

GENEVA-TRENDS AND ANALYSES



The Allemano-bodied ATS GT made its debut at Geneva and was certainly one of the most exciting cars at the show. Radiator, spare wheel, and battery are in the nose.

World sales battle more
intense than ever.
Switzerland's "open
market" provides
its customary pointer
to automotive things
to come.

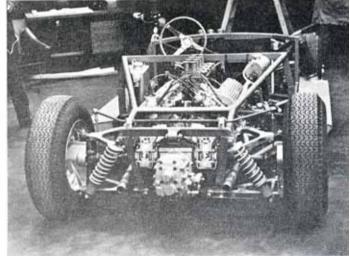
MOTOR SHOWS come and go but Switzerland is a truly international platform and the Geneva Salon is undoubtedly the most informative of them all from a significance viewpoint. With its mid-European position and its "wide-open" trading structure this prosperous little country can be regarded as a pulse for automotive moves, and the fact that the annual exhibition held in the "diplomatic" town of Geneva is staged in the early spring, imparts a fresh, new-season feeling which undoubtedly promotes trade.

The 1963 show was notable for five entirely new cars from Italy and Germany, and many interestingly revised models from Britain, Germany, and Italy. Two Russian cars were presented with British diesel engines, and Japan exhibited for the first time. Definite trends were a strong continuation of the theme for more power, passenger, and baggage space from small-engined cars, the ever-growing use of disc brakes, even on family models, the minimization of servicing tasks (and costs), and the spread of good looks and dignity of appearance to practically all marques. From exhibits and show-time announcements it also seems certain that alternating generators will soon be seen on large production cars from the "western" world.

For many months the rumours have gained strength that Daimler-Benz were testing a new sports model based on the "220" engine, to replace the four-cylinder 190SL. With enlarged 2,306 c.c. engine (from 2,195 c.c.) the new car made its debut at Geneva and in fact also replaced the more "hairy" 300SL. With a choice of three body types: roadster, hardtop, and coupé, the new model has (in the two last-mentioned body styles) a typically "SL" look to the body proper, and a tall roof which the French-speaking



Just the thing for a fast week-end. Luggage-type baggage goes in through the lift-up rear window of the ATS. Designer Chiti (spectacles) and tester Jack Fairman (striped tie) wonder who is going to drive. The ATS girl watches them in the rear-view mirror.



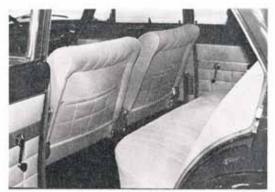
ATS out of battledress. The 2.7-litre V8 engine is mounted ahead of the rear suspension, is in unit with five-speed all-synchromesh box. Dunlop disc brakes are mounted inboard at the rear, and Lucas fuel-injection is available as an alternative to the Weber carburetters seen here. Two longeron-type fuel tanks are fitted, and the show car had a Lucas AC generator.





FAR LEFT: Lancia's new front-drive Fulvia follows the current accommodating cubist theme from nose to tail. The boot is roomy but requires a generous lift to clear the lip. Four-wheel Dunlop disc brakes are standard equipment. LEFT: The Fulvia's narrow-angle V4 engine is installed in a sub-frame at an angle of 45 degrees, and is in unit with four-speed all-synchromesh gearbox and final-drive. Finish and engineering standards are in the Lancia tradition.





FAR LEFT: New Sinca 1500 has clean uncluttered lines, excellent visibility and large, wide-opening doors. Disc brakes on the front wheels. The new 1300 has a similar general appearance but has drum brakes all round. Boot is large and standards of finish good. Available in the U.K. by the latter part of 1963. LEFT: Trim, upholstery, and equipment of the Sinca 1500 are all excellent. The separate front seats have reclining backs, map pockets, and knee-room is ample.





