



*Broadcasting Centre/
Uitsaaisentrum*

Johannesburg



The impressive glass ceiling in the foyer of the Piet Meyer Building was designed and installed by the internationally famous Venetian firm of Barovier and Toso.

Die internasionaal beroemde Venesiaanse firma Barovier en Toso het die indrukwekkende glasplafon in die voorportaal van die Piet Meyer-gebou ontwerp en geïnstalleer.



*Mr W. Hilarius in the radio control room of the Scientific and Technical Club on the top of Stuttafords Building in 1925.
Mnr. W. Hilarius in 1925 in die radiokontrolekamer van die Scientific and Technical Club bo-op die Stuttafard-gebou.*

Broadcasting Centre

Broadcasting Centre, standing, on 15 hectares to the west of Johannesburg's city-centre skyline, is one of the largest complexes of its kind in the world. Comprising a 36-storey administrative tower, several floors of radio studios in an adjoining block and a separate television building, it is owned and operated by the South African Broadcasting Corporation, more generally known as the SABC.

In 1980 the entire area on which the complex is situated was declared a separate municipal area with the name Uitsaaisentrum.

A Brief History of South African Broadcasting

The first radio broadcast in Johannesburg was made on December 29, 1923 under the somewhat unlikely auspices of the South African Railways. In 1924 the Scientific and Technical Club took over transmissions on the Witwatersrand, and in September of the same year the Cape and Peninsula Broadcasting Association started a similar service in Cape Town. Wireless was introduced to listeners in Durban three months later.

But a combination of limited area covered by primitive transmitters and low revenue from licensed listeners failed to make radio a viable proposition. So, to rescue the fledgling industry, the Schlesinger Organisation incorporated the three small stations on April 1, 1927 as the African Broadcasting Company.

Even so, financial difficulties limited the growth of radio, and it was not long before the then Prime Minister, General Hertzog, ordered an enquiry into all aspects of broadcasting.

The result of this enquiry was the establishment of the SABC in terms of Act 22 of 1936.

At first the new national radio service was in English only, but the act had stipulated the inauguration of a parallel Afrikaans service, so that in 1937 comprehensive transmissions in both official languages became a reality.

Uitsaaisentrum

Uitsaaisentrum, op 15 hektaar, kyk uit die weste na die silhoeëet van die middestad van Johannesburg. Hy is een van die grootste komplekse van sy soort in die wêreld. Hy bestaan uit 'n administratiewe toring van 36 verdiepings, verskeie verdiepings radio-ateljees in 'n blok langsna en 'n aparte televisiegebou. Die SAUK – die Suid-Afrikaanse Uitsaaikorporasie – besit en bedryf hom.

In 1980 het die Munisipaliteit die hele gebied waarop die kompleks lê, tot 'n aparte munisipale gebied, met die naam Uitsaaisentrum, verklaar.

Beknopte geskiedenis van uitsaaiwese in Suid-Afrika

Die eerste radio-uitsending in Johannesburg het op die 29ste Desember 1923 plaasgevind, nogal onder die beskerming van die Suid-Afrikaanse Spoorweë. In 1924 neem die Scientific and Technical Club uitsendings op die Witwatersrand oor en in September daardie jaar begin die Cape and Peninsula Broadcasting Association ook so'n diens in Kaapstad. Drie maande later het luisteraars in Durban met die draadloos kennisgemaak. Maar met die primitiewe senders, wat 'n beperkte gebied gedek het, en met die lae inkomste uit gelisensieerde luisteraars, sou radio nie lank kon hou nie. Toe, om hierdie ontluikende nywerheid te red, inkorporeer die Schlesinger-organisasie op die 1ste April 1927 die drie stasietjies in die African Broadcasting Company.

Nog het geldelike moeilikhede die groei van radio gestrem en dit was nie lank nie toe sê die destydse eerste minister, generaal Hertzog, hulle moet die hele uitsaaiery ondersoek.

Die gevolg van hierdie ondersoek was die stigting van die SAUK kragtens Wet 22 van 1936.

Eers was die nuwe nasionale diens net in Engels, maar die Wet het die instelling van 'n parallelle Afrikaanse diens voorgeskryf, sodat in 1937 omvattende uitsendings in altwee amptelike tale 'n werklikheid geword het.



Uitsaaisentrum is nie ver van die middestad van Johannesburg nie.

Broadcasting Centre is not far from Johannesburg's city centre.

