

Paris

The Eiffel tower shimmers and sparkles

Every evening since 21 June, France's national monument shimmers with thousands of fairy-lights. This latest spectacle involving the Eiffel tower is the work of AMEC SPIE Ile-de-France/Nord-Ouest's Commercial Sector Department, which has been looking after the "Grande Dame" for the last 10 years.

➤ "We maintain, renovate and upgrade the Eiffel tower's electrical installations on an ongoing basis", explains the contract manager Roland Garreau. Previous projects include the "Year 2000" countdown clock, replacing the north tower's lift motor, installing signage for visitors, "Voice-Data-Image" cabling and fire detection systems. The most recent project – the shimmering tower – involved wiring up 20,000 flash-lamps, powered from distribution panels located all over the structure. These lamps are switched on for 10 minutes every hour between nightfall and 2 a.m. in summer, and between dusk and 1 a.m. in winter. They are designed to emit flashes of light at random intervals, creating a shimmering effect. "Thirty cable-makers based

in our workshops supplied twenty fitters working at the site under the orders of the site manager, Daniel Cheymol," explains R. Garreau. "Our job was to install the main electrical distribution system from the LV panels, via 12 km of cables, 28 distribution panels and 370 junction boxes. We prefabricated 20,000 leads fitted with connectors in order to link up the lights. We used a total of 78 km of cable and 40,000 connectors. This project involved numerous challenges, including a very tight schedule (five months) with a non-negotiable handover deadline, given that the lights were to be switched on for the national music festival on 21st June. Furthermore, we had to set up a significant logistics operation to manufacture and supply the prefabricated



cables. The factory-produced cables had to satisfy the relevant technical constraints while keeping the wiring practically invisible, to avoid spoiling the tower's aesthetic appeal." AMEC SPIE Ile-de-France Nord-Ouest's adventures at the Eiffel Tower are set to continue, as the Commercial Sector Department has just won an order to replace the tower's architectural lighting. This new work will be completed by February 2004. ■

Above: Thirty factory-based cable-makers and twenty onsite fitters worked to ensure that the Eiffel tower sparkled on 21st June.

Below: Roland Garreau, contract manager with AMEC SPIE IdF/N-O's Commercial Sector Department.

