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PARIS TO BASEL – FASTER WITH TGV

George Hoekstra

George visits the new line and the Alstom works



These pillars are for one of the spectacular viaducts that will carry the line straight across a valley. Although the trains themselves are not that heavy, the pillars receive such a pounding from the 200 mph speed, they have to be this massive.

PHOTOS: George Hoekstra

Notwithstanding the recent correspondence about flying to Switzerland, a lot of SRS members prefer taking the train - for whatever personal reasons. With the opening of a new section of high-speed line in eastern France, and the introduction of new TGV services, travel times to Switzerland via Basel have been slashed. Transit in Paris has become a lot easier too: you no longer have to search for the very well hidden (behind a huge pillar) entrance to the RER to the Gare de Lyon. If you do not have a lot of luggage you can easily walk between stations. Turn left out of Gare du Nord, then walk through the aptly named "Rue des deux Gares" and down the monumental stairs to the Gare de l'Est. Unfortunately, you usually have to walk around some beggars on these stairs.

The new TGV service to Basel makes use of a section of the projected high speed

line to Strasbourg. This will form part of the future TGV Rhin-Rhone system. France is determined to develop high speed lines. It was inaugurated with a special train for journalists and politicians - resulting in the usual media frenzy. I am an engineer and I am much more interested in the technical aspects. This is where the Association of Swiss Railway Journalists comes in: they organised a very interesting visit to the Alstom factory, where the TGV sets are being built and to the construction site of the new line. Instead of political hot air, we got highly qualified technical information!

We first went to the Alstom factory in Belfort. Inside, we were allowed to take photographs - no trade-secrets or terrorism-hysteria here. I had visited this factory before in the early eighties while the first generation orange Paris-Lyon TGVs were

being built. The contrast with today was staggering. In the eighties, workers were swarming around, fetching parts from the racks along the walls back to their construction pads. Not now: the workers stay at their point of work and trolleys with all the necessary parts are brought to them at the precise time they have to be installed.

A computer keeps track of all the tens of thousands of parts and exactly when and where they are needed. The parts stay on the trolley until they are actually installed. Nothing is left lying around: everything is clean and orderly!

Then we visited the construction site for the future new lines. It is impressive to see the TGV concept being implemented. High speed lines must "flow". There can be quite steep inclines - TGVs are quite powerful under 25,000 Volts AC - but curves can only be very slight. If necessary, hills are cut through and valleys spanned with impressive structures, but this does not mean the construction is ruthless, quite the contrary. Existing nature and wildlife is



The new 325 kph (= 200 mph) stock, standing in the final testing hall, just before running trials. To cope with this speed, the nose has to be longer and smoother than the previous models.

The High-Tech equipment cannot be tested without computers - but look at the screen saver on the laptop: a steam engine! There are some real railway people left after all... Incidentally, yours truly taking the picture is reflected in the top right hand corner.





In one of the large halls, different body parts are resting on assembly jigs. The jigs are painted yellow, so nobody inadvertently installs anything onto it by mistake! One of the trolleys for the parts can be seen on the right. The jigs are just so high that installation can be done as comfortably as possible - in this case sitting down.

The stock needs many miles of cables. Here some hang on the parts trolley: each one is pre-cut to the required length and labelled. The yellow trolley on the right is for tools - nothing is left lying around.



treated with great respect. Naturally, there is some upheaval during construction - this is unavoidable; not even the house you live in could have been built without some disturbance to wildlife - but it is what happens afterwards that counts. First of all a thorough clean up, no leftovers must be allowed to remain. Then landscaping, re-planting, re-routing of water-runs, reinstatement of habitats. All this, they do very well.

Two technicians are installing cables into channels in the floor. Each cable is tested as soon as it is connected.