A bilingual commercial service, Springbok Radio, was added to the SABC's national network on May 1, 1950, four years before the establishment of a short-wave transmitter at Paradys, near Bloemfontein, which filled in gaps caused by poor reception of medium wave transmissions in certain areas.

But an ideal of high fidelity reception for most of South Africa was already within reach, and on Christmas Day, 1961, initial FM transmissions were made from the SABC Tower in Johannesburg, carrying the newly-established Zulu and South Sotho broadcasts as well as the English and Afrikaans Services and Springbok Radio.

While rediffusion services had been provided for the black townships west of Johannesburg, the inauguration of FM made it possible for the SABC to augment these services with the introduction of broadcasts in Tswana and Northern Sotho from Pretoria in June, 1962.

FM transmissions in Zulu began from Durban in January the following year, and in June of 1963, a Xhosa service was started in Grahamstown. Venda and Tsonga transmissions were initiated in Johannesburg two years later.

Regional commercial services comprised the next broadcasting development in South Africa.

Radio Highveld, broadcasting from Johannesburg, was the first of three regional stations, and was heard for the first time in September, 1964. It was followed by Radio Good Hope, based in Cape Town, in July, 1965, and in turn by Radio Port Natal, broadcasting from Durban, in May, 1967. In October, 1975, Radio 5, formerly LM Radio, went on the air for the first time as an SABC station, using eight medium wave transmitters in various parts of the country.

In the meantime, listeners in many parts of the world had been provided with daily broadcasts in which they could learn something about South Africa.

Radio RSA, the SABC's shortwave external service, had been established in 1966, and had soon reached almost every corner of the world.

The station's multilingual programmes had been made possible by the building of the H.F. Verwoerd Transmitting Station at Bloemendal near Vereeniging.

In neighbouring South West Africa, as it then was, the SABC had been responsible for the introduction of radio services for the indigenous peoples.

This had begun in November, 1969 with the birth of the Ovambo Service (broadcasting in Kuanyama and Ndonga), the Herero Service and the Damara>Nama Service.

They were followed in February, 1976 by the Kavango Service in Kwangari, Mbukushu and Gciriku.

However, the SABC relinquished control of these services in May, 1979 when the South West African Broadcasting Corporation came into being by proclamation of the Administrator General.

By the end of that year the SABC had reached an important goal at home when 100 transmitting stations had been built, providing virtually all of South Africa with FM transmissions

Op die 1ste Mei 1950 voeg die SAUK 'n tweetalige handelsdiens, Springbokradio, by sy nasionale net en hy bou vier jaar later 'n kortgolfsender op Paradys, naby Bloemfontein, om die mediumgolfsenders se swak bereik in sekere gebiede aan te vul.

Maar die ideaal van hoëtrou-ontvangs oor byna die hele Suid-Afrika was al in sig en op Kersdag 1961 dra die eerste FM-uitsendings van die SAUK-toring in Johannesburg die pas gestigte Zoeloe- en Suid-Sotho-programme, die Afrikaanse Diens, die Engelse Diens en Springbokradio uit.

Die SAUK het rediffusiedienste aan die Swart dorpsgebiede wes van Johannesburg verskaf, maar nou het die instelling van FM dit moontlik gemaak om hierdie dienste in Junie 1962 uit te brei met die instelling van uitsendings in Tswana en Noord-Sotho uit Pretoria.

FM-uitsendings in Zoeloe uit Durban het in Januarie die jaar daarna begin en in Junie 1963 begin 'n Xhosa-diens in Grahamstad. Die Venda- en Tsonga-uitsendings begin twee jaar later in Johannesburg.

Die volgende uitsaai-ontwikkeling in Suid-Afrika was handelsdienste vir streke.

Radio Hoëveld, uit Johannesburg, was die eerste van drie streekstasies wat 'n mens in September 1964 die eerste keer gehoor het. Toe volg Radio Goeie Hoop in Kaapstad in Julie 1965 en Radio Port Natal in Durban in Mei 1967. In Oktober 1975 begin Radio 5, vroeër LM-radio, as 'n SAUK-stasie uitsaai en hy gebruik agt mediumgolfsenders in verskillende dele van die land.

Tegelykertyd was daar ook al aan luisteraars in baie dele van die wêreld daaglikse uitsendings waarin hulle iets oor Suid-Afrika te wete kon kom.

Die SAUK het Radio RSA, sy buitelandse diens oor kortgolf, in 1966 gestig en gou elke uithoek van die aarde bereik.

