



# 1960's

## Early years of product development – from products to systems

In the early 1960s The Finnish Broadcasting Company quickly constructed a double FM transmitter network covering the whole country. As early as 1963 the television's network primary service area covered 90 per cent of the population and the business of selling televisions to households was gathering momentum. Within no time the majority of the Finns had a TV in their living room.

Due to the success of the Television, the demand for aerial components was obviously high, right from the turn of the decade. Business was booming yet Teleste still had a steep mountain to climb to become successful. At the time the country was still waiting for the arrival of engineers who specialised in the design of master aerial systems or audio systems. Determining the contents of aerial-related deliveries it was commonplace to draw up invitations to tenders in a manner, which was open to interpretation.

"The Real estate shall be equipped with an aerial distribution system in accordance with the requirements specified by the Inspection Centre for Electrical Installations. This system must contain the required outdoor aerials for radio AM and FM frequencies and for both of the locally visible television channels. The amplifier cabinet including the accessories will be placed in the attic of the building and every flat shall be equipped with an aerial plug socket." This type of request for a quotation to tenders in those days typically contained a number of pitfalls for the company bidding on the contract. In practice the delivery should have contained the whole system even though the request to tenders only specified a number of separate appliances.

At first glance it was obvious that there was no way to construct a functional system based on the given request. The company realised that the way ahead was through initiative and to start piecing together fully functional systems consisting of separate components. What this boiled down to, however,



...Reliable efficiency... Teleste ad from the 60's. Customers learned to trust Teleste's expertise and selected them to be their supplier when they started supplying comprehensive systems instead of just manufacturing products.

< **Antenna installers** could not be afraid of heights. In the beginning of the 60's, this sight was common on rooftops when TV antennas were being installed. Not all installers were such daredevils.

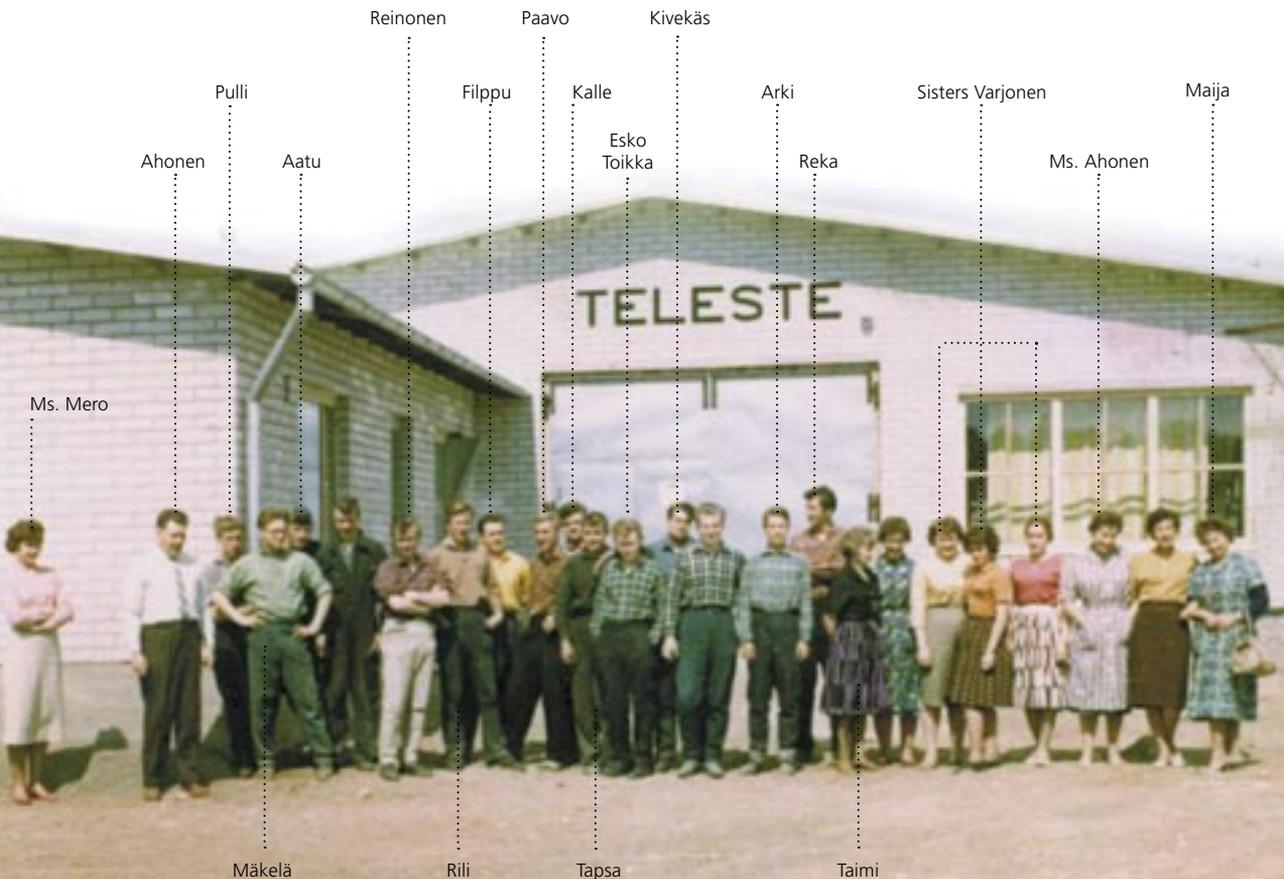
meant stepping on the electrical designer's toes and distancing oneself from the specific requests. Another risk involved in this development was losing control over expenses, which tended to exceed those of the competition. Nevertheless, Teleste's clients became reliant on them and successful design and implementation of these systems paved the way for the company's subsequent product development efforts.