FAR LEFT: Mercedes-Benz new 230 SL looks best in open form. Equipment is lavish and finish of a very high order. The new sports model is available with four-speed all-synchromesh manual gearbox, or with automatic transmission. LEFT: In coupé or hardtop form the 230 SL provides open car visibility but the height and concave roof panel give the car a "tall" look. This show model was finished in mustard and black.

The new long-wheelbase Mercedes-Benz 300SE provides an additional 3.9 in, for rear passengers. An electrically-operated glass division and centralized door, bonnet, and boot-locking system are available as optional extras. With manual gearbox this large car is capable





Daimler-Benz development engineer Rudolf Uhlenhaut (spectacles) explains a point about the new fuel-injection system of the 230SL. A Bosch alternator was fitted to the engine.

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of 115 m.p.h.

journalists tagged Style Pagode. A pagoda look it may possess but there is no doubt whatsoever that the high roofline and vast glass area provides the closed versions of this 120 m.p.h.-plus model with open car visibility. Unlike the 300SL this six-cylinder Mercedes sports car has a welded steel unitary structure, there being no separate chassis, and into this rigid hull is installed the single overhead camshaft power-unit at a steep angle to reduce bonnet height and frontal area, and to assist with the visibility. The "angled" installation of the engine also assists with accessibility generally, and in particular to the Bosch fuel-injection equipment which now meters fuel into the inlet port instead of the manifold as on the "220" series. With heated water surrounding the manifold much improved atomization is claimed. Compression ratio is up to 9.3:1, and poweroutput is a notable 170 b.h.p. (S.A.E.) at 5,600 r.p.m. Stroke is identical to the 220 at 72.8 mm, but the bore is increased by 2 mm, to 82 mm.

Suspension follows the now classic Mercedes all-independent formula of wishbones at the front, and low-pivot swing-axles at the rear, with coil springs to supply the medium to all four wheels. Handling and ride is first-class but the car still has the Mercedes-Benz oddity of an 84 m.p.h. third gear, although the top gear will take it on past 120 m.p.h. Mountain storming has of course been kept very much in mind by the design staff, but there are dozens of markets where it would have surely been more suitable to have offered a higher third gear.

Some American journalists at Geneva tagged the new car the "Stuttgart Corvette", and when I talked to engineer Uhlenhaut about the policy behind the car he said, "This is no racing sports car, but one we can sell, and it has plenty of performance allied with good ride and handling characteristics". The 230SL undoubtedly looks best in pure open form-the wheels appear large in this day and age-but it is beautifully finished and furnished, has more performance than the average buyer will ever use, and will surely command greater sales than were ever gained by either 190 or 300SL. It has Girling servo-assisted discs on the front, Alfin drums on the rear, and the four-speed gearbox is all-synchromesh. Daimler-Benz four-speed automatic transmission is also available as an optional extra, but this reduces performance a little. An alternating current generator is standard equipment.

For the tycoons Mercedes also introduced a long-wheelbase version of the 300SE with four inches more leg room for the boardroom occupants. An optional extra is an electrically-operated glass partition which ensures security during the take-over talks after lunch. There is also a vacuum-operated central locking system available for this model as an optional extra which secures doors, boot and fuel tank simultaneously. Axle ratio is raised to 3.92:1 (from 4.1), and a thermostatically-controlled electric engine cooling fan is standard equipment. With automatic transmission and division the long-wheelbase

From GM's German factory the new Opel Rehord wears a distinctly Chevy 2 look. Available in 1½ and 1.7-litre form it has drum brakes and two doors at the moment but discs and four doors will be catalogued soon. The ventilation system is extensive and the boot is large.



Another new Opel at Geneva was the capacious estate car on the one-litre Kadett structure.



Abarth's latest, the 2 Milo has a 180 b.h.p. sting in the tail. Shaped in the "GTO" manner the nose contains the radiator and fuel tank and leaves ample space for a toothbrush. But very desirable.