Die oprigting van die H F Verwoerd-sendstasie op Bloemendal naby Vereeniging het die stasie se veeltalige programme moontlik gemaak.

In die naburige Suidwes was die instelling van radiodienste vir die inheemse volkere aan die SAUK te danke.

Dit het begin in November 1969 met die geboorte van die Ovambodiens (wat in Kuanyama en Ndonga uitsaai), die Hererodiens en die Damara-en-Namadiens.

In Februarie 1976 volg die Kavangodiens in Kwangari, Mbukushu en Gciriku.

Die SAUK doen egter in Mei 1979 afstand van hierdie dienste met die totstandkoming van die Suidwes-Afrika-uitsaai-korporasie kragtens die Administrateur-generaal se proklamasie.

Teen die einde van daardie jaar het die SAUK tuis 'n belangrike doel behaal toe 100 sendstasies klaar was om feitlik die hele Suid-Afrika van FM-uitsendings te voorsien.



A Radio 5 temporary studio on the beach front at Sea Point in Cape Town during a special promotion.

Radio 5 se spesiale tydelike ateljee op die strand in Seepunt, Kaapstad.

The SABC's Radio Broadcasts.

The ENGLISH AND AFRIKAANS SERVICES broadcast 120 hours of programmes every week. These cultural services are beamed nationwide on FM, while short-wave transmissions carry them even beyond our borders.

SPRINGBOK RADIO, a commercial service, can likewise be heard throughout the country on FM, and is transmitted for 132 hours a week.

The REGIONAL COMMERCIAL SERVICES are also broadcast for 132 hours a week on FM. They are made up of RADIO HIGHEVELD, which covers the Transvaal, the Orange Free State and the north western Cape, RADIO GOOD HOPE, providing programmes for the western Cape as well as the southern and eastern coastal areas as far as East London, and RADIO PORT NATAL, broadcasting to the Natal coastal region and midlands.

RADIO 5 is on the air for 133 hours a week, and is a nationwide youth-oriented commercial service. It can be heard on medium wave as well as on shortwave in certain areas.

RADIO SOUTH AFRICA is an all-night service broadcasting between midnight and 05h00 daily (except on Sundays when it continues until 06h00) using the transmitters normally carrying the daytime commercial services.

The RADIO SERVICES IN BANTU LANGUAGES are made up of seven FM commercial stations, each broadcasting round the clock for a total of 1 176 hours a week.

The ZULU SERVICE is broadcast from Durban to Natal, KwaZulu and the eastern Transvaal and Witwatersrand, and the XHOSA SERVICE is presented from King William's Town to the eastern and western Cape. The SOUTHERN SOTHO SERVICE is broadcast from Johannesburg to the southern and western Transvaal and the Orange Free State, and the NORTHERN SOTHO SERVICE is presented from Pietersburg to the northern and eastern Transvaal. The TSWANA SERVICE is broadcast from Pretoria to the western Transvaal and the western Free State, and the VENDA and TSONGA SERVICES emanate from Pietersburg, reaching the far northern Transvaal.

The external services of RADIO RSA are beamed abroad for 185 hours a week in English, Afrikaans, German, Dutch, French, Portuguese, Spanish, Tsonga, Lozi, Swahili and Chichewa.

Die SAUK se radio-uitsendings

Die ENGELSE EN AFRIKAANSE DIENSTE saai elke week 120 uur se programme uit. Hulle straal hierdie kulturele dienste vir die hele nasie oor FM uit, terwyl kortgolffuitsendings hulle selfs tot oor ons grense dra.

SPRINGBOKRADIO, 'n handelsdiens, kan 'n mens ook deur die hele land op FM hoor. Hy saai 132 uur per week uit.

Die STREEKHANDELSDIENSTE saai ook 132 uur per week op FM uit. Hulle bestaan uit RADIO HOËVELD, wat die Transvaal, die Oranje-Vrystaat en Noordwes-Kaapland dek; RADIO GOEIE HOOP, wat programme voorsien vir Wes-Kaapland en die suidelike en oostelike kusgebiede tot by Oos-Londen; en RADIO PORT NATAL, wat na die Natalse kusgebied en binneland uitsaai.

RADIO 5 saai 133 uur per week uit. Dit is 'n landswyse handelsdiens wat op die jeug gerig is. 'n Mens kan dit in sekere gebiede op mediumgolf sowel as op kortgolf hoor.