### From Workshop to Proprietary Industrial Premises

In 1960, the premises in Sirkkanlankatu had become awfully crowded, due to the number of personnel approaching thirty. As luck would have it, in Puistomäki, a part of the city not far from the Uttamo barracks, there was virtually a finished building with floor area of 400 square metres designed as an engineering plant, with the plot, for sale. It was an opportunity too good to miss. The new address was to become 51 Puistomäenkatu. For the first time Teleste had its own industrial premises.

Steel pipes imported from Germany provided the raw materials needed for aerial masts and the new metal workshop secti-

**Teleste staff** enjoying their first office that belongs to them in the yard of Puistomäenkatu 51.



on was high enough to accommodate an overhead crane for lifting the heavy pipe loads. The wing provided two office rooms with separate entrances. A proud plaque could be attached to the wall on the outside of the building reading TELESTE.

The move to the new premises in Puistomäenkatu was an upheaval for Teleste but it only took until autumn of the following year before they started designing a new two-storey building with floor area of around 440 square metres. This was larger than the original!

Aside from the premises, Teleste was also entering a new administration era with the constitutive meeting of Teleste Joint-Stock Company being held on January 9, 1962. In practise the only real effect in the changing of the company's structure was an increase in statutory administrative duties. Shareholder meetings had to be held and records must be kept not forgetting

“Once we moved over to Puistomäki, we were a family of 25 people. The premises had all new conveniences such as an indoor loo and warm water, not to mention the curtains in the factory hall that offered something for the eye. And there was a changing room with a table and everything. If you didn't have your packed lunch, you could get one in the shop: three slices of boloney and a roll”, remembered Head Clerk Sirkka Mero.



↳ In the early 60's, the use of plastic in products became more common, and Teleste purchased its first plastic press. The machine operator was called muovipimu (the plastic chick).

▲ The development of antenna devices required expensive measuring equipment and special skills. In the picture, Tapio Luoto is fine-tuning an antenna amplifier.

**Teleste had evolved** from a workshop into a factory, and a full warehouse was a sign of good ability to deliver.

# Teleste LOGO

## Development Of The Teleste Logo

When Teleste was first established its field of business was not called the 'electronics industry'. First, the company was called 'Electro-technical factory Teleste'. In Turku, Wallac was the other and the best known company in existence operating in the same field and also with its roots similarly in the enthusiasm of devoted amateurs, who have reached world wide recognition. In the nearby town of Salo there was a radio shop owned by the enthusiastic Nordell family who moved into production and later became Salora. Industrial production was engaged in low-current technology and although still in its infancy was clearly alive and kicking.