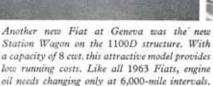
The 2 Milo engine is a two-litre fourcylinder unit with twin overhead camshafts, dual ignition, five main bearings and two large double-choke Weber carburetters. That's a lot of power-unit to push a toothbrush. Perhaps they'll rename it the Fluoride.



Fiat's new 2300 de Luxe has longer tail and more capacious boot, improved trim, and an alternating generator as standard equipment. Power steering is optional.









Latest version of the 1600S Fiat has a scoopless bonnet and four headlights. The twin o.h.c. 1.6-litre engine develops 100 b.h.p. Another model, the 1500 Cabriolet has the same body/ structure with 1½-litre pushrod "saloon" engine, two headlights, and a 100 m.p.h. maximum.



Michelotti's striking GT coupé was fashioned on an ex-Le Mans D-type Jaguar.

300SE will cost £4,722 14s. 7d. in the U.K. With manual gearbox this very large car is good for 115 m.p.h.

For more than forty years Lancia have been intriguing enthusiasts and gaining adherents with bold and original designs. In the light of recent Lancia models, and of general automotive developments, the new front-drive 1,091 c.c. Fulvia model which made its debut at Geneva can hardly be described as original, but it is certainly different. The old-established Turin factory has borrowed the basic shape and transmission configuration of the 11-litre Flavia, but has made a surprise return to the narrow-angle V4 power-unit. At first glance the 14-degree power-unit looks incredibly similar to the rear-drive Appia (to be ultimately replaced by the Fulvia) but the one cubic centimetre difference in capacity hides a wealth of non-similarity, the 72 mm. bore and 67 mm. stroke of the new unit being quite different from the 68 by 75 dimensions of the 1,090 c.c. Appia, the Fulvia also having three main bearings (instead of two). The use of a single overhead camshaft to each cylinder bank has not only increased overall efficiency, but due to the

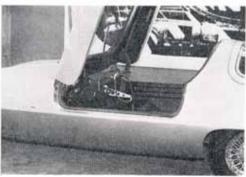
lack of pushrods has enabled superior port shapes to be used. The fact that each single camshaft actuates a row of either inlet or exhaust valves only means that maximum poweroutput and revs. can be stepped-up by timing "adjustment" at the loss of low and mediumspeed torque. A notable nett maximum poweroutput of 58 b.h.p. is achieved at 5,800 r.p.m. and with top gear at 14.7 m.p.h. per 1,000 r.p.m. the claimed 85 m.p.h. autostrada cruising speed should be feasible. With a kerb weight of almost a ton however it is unlikely that the Fulvia will be a lively car with a full load of passengers and luggage, although its excellent handling and four-wheel Dunlop disc brakes will undoubtedly permit good average speeds.

The Fulvia uses an identical gearbox casing to the larger Flavia and has a similar front-wheel-drive layout but as a complete contrast to the "flat-four" power-unit the Fulvia's V4 is installed at an angle of 45 degrees, a feature that ensures ease of servicing, accessibility of valve adjustment and of the Solex progressive two-choke carburetter. All four speeds of the steering column-controlled gearbox are synchronised. Bodywork follows

the modern quart-in-a-pint-pot cubist theme. the squareness extending to the tail where the shape provides a very capacious boot and a not unpleasant appearance. Internally the finish and trim are in the Lancia tradition, front seats being of the separate type with reclining backs. Upholstery is in attractive non-slip cloth and businesslike rubber mats cover the floor. The facia is restrained with rectangular instruments, the speedometer being a larger version of the "tape" instrument immortalised by American cars of the 'twenties, but in the case of the Lancia, with larger revolving drum and numerals. The familiar pillarless saloon bodywork has gone (many countries now forbid new cars with "forward-opening" doors on account of safety) but the four front-hinged doors are large and permit easy entry and egress. Like the Flavia the new small fwd model has front suspension by double wishbones and transverse leaf spring, and a "dead" rear axle on semi-elliptic springs with lateral location by Panhard rod. With only six inches less in the wheelbase the Fulvia would appear to be encroaching on the Flavia's PAGE 38



Bertone's very special Chevrolet Corvair was looking for a runway. The acetate canopy lifts up, and the headlights are retractable. Cooling air for the rear engine is admitted through the gills at canopy-sides.