RADIO SUID-AFRIKA is 'n deurnagdiens wat tussen middernag en 05h00 elke dag uitsaai (behalwe op Sondag wanneer dit tot 06h00 aanhou). Dit gebruik die senders wat andersins bedags die handelsdienste dra.

Die RADIODIENSTE IN BANTOETALE bestaan uit sewe FM-handelstasies. Elkeen saai 24 uur per dag uit, 'n totaal van 1 176 uur per week.

Die ZOELOE-DIENS saai vir Natal, KwaZulu, Oos-Transvaal en die Witwatersrand uit van Durban af en die XHOSA-DIENS kom uit King William's Town vir Oos- en Wes-Kaapland. Die SUID-SOTHO-DIENS saai van Johannesburg uit vir Wes- en Suid-Transvaal en die Oranje-Vrystaat, die NOORD-SOTHO-DIENS kom uit Pietersburg vir Noord- en Oos-Transvaal, die TSWANA-DIENS uit Pretoria vir Wes-Transvaal en die Wes-Vrystaat, en die VENDA-DIENS uit Pietersburg – dit bereik die verre Noord-Transvaal.

Die buitelandse dienste van RADIO RSA saai 175 uur per week na die buiteland uit in Engels, Afrikaans, Duits, Nederlands, Frans, Portugees, Spaans, Tsonga, Lozi, Swahili en Chichewa.



'n Ingenieur verbind die Cathedral of Christ the King in Johannesburg met Uitsaaisentrum deur 'n drakontrolebank in die sakristie.

An engineer links the Cathedral of Christ the King in Johannesburg with Broadcasting Centre via a portable control desk in the sacristy.



Immediacy remains a valuable advantage in radio news. Onmiddellikheid bly 'n waardevolle voordeel in radionuus.

The Radio News Department.

This service has grown phenomenally since its creation in 1950 when the SABC's own teams of journalists took over responsibility for the compilation of news bulletins. Previously these had been compiled by journalists on the staff of the South African Press Association. Today news is broadcast in 24 languages in more than 262 bulletins for more than 24 hours per weekday.

The SABC has 18 editorial offices in South Africa and South West Africa/Namibia, as well as offices in London and Washington.

The news material supplied by these offices is gathered by approximately 1 200 correspondents including about 40 freelance professionals abroad. Use is also made of news supplied by seven agencies such as UPI and SAPA. The news office in Johannesburg receives a daily total of half a million words which are assimilated and processed by 250 full-time journalists. A special division of the news service makes the material gathered in this way available to about 40 client stations overseas.

The TV News Department.

SABC-TV has news teams throughout the country, and camera teams in Johannesburg, Pretoria, Bloemfontein, Durban, Port Elizabeth, Cape Town and Windhoek.

It is often difficult to get television cameras to a scene of action, but where this is possible, road vehicles, aircraft and even sea vessels are used to facilitate on-the-spot coverage.

All filmed material is flown to Johannesburg for processing and transmission, but the recent introduction of portable video cameras has resulted in the availability of instant reports which can be played into the television network from any centre or outside broadcast vehicle.

The international scene is covered on SABC-TV's behalf on a regular basis by Visnews and UPI-TN staff who are able to file reports of events, within hours of their occurrence, through satellite transmissions.

Photographs, sent by cable from Associated Press in London, are often used when updating is required or when there is insufficient time for filmed or videotaped reports to be gathered at the scene and transmitted to South Africa.

From Monday to Saturday inclusive three television newscasts can be seen daily, two of them in English or Afrikaans on a daily rotation basis. On Sundays a news review programme is transmitted.

Die Radionuusafdeling

Die diens het fenomaenaal gegroei sedert sy instelling in 1950 toe die SAUK se eie span joernaliste die verantwoordelikheid vir die samestelling van nuusbuletins oorgeneem het. Voorheen het joernaliste op die Suid-Afrikaanse Persvereniging se personeel hulle saamgestel. Vandag saai die SAUK nuus uit in 24 tale en in meer as 262 buletins vir meer as 24 uur per weekdag.

Die SAUK het 18 redaksiekantore in Suid-Afrika en Suidwes, asook kantore in Londen en Washington.

Omtrent 1 200 korrespondente, insluitende omtrent 40 onafhanklike professioneles in die buiteland, samel die nuusmateriaal in wat hierdie kantore verskaf.