The printed invoice form did not just bear the everyday title Teleste but the name was written out festively as "Electro-technical factory Teleste", printed in blue and red.

Business graphics in the early years featured a design printed on a continuous form heading in which the company name has been embellished with a horizontal line in the same colour. Product leaflets were decorated with a triangle standing on one apex usually printed in black. This style was one of the print shop's regulars and, hence, no established Teleste logo existed.

The design of Teleste's brand mark was assigned to advertising artist Lennart Heinoja from Turku in 1963. Actually, the only thing requested was that the mark could be pressed

into a 3D piece of plastic with a moulding machine so that it could be attached to the Teleste products. This is how the original form of the present brand mark came to be.

A couple of decades later we decided to let go of the 3D for technical reasons related to printing. The Teleste logo was further simplified without changing the basic design – and that's how it stands up to this very day. The artist made another design, which was triangular with just the letter T in it. The triangle just never won unanimous popularity amongst the staff. So it just faded away.



*Teleste*

*Teleste*



*Teleste*



**Teleste wanted to extend** its customer base outside of Turku, which was accomplished by increasing marketing efforts. Sales Manager Pentti Talvio in a trade fair, that was at that point of time called product exhibitions.

the joint-stock company annual reports. Olavi Ahonen was the Chairman of the Board of Directors and the Managing Director; Pekka Valkama was the original member of the board and the technical manager.

There's a line in the first Teleste Oy annual report saying that the tax authorities had as of April 1, 1962 changed the levied tax from the one-man business basis to that of an industrial enterprise. This officially put an end to the 'workshop' era for Teleste turning it into an industrial enterprise. New employees were hired on a continual basis and at the end of the year the number of staff stood at just about forty.

### Going Places... Like the Rest of Finland, and Trade Fairs

Up until this time the sale and marketing of Teleste's products had been sorted out by Olavi Ahonen and Pekka Valkama. In 1962 Mr. Pentti Talvio was hired to fill the new post of sales manager. His first duties included developing a sales system based on offers.

Teleste's clientele by now had clearly exceeded the boundaries of Turku and Helsinki among others. Obtaining a foothold in the capital was easier said than done because at least two domestic companies were already presently competing with Teleste's master aerial equipment. Teleste came up with a plan involving close co-operation with aerial installation firms located in the larger cities.

The national elementary school festivities held in Oulu in the spring of 1964 was one of the first product exhibition events Teleste participated in. The idea of getting involved in an obviously narrow and highly distinct product exhibition in a



**Teleste antenna products** at the Yleisradio celebrative exhibition in Helsinki in 1965. A picture of the old fair hall in Helsinki along Mannerheimintie. Our participation here was a significant factor in being able to expand the markets to include all of Finland the next year.



special field of school and teaching accessories was to gain momentum in fairs and expand their clientele. This event marks the starting point for Teleste's active and on-going involvement in marketing using these fair venues.

The exhibition in Oulu proved to be a good opportunity to get acquainted with other companies operating in the field.

For instance, Teleste established connections in the Norwegian Oy Tandberg-Radio Ab, which were promoting their language laboratories and tape recorders. The Norwegian manufacturer had already carved a good reputation for their products that were known for their reliability and endurance. Gaining a foothold of the American market virtually turned their brand into a household name and importation of tape recorders into Finland began. At the time Teleste was in the business of manufacturing sound systems for schools. At the core of most of these central radio systems was an open-reel magnetophone. Demand for these kinds of recorders as part of Teleste's own systems was growing by the month.

**The fair was** also a good opportunity for Teleste employees to get to know other businesses in the same field. The trade fair marked the beginning of co-operation between Teleste and Tandberg in language studio products.



**Pentti Talvio** – long-time sales manager of Teleste.



**An antenna amplifier centre**, which could be found in the basement or attic of most Finnish apartment buildings.



**Naturally, the first antenna amplifiers** used electron tubes. Teleste was also among the first to apply the new transistor technology when it became available.