Even the steering wheel has a touch of the 707 on the Bertone Corvair. This car was a design exercise but its aerodynamic excellence could not be questioned.



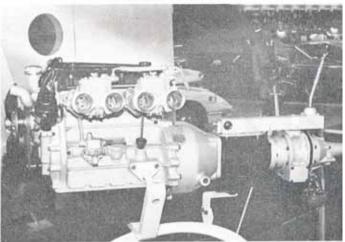
Also on the Bertone stand Italy's reply to Raymond Loewy on an Alfa-Romeo 2600 structure. It is runnoured that Bertone may call it the "Scram".

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The ASA, née Ferrarina, now available with roadster bodywork (by Bertone) as well as the GT coupé in background. It is expected that this ultra-fast little gent will be in realistic production within a few months.



The ASA engine is a =3 Ferrari V12 with single overhead camshaft, Rootes Alpine gearbox with over-drive, and Peugeot thermostatic fan. From 1,032 c.c. this Modena-bred unit pours out 97 horses at 7,000 r.p.m. Claimed maximum is 118 m.p.h,

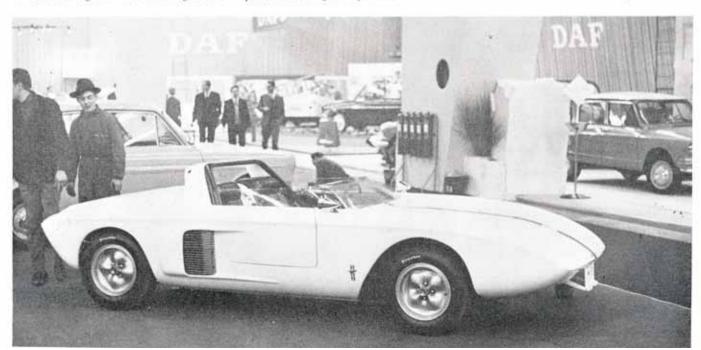


market and its introduction tends to lend strength to the rumour that the 11-litre model will soon be enlarged to 1,750 c.c. Perhaps the most exciting car at Geneva was the ATS GT. Not only was this 2,647 c.c. Gran Turismo coupé a brand-new model, but a new marque also as far as the Geneva Show was concerned. Designer Carlo Chiti, one of the Ferrari "breakaway" contingent, has done well to produce this powerful and unusual machine in less than 10 monthsand a Formula I single-scater as well! The coupé, designated 2500 GT has a 90-degree V8 engine mounted behind the two seats but ahead of the rear suspension, and is strictly a "mid-rear-engined" car. Adhering to the Ferrari theme of utilizing twin overhead camshafts (per block) only in the Grand Prix category, Chiti has given his light-alloy unit single overhead camshafts per bank, the angled valves being actuated through rockers. To be made in two versions, GT with 220 b.h.p. at 7,500 r.p.m., and GTS 260 b.h.p. at 7,700 r.p.m. (both S.A.E. figures),

In a quiet corner of the Ford corral the rearengined V4 Mustang from Dearborn grazed quietly. Wheels are light-alloy Lotus, and the number plate is retractable. Seats are fixed but pedals and steering are adjustable. both types are in unit with a five-speed all-synchromesh gearbox.

The power-output figures are conjectural for neither engine at the Geneva Show possessed a crankshaft, but then all the best manufacturers have at some time or another exhibited a brand-new model with intriguing deceptions ranging from wooden crankcases to 160 m.p.h. speedometers.

