

**Zeitschrift:** Technische Mitteilungen / Schweizerische Post-, Telefon- und Telegrafienbetriebe = Bulletin technique / Entreprise des postes, téléphones et télégraphes suisses = Bollettino tecnico / Azienda delle poste, dei telefoni e dei telegrafi svizzeri

**Herausgeber:** Schweizerische Post-, Telefon- und Telegrafienbetriebe

**Band:** 60 (1982)

**Heft:** 7

**Rubrik:** Summaries and notices

### **Nutzungsbedingungen**

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

### **Conditions d'utilisation**

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

### **Terms of use**

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

**Download PDF:** 09.08.2025

**ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>**

## Summaries

p. 304...313

### Switzerland's First Optical 34 Mbit/s Experimental Transmission Equipment

A. Käser, Berne, and P. Glanzmann, Zurich

The introduction of the optical transmission technique requires an early clarification of basic questions and of possible problem areas so as to avoid later complications in this new technology. A 34 Mbit/s transmission equipment is described. The important characteristics are discussed as well as the initial measurement results.

p. 314...323

### Protective Suit against RF Electromagnetic Field Exposure near Transmitting Equipment

W. Bolinger, Berne

The intensity of the RF electromagnetic field can cause biological damage due to thermal effect to the personnel working near broadcasting and radio-relay transmitting equipment. The permitted maximum field strength value that men can be safely exposed to has been set at different levels in different countries. Little is so far known about the biological effects. To provide sufficient safety margin against thermal and other effects a protective suit with face mask of metallic textile fabric has been developed and tested. It screens the electromagnetic field so well that one can work near an operating antenna without any danger. The protective suit represents an individual Faraday's cage.

p. 324...330

### Status of the Data Transmission Networks in Switzerland

P. Lässer and H.-P. Lutz, Berne

The data transmission traffic is progressing rapidly with a yearly net increase of around 30 pc. At present it is possible to transmit the data traffic over the public telephone network, the leased circuits or Euronet and Datanet. Message switching, telefax as well as telex are included in the complete range of the data services. The Swiss packet network Telexpac and the Datex 300, an interesting network for the interchange of texts and data, are on the verge of realization. In the new service area the videotex and the teletex are being tested.

p. 336...341

### Sweep Measurements of the Transfer Function of a RF-Channel and its Representation by Polynomials

M. Liniger, Berne

Sweep measurements over a bandwidth of 40 MHz were carried out on two hops in the 2.5 GHz and 11 GHz band, respectively. The aim of these measure-

ments was to determine the amplitude and delay distortions caused by selective fading. The measurement set-up, the path profiles and the method of analysis are described. A new approach was taken to present the results. They are described as probability density functions of polynomial approximations of the attenuation in decibels. Results are shown for transmission with and without space diversity reception.

## News Items

### Telephone

The PTT in cooperation with the Swiss meteorological office has been tentatively reporting a **5-day weather forecast** on the telephone No 162 since mid-May 1982. This report can be heard daily between 15.30 to 18.15 o'clock in French and German.

The **Terco** system dealt with 65 754 million inquiries in peak hours for inland directory information service during the first quarter of this year. The demand for this service increased by 8.5 pc over last year.

The **telephone service in Geneva** celebrated the **centennial anniversary** on 15 May 1982. An exhibition of the historical development of the telephone was organised on this occasion. The first Swiss telephone service opened on 2 October 1880 in Zurich.

Since 1 June 1982 **IDD service** has been provided to Liberia, Surinam, Syria, Togo and Yemen Arab Republic.

### Teleinformatics

The PTT has decided to invest 6.25 million francs in equipment for step 1 and step 2 for replacement of **Ateco** (automatic telephone switching with computer). These new parts will form the basis of the **Comtex** project as well as completely replace the Ateco system. The Comtex system is planned to take over further services within the area of text communications.

Since 1 June **automatic telex service** has been available to **Burundi** and **Panama**.

### Radio, Television

Since the end of April 1982 the Rediffusion Co through the regional **cable TV network** in Zurich has been providing a **pay TV** «Teleclub» service as well as an additional «Telenewspaper» service.

A pilot project for **wideband communications** has been foreseen at Marsens, canton of Fribourg. It will connect 30 participants via optical fibre cables. The new transmission equipment is based on the development work between the Swiss Federal Institute of Technology in Zurich and the PTT.