**Central radio**—or in fancier words—sound centre.

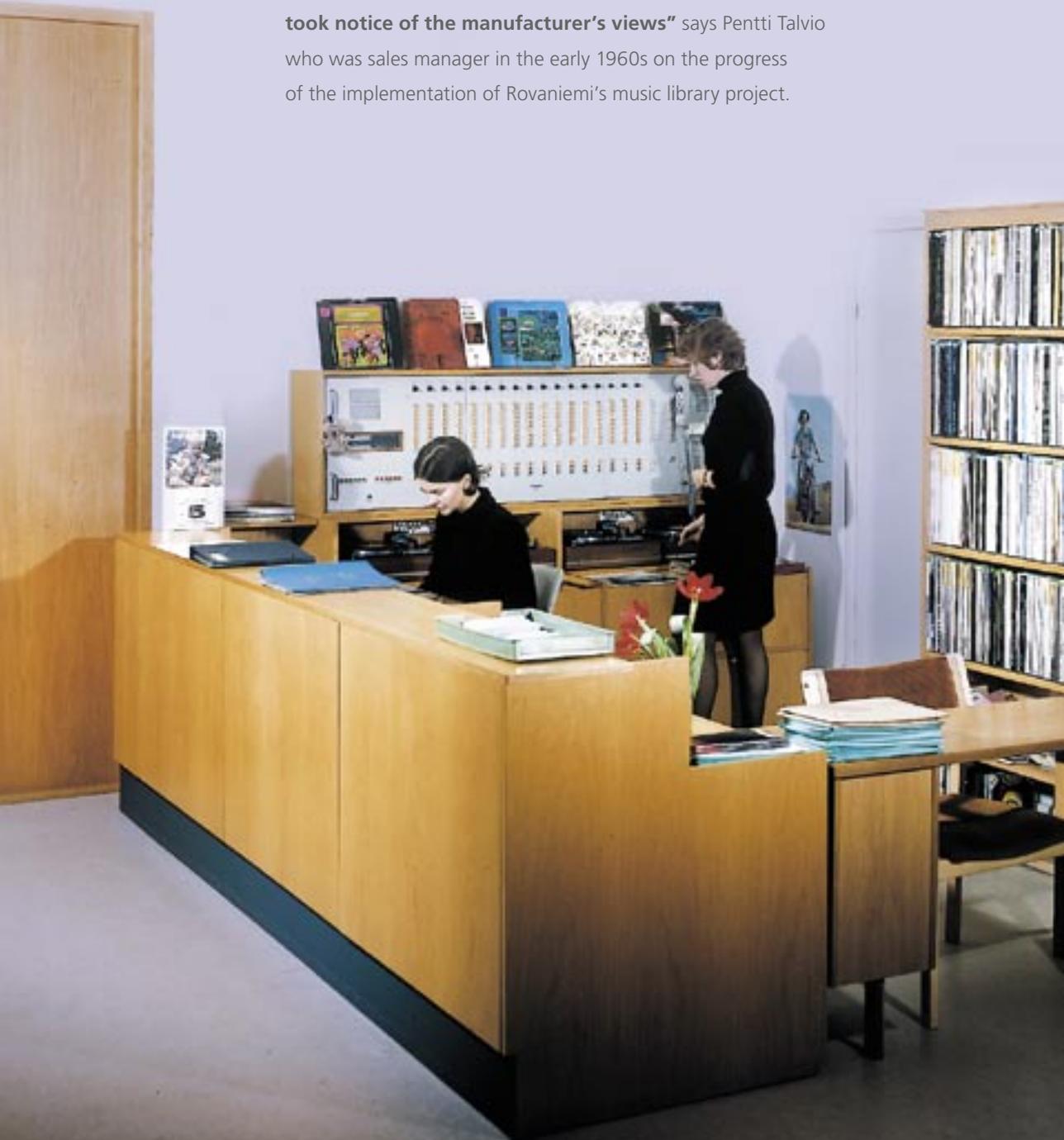


**Sound amplifier** and a turntable.

Whenever a client was looking for deliveries from Teleste, Tandberg's recorder was the standard reply, which was part of Teleste's central radio. Another positive for Tandberg was that The Educational Film Commission under the Finnish National Board of General Education approved most of their models. The catch: State subsidy of any procurement of this nature was subject to this particular approval. Furthermore, Tandberg and Teleste were both considered reliable brands and in Teleste's view two Nordic family companies made nothing less than a splendid partnership.