The rather dated-looking chassis frame of the ATS consisted of welded round and square-section tubing, massive enough at the front and rear, but with a flexible look in the centre-section where the depth was very modest to accommodate the large doors of the Allemano body. All-round





Pininfarina's new "Cabriolet Speciale 2-posti" on the six-cylinder Fiat 2300 had similar panel treatment to the recently-exhibited Alfa-Romeo 2600, but the latest car's headlights were fixed behind acetate shields, and the section between windscreen frame and rear canopy can be closed with a detachable roof panel.

independent suspension by coil springs and wishbones is used and the design policy has been to minimize lift and dive as well as unsprung weight. The Dunlop disc brakes are mounted outboard at the front and inboard at the rear. Other notable British equipment to be used on the ATS GT models includes coil and distributor, and alternating generator by Lucas, and the option of fuelinjection equipment from the same manufacturer. Standard induction equipment is four double-choke Weber carburetters.

Allemano has achieved a high measure of air penetration and good looks with what must have been a difficult configuration to clothe, To alleviate the luggage problem in this two-seater "Grand Touring" car, he has incorporated a lifting rear window/panel which enables the large parcels shelf and behindseat space to be utilised for baggage and oddments. Quite apart from the difference in projected power-output the two models will have coachwork differences in that the GT will have steel panels, the GTS lightalloy. Claimed maximum speeds are 150 and 160 m.p.h. respectively. It is expected that the GT will sell in Switzerland, later this year, at about 35,000 francs (approximately £3,000). It seems that new production "family" cars (for want of a better word) are rapidly becoming divided into two main groups-those bristling with novel and advanced features, and those of "classic" (for want of a better word) design with well-proven components and layout. The new Simcas, introduced at Geneva, come within the last-named category but in spite of no technical novelties will undoubtedly prove to be big sellers on the Continent. With conventionally-mounted four-cylinder engine at the front of the car, driving through a four-speed manual gearbox and divided open propeller-shaft to a live rear axle, the new 1500 and 1300 saloons have nothing exciting on the surface, but good engineering, a particularly high standard of finish and trim for a French volume-production car, and attention to detail are evident throughout.

The Geneva introduction was in the nature of a "sneak preview" as far as the public and press were concerned and no test runs were to be had. The manufacturers claim that the handling of both new models is exceptional, and the fact that the coil-sprung rear axle is located longitudinally by two trailing arms (per side) and laterally by a Panhard rod lends strength to their claims and proves that this all-important feature has been given much thought. The front suspension is by double wishbones with vertical coil springs and telescopic dampers mounted high under the wing and bolted to the stiff under-bonnet scuttle section a la

Macpherson. The high mounting not only provides rigidity but also places the damper in a relatively mud-free area where its life should be extended.

The Simca bodywork can be described as "international". It is good-looking without having any outstanding attributes, but rather relying on balance and well-schemed proportions for its agreeable appearance. Internal space is generous, there being room for five adults with ample legroom in the rear compartment. The boot is vast, and the 12-gallon (Imp.) horizontal fuel tank is recessed to accept the spare wheel. This seems a neat method of gaining the maximum of useful shape and space, but the traveller with the well-packed boot is still faced with the removal of his or her luggage on those wet nights when the punctures lurk. The 1500 is to be made as a single four-door saloon with de luxe trim and finish and disc brakes on the front wheels. It will sell in France for about £685. The engine is a completely new five-bearing unit of 1,482 c.c. with a claimed and notable power-output of 81 b.h.p. (S.A.E.) at 5,400 r.p.m. Although new it has been developed from the lively fivebearing 1,290 c.c. "Rush Super" engine of the Aronde series (which stay in production) a well-proven unit which also powers the new 1300.

The 1300 is identical in general shape and configuration but has the 62 b.h.p. (S.A.E.)

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engine, drum brakes all-round, and a distinguishing radiator grille. It will be sold in normal and Grande Luxe form, the lastnamed having superior trim and separate front seats in contrast to the bench seat of the standard model. The three new models have four-speed gearboxes with Porsche synchromesh on all ratios, and the efficient centrifugal engine filtration has made it possible to extend the oil change period to 6,000 miles. Grease nipples are reduced to four. French prices of the 1300's are expected to be about £575 for the standard model and £605 for the Grande Luxe. Continental deliveries commence in May, but due to right-hand drive production difficulties the U.K. will not see the new cars until the end of the year.

