riveted and welded box-section side members and a massive central cruciform member of the type reserved by American manufacturers for use in conjunction with convertible bodies. Solidity obviously is the keynote. Both of the Packard-bodied new Soviet cars were equipped with straightforward coil-spring i.f.s. and semi-elliptic springs slung under their solid rear axles.

It is quite possible that the 3.94 x 3.46 inch (100 x 88 mm) Chaika engine and the 4.0 x 3.5 inch (101.6 x 88.9 mm) Packard were one and the same, although there is little possibility that this ever will be known with certitude. The 337-cid Chaika used a four-throat carburetor with a compression ratio of 8.5 to one and was set up to operate on much lower-octane fuel than the ZIL-111 or the Packard. Thus the GAZ-13 developed 195 bhp at 4400 rpm at the outset, this figure later being raised to 207. The Packard V-8 of closely similar dimensions, with a two-throat carburetor and compression ratio of ten to one, was rated at 240 bhp at 4600. The Chaika's top speed was given as 99 mph (160 kph) and its fuel consumption as 15.5 mpg. Both figures probably are slightly conservative.

The various Soviet automotive people with whom I have had contact have found it difficult to learn very much about their own industry, and their understanding of its foreign associations is hazy. Concerning the genesis of the post-110 prestige cars, Margus Kuuse stated in *Autocar*, "...three new American cars were purchased—two late model Packards (the Caribbean and the Patrician) and a 1956 [Chrysler] Imperial. When the first new ZIL-111 prototype appeared in 1958, it was said by a number of American experts that it was merely a Packard copy—but this was strongly denied." Another Soviet engineer told me recently, "With the ZIL-110 the era of the marque's direct association with the American auto industry ended. But the similarity in everything, from fundamental concepts to insignificant detailing, remains strong to the present day."

In other words, speaking openly of copying is admissable, even though it may be greeted with strong denial in the teeth of the visual evidence. What is *not* alluded to is the direct American origin of designs, dies, tooling and components. The silence of qualified Soviet sources on this subject is fully matched by the equivalent American sources.

Another subject on which Soviet officialdom has maintained total silence over the decades has been production figures for VIP cars. This brings us to the most remarkable revelation in this story. According to the information which I have been able to gather from very good Soviet sources, production of the ZIS/ZIL-110 and of the ZIL-111 ran from about 16 to 22 *units* annually over the years. Production of the various GAZ/Packard models has hovered around 100 units per year.

We are, then, dealing with handcrafted, custom-built conveyances. They correspond rather closely to the luxury "exotics" now being made for the occidental VIP market. The logistic requirements of production on such a rarified scale raise a whole new mass of

questions concerning how the Soviets do their thing, both in engineering and economic terms. For example, where do the big V-8 engines come from, what do they cost, and how is their tooling amortized? Lacking any answers at all, we are left to ponder in bafflement.

Although the introduction of a new Chaika, the GAZ-14, had been scheduled for 1977, the GAZ-13 remained in production well into 1979. Thus the Packard-USSR accords gave the 1938 Super 8 a life span of at least 23 years and the Nance regime's new body one of 24 years. Soviet appreciation of Packard's elegance, solidity and performance added nearly a quarter-century to the effective life of the grand old marque. □

About the Author: Griffith Borgeson was born into a car-loving family in Berkeley, California, in 1918. He began writing about cars in 1949 and has written hundreds of articles and several books. The best known of these is *The Golden Age of the American Racing Car*, over 30,000 copies of which were sold before it went out of print. There are rumors of a new edition. A new book to be published in the coming months is *The Classic Twin Cam Engine*, a comprehensive history of that high-performance breed in Europe and the USA.

The scope of Griff's interests and expertise is very broad, and his contacts with important figures of automotive history here and abroad are remarkable. His interest in the Soviet industry began well before he visited Moscow in 1961, where he also established important contacts. He moved to Turin, Italy, in 1963, and has made his home in the South of France since '65. His reason for moving to the old world was to be in a better position to study the origins of the automobile and of Western civilization generally. He has been European editor of *Automobile Quarterly* since 1975 and his work is published widely throughout the world. This is his first contribution to *SIA*.

***1.** ZIL-111 V-8 also uses wet sleeves, is dimensionally close to '59 Pontiac V-8.* ***2.** The ZIL-110 in an unfamiliar suburban American setting.* ***3.** A 1961 ZIL-111 in more natural surroundings: Moscow.* ***4.** Chaika GAZ-13 limousine was produced from 1958. Although officially replaced in 1977, new cars were still being delivered during the first half of 1979.*