Expansion of the Finnish television network brought in its wake two new television channels and the new transmitters had to broadcast in the UHF band. This, in turn, meant that a new range of VHF/UHF channel converters had to be designed. Teleste designed one of the first converters introduced to the Finnish market. They were displayed at an exhibition co-organised by the Finnish Broadcasting Company and the Radio Retailers' Association in Lahti in 1965. The following year the Finnish Broadcasting Company arranged their 40th Anniversary Jubilee Exhibition in Helsinki Exhibition Centre in which Teleste were present with their own stand. This event was instrumental

**“If not product development then at least system development was in constant demand since the libraries, being usually local monuments that on request from the architects had to be furnished with control consoles of all shapes and sizes. The great Alvar Aalto turned out to be—at least in our case—an agreeable negotiator who took notice of the manufacturer’s views”** says Pentti Talvio who was sales manager in the early 1960s on the progress of the implementation of Rovaniemi’s music library project.





**The Rovaniemi library** was a ground-breaker in establishing sound libraries. The library and Teleste co-operated in an extensive project where the customers could listen to music at the library.

in increasing Teleste's market area to cover the whole of Finland from the second half of the decade onwards.

### Success with New Audio Systems

The audio systems in production, with their low frequency amplifier, proved to become a new selling point.

Lasse Rantanen who joined Teleste in 1963 aided the success achieved with sound reproduction products. As a young engineer, he took a special interest in hi-fi sound technology. Mr. Rantanen, who was a talented draughtsman, also designed Teleste's stylish and trendy sound amplifier units and speakers, which kept going for years.

A library in Rovaniemi, which allowed visitors the opportunity to listen to records and tapes, a notion unknown anywhere else at the time, housed this new concept system. Any special requirements needed, in order to function properly in the library environment, were observed in the system design. In those days records and tapes were valuable merchandise requiring careful handling and storage. Teleste's idea was that clients could enter the music library and listen to the music of their choice using headphones so that they could pick the music on the

**v Teleste had a wide selection** of various sound amplifiers for various purposes and new ones were made to suit the needs of customers.



shelves but could not come into contact with the records themselves, or the players, for that matter. They had, however, full control over the adjustments including sound and tone.

The new system was developed in close co-operation with the client. This provided a means to accommodate all the requirements. Tricky issues relating to the electronics were solved right at the beginning and over the following years this music library sound reproduction system was delivered to a number of notable libraries in all parts of the country.

The number of sound systems delivered in the mid-1960s was staggering. This success created a positive image bringing in even more distinguished assignments including sizeable and multi-channel sound consoles: 14 main amplifiers to M/S Botnia and 16 to the Turku University Hospital, to name just a few.

### Developing Patient Telephone Systems

Engineering Officer Matti Leppä provided Teleste with a whole new R&D idea. Back in the early 1960s he had taken on an assignment involving the design and electrical specifications for an elderly home in Rauma. At the time it was not at all uncommon for electrical designers to present designs and products that were not yet in production. When Mr. Leppä examined the contract specifications for the elderly home it stated the need for a detailed functional description of a nurse call system. This design allowed the nurse to communicate with the patient before making a visit.

Now Teleste set to work drawing up a communication system between nurse and patient. Teleste's first hospital application sought to combine the entertaining aspects of the central radio system with an enhanced feeling of patient security. The fundamental idea was to make it possible to verbally respond to the patient's request in the minimum amount of time.

Another leading principle was user-friendliness. The tough work paid off in the end and the duplex type communication system was created. One of the core advantages of this two-way system was that neither the nurse nor the patient needed to worry about switching over. The new product concept went straight into production and demand was endless as it happened when construction of the Finnish central and regional hospitals was underway.