Simca's near-relatives, the Fiats, made their Geneva appearance in new and revised forms. A new de luxe 2300 saloon was introduced with larger boot, Fiat-produced alternating generator, new-type vacuum servo for the four-wheel disc brakes, and reduced greasing points. The 1200 Cabriolet was superseded by a 1,500 c.c. model (identical engine to the saloon) with a 100 m.p.h. performance and two headlights. The faster 1600S Cabriolet uses the same body pressings, but has the 100 b.h.p. (S.A.E.) twin o.h.c. engine, new bonnet without air scoop, and four headlights. To cope with the greater current requirement a higher-output dynamo is standardised but is of the DC type. Also new at Geneva was the attractive and spacious 1100D Station Wagon with a maximum load capacity of 8 cwt., plus driver, and a maximum speed of 80 m.p.h. In line with Simca, Fiat also extended oil-changing periods to 6,000 miles on all 1963 models.

Germany's Opel Rekord, second-best seller after VW, was unveiled in completely new form. Still offered with either 1.5 and 1.7-litre engines the 1963 cars have been completely restyled in the Chevy 2 manner. With clean lines and good looks the new Rekords have fourcylinder pushrod ohy engines with the same bore and stroke dimensions as earlier models but with four-bearing crankshafts (instead of three). In each case, power has been increased five b.h.p. by the use of larger ports and inlet valves, but the compression ratios stay at a modest 7.25:1 which means they perform satisfactorily on low-grade fuels. The 55 and 60 b.h.p. (nett) respective power-outputs give the two models top speeds of approximately 83 and 87 m.p.h., and there is a choice of all-synchromesh three-speed or four-speed manual gearboxes, or Fitchel and Sachs automatic clutch.

The chassis layout is conventional with unequal length wishbones and coil springs for the front suspension, and semi-elliptics and live axle for the rear. Two-leading shoe front drum brakes are standard, but discs will soon be available on the front wheels as optional extras. Ventilation and demisting has been taken very seriously with faciamounted air outlets which will direct cool or warm air on to side windows or driver's face. An interesting option is a three-branch heating/demisting/ventilating manifold set beneath the rear window where it will warm or cool the rear compartment, and keep the window free of mist. This newcomer from General Motors' German factory has a kerb weight of 19 cwt, and a wheelbase of 8 ft. 8 in, compared to 8 ft. 4 in, of the earlier models. The same firm also displayed a brand-new Estate Car on the one-litre Kadett structure.

One of the most intriguing cars at Geneva was the brand-new 2 Milo GT from Abarth. A quick development of the 1600 which was announced only a few weeks ago, this latest high-speed miniature has a rearmounted two-litre, dual ignition, twin o.h.c. engine which with an output of 180 b.h.p. (DIN.) must give the car a top speed of circa 155 m.p.h. Lavishly equipped, and finished in the grand manner it was certainly the centre of a good deal of interest at Geneva and will be seen in competition this year.

The Coachbuilder's art is always well manifested at Geneva, and this year it would be fair to say that the Bertone Corvair created the most attention. This highly streamlined A Geneva début for the four-seater Alpine GT4. With rear-mounted five-bearing Renault engine this pretty little 51 b.h.p. model has a claimed top speed of 95 m.p.h. With all-round independent suspension and disc brakes it costs about £1,200 in Switzerland.

From Japan the Hino Contessa Sprint 900 is also Renault-derived. Styled by Michelotti and engineered by Nardi this attractive little coupé will sell for about £700 in Switzerland, from September on.

The Russian Volga was shown by Scaldia with the alternative of a Land Rover diesel engine. Also displayed by the same enterprise was a Moskvitch with the choice of petrol, or British Perkins 1.6-litre diesel unit.







rear-engined coupé had an upwards-lifting acetate canopy, aircraft-type steering wheel, and driver-controlled retractable headlights. On the same stand a 2600 Alfa-Romeo had been given a body with an "Avanti" theme. Next door to Bertone, Michelotti exhibited a striking GT coupé on a D-type Jaguar chassis. It was of course a "design exercise" but the thought of the full dry-sump racing engine and all-synchromesh gearbox made many enthusiasts racing green with envy. The Geneva car was built on an ex-Le Mans chassis.

Pininfarina's "novelty" for Geneva was a handsome Cabriolet Speciale 2-posti on a Fiat 2300 six-cylinder chassis. With similar side panel treatment to the recently-exhibited Alfa Romeo 2600 two-seater coupé, the latest Pininfarina creation featured a completely open top between windscreen frame and rear "roof". A metal panel clipped into place for inclement weather. The same enterprise also showed an improved version of the graceful Corvair GT which made its debut at last October's Paris Show. The latest variant has four seats, and the curved windscreen does not intrude into the door aperture and completely eliminates the "knee-knocker" of the earlier two-seater.

Graber, the Swiss coachbuilder showed a pleasant convertible on the latest Rover 3-litre "Coupé" structure, and Bertone also exhibited a new open roadster on the onelitre ASA. This body was also displayed on the ASA stand in company with the shapely GT coupé. Powered by a 1,032 c.c. 97 b.h.p. four-cylinder engine, this delightful 100 m.p.h. small car should be in serious production in six months. Originally the "Ferrarina", it will be manufactured by a wealthy Italian electronics enterprise, and will be seen in competition. The engine is a "third" of a V12 Ferrari engine, and at the moment is in unit with a Sunbeam Alpine gearbox with overdrive on third and top. A Peugeot thermostatic cooling fan assists with the extraction of such a high power-output from a one-litre engine.

It was Japan's first time at the show and the Hino Contessa 900 Sprint was certainly a good ambassador for the Nippon industry. Derived originally from the Renault Dauphine, then from the more sporty Alpine variant, the Japanese car has been styled by Michelotti, modified by Nardi, and will be in production in Italy by September! It is expected to sell in Switzerland for about 8,500 Francsapproximately £700 sterling. With 893 c.c. rearmounted engine of 45 b.h.p., this very goodlooking and well-finished coupé will approach 90 m.p.h. It is equipped with a Weber double-choke carburetter, and there is a choice of three or four-speed gearbox. Sunbeam's new and greatly improved Alpines were both very well received in Switzerland where finish, trim, and equipment are taken very seriously. The Series 3 Sports Tourer undoubtedly has more power, better seats, and an improved driving position in comparison to its predecessor, and the Gran Turismo is a lavishly comfortable car with unusually quiet road performance.

An event of great significance during the show was the Lucas press conference where there was an interesting display of new Lucas equipment including transistorised ignition of two different types and alternating generators. Lucas have been carrying out a tremendous amount of research into electronics from an automotive viewpoint and are ready to supply the motor industry with the aforementioned apparatus, and even have dipping rear vision mirrors and automatic switches for car lighting systems, all electronically-operated by means of light cells. During his speech the managing director of Lucas described all the new equipment as "Flights of fancy-if you like", but the fact remains that it is ready for industry to adopt when they feel the time is ripe. It is rumoured that two large British cars will be made available during 1963 with optional Lucas alternating generators, and in view of the fact that Mercedes-Benz, Fiat, and ATS were exhibiting with alternators of Bosch, Fiat, and Lucas manufacture respectively it must be assumed that the "AC Age" is just around the corner. The Chrysler Corporation have fitted alternators on several of their models for nearly three years, and many American General Motors' cars also use this type of battery charger. In this day and age when batteries get ever-smaller vet are called upon to do more and more work it can only be a matter of time before the AC generator becomes normal equipment.