**Teleste was soon heard at sea.** M/S Botnia's sound system was the first naval application. Later, Teleste delivered many large naval systems.



**Hospitals** were included in Teleste's clientele in the 1960s. The traditional sound reproduction became accompanied by the nurse call system later to expand to patient telephone.



**Audio equipment design** from the 1960s. Later on especially the loudspeakers had to be designed to meet the clients' requirements bearing in mind materials and style of the building.



**A nurse calming down a patient** who has called her using the Teleste patient phone. Developing their own hospital system was Teleste's first true product development work. Previously, our laboratories had only carried

out measurements and alterations on new devices. This time, we visited many hospitals and had discussions with financial managers, doctors and, above all, nurses.





### Under Yet Another New Roof – And Again Expanding

Designs for the new Teleste premises were ordered in 1965 to be constructed on the plot of 44 Kaurakatu. The floor area amounted to 1,650 square metres, which was more than double the previous premises. Pekka Valkama was in charge of the construction site. He proved to have a good command of organising and managing a construction site so well that there was no need to look any further for a supervisor for subsequent projects. Teleste moved on the new premises in the early 1966.

The building was only two years old when, in 1968, the time came to start further expansion. The adding of a new wing resulted in the layout of the building been turned into an E shape while the floor area grew up to 2,000 square metres. The steady growth of the business was reflected in the need for additional office employees. An economist with knowledge of languages was hired to whip up exports and a full-time purchasing manager was hired to sort out procurement. The number of people working under the one roof was almost one hundred.

**The owners of Teleste** had had the presence of mind to select a new address for future expansions – this lot had enough room to grow. The Kaurakatu facility was expanded multiple times as the company grew.





“Towards the end of 1960s with an increase in transport we needed a full-time driver. The first one we hired was, however, something of a speed demon. The contract terminated once we had to pay damages for the neighbour’s hedge he ruined by driving through. The second driver did no better as he managed to have a small crash for starters. Besides, I ended up with a ticket for being daft enough not to make sure he had a professional driver’s licence, which of course he didn’t. **Mauri Kuosmanen**, nicknamed Asser, was the third hopeful. The first thing I did was to ask him whether he had a professional license. He said sure but I thought this was not good enough and insisted on seeing it. He remembered this 20 years on; the nerve of not taking his word for it. Mauri retired from Teleste not until after the turn of the century, so you might say he was a decent driver!”, remembers Pekka Valkama.

## Aerial Business Takes Another Upturn

A new era had begun: transistors replaced tubes. In 1967, Teleste had made huge strides in the market, so much so that they were now neck and neck with those in Continental Europe. The time had now come to introduce to the market the transistorised master aerial amplifiers, the TVR Series. The first aerial amplifiers using transistors had been created as early as in 1963 but those were not suitable for master aerial systems. The crucial move took place right at the end of the decade. In 1969 Finnish Television introduced regular colour broadcasting. The first high-capacity UHF transmitter was installed at Eurajoki TV station, which forecasted a boost to the demand of Teleste’s aerial accessories simply because almost every new aerial system required a channel converter. This untapped demand was by no means limited to Finland as the Swedish Svenska Siemens Ab placed the first truly significant foreign order. The assignment involved 2,000 UHF channel converters to be delivered in just six months time. The value of this one single order was more than half of Teleste’s annual turnover of aerial accessories since different pairs of channels each required a specific converter and the number of models was almost 40. This resulted in Teleste’s product development and production being effectively pressurised for the following half a year. It was a steep learning curve. At the turn of the decade the product development manager Lasse Rantanen initiated a project designed to redefine the master aerial amplifiers. This was necessitated by the inadequate emission protection of the TRV Series demanding the entire structure to be enclosed in a metal case. The new improved A-20 Series later to be introduced to the market was the outcome of this effort.

**The master aerial amplifier TRV** used the latest high-frequency transistor technology; at that time, however, disturbance radiation was not completely understood.