Die SAUK gebruik ook nuus wat sewe agentskappe, byvoorbeeld UPI en SAPA, verskaf. Die nuuskantoor in Johannesburg ontvang 'n daaglikse totaal van 'n halfmiljoen woorde wat 250 voltydse joernaliste assimileer en prosessee. 'n Spesiale afdeling van die nuusdiens maak die materiaal wat hulle so ingesamel het, beskikbaar vir omtrent 40 kliëntstasies oorsee.

Die TV-nuusdepartement

SAUK-TV het nuusspanne deur die hele land en kame-raspanne in Johannesburg, Pretoria, Bloemfontein, Durban, Port Elizabeth, Kaapstad en Windhoek.

Dit is dikwels moeilik om televisiekameras by 'n ak-sietoneel te kry, maar waar dit moontlik is, gebruik hulle padvoertuie, lugvoertuie en selfs seevaartuie om op-die-plek-dekking makliker te maak.

Alle verfilmde materiaal vlieg Johannesburg toe vir prosesering en uitsending. Die onlangse verskyning van dravideokameras het tot gevolg gehad dat onmid-dellike verslae beskikbaar is wat die nuuspersoneel in die televisienet kan inspeel van enige sentrum of buite-uitsendingsvoertuig af.

Personeel van Visnews en UPI-TN dek gereeld die internasionale toneel namens die SAUK. Hulle kan verslae oor gebeurtenisse binne ure na hulle plaasgevind het per satelliet oorsend.

Die SAUK gebruik dikwels foto's wat Associated Press in Londen per kabel stuur as hulle die berigte op datum wil bring of as daar nie genoeg tyd is vir iemand om verfilmde of videobandverslae op die toneel in te samel en na Suid-Afrika oor te send nie.

Van Maandae tot en met Saterdag kan die publiek drie nuusuitsendings elke dag sien, twee in Engels of Afrikaans, op 'n daaglikse rotasiebasis. Op Sondag saai die SAUK 'n nuusoorsigprogram uit.



Met 'n satelliet se hulp kan die televisie enigiets in die wêreld vinnig hier wys.

Satellite transmissions speed global coverage to Television Centre for local screening.



The SABC's outside broadcast vehicles are used to record events on videotape or relay them in direct transmissions.

Die SAUK gebruik sy buite-uitsendingwaens om gebeurtenisse op band op te neem of direk uit te saai.

The Television Schedule

The television service now presents a weekly 44-hour transmission schedule, equally in English and Afrikaans.

Programmes are broadcast between 17h30 and 23h00 from Mondays to Thursdays inclusive, and between 17h30 and 24h00 on Fridays and Saturdays; on Sundays transmissions begin at 16h30 and end at about 22h00.

All aspects of programming are reflected in planning: news and news commentary, documentary programmes, drama, actuality broadcasts, comprehensive sports coverage, light entertainment, women's and children's programmes and religious services. Local productions, which account for more than half of all transmissions, are supplemented by programmes bought overseas (many of them later dubbed into English or Afrikaans) and by co-productions undertaken with other television programming organisations.

Live broadcasting of sporting events and other important outside activities are covered by mobile television units.

When current expansion of the national television network is completed during the first half of 1980, 47 high-powered and at least 19 low-powered transmitters will be in operation. These transmitters will provide television coverage for approximately 85% of the target audience.

TV2

Training and studio construction started early in 1980 for the introduction of a second channel, TV2 – a service in some of the Bantu languages.

Die televisieskedule

Die televisiediens bied nou weekliks 'n uitsaaiskedule van 44 uur, gelykop in Engels en Afrikaans, aan, van die 5de Januarie 1976.

Televisie saai uit tussen 17h30 en 23h00 van Maandae tot Donderdae, tussen 17h30 en 24h00 op Vrydae en Saterdag en tussen 16h30 en 22h00 op Sondag.

Die beplanning sluit allerhande soorte programme in: nuus en nuuskomentaar, dokumentêre programme, drama, aktualiteit, ligte vermaak, vroue- en kinderprogramme en godsdienste. Meer as die helfte van al die uitsendings is plaaslike produksies.

Die SAUK vul hierdie programme aan met programme wat hy oorsee koop (waarvan hy later baie in Engels of Afrikaans oorklank) en met koproduksies saam met ander organisasies.

Mobiele televisie-eenhede saai sport en ander belangrike buitebedrywighede lewendig uit.

Wanneer die uitbreiding van die nasionale televisienet teen die eerste helfte van 1980 klaar is, sal daar 47 hoëkrag- en ten minste 19 laekragssenders wees. Hierdie senders sal televisiedekking aan omtrent 85% van die teikengehoor voorsien.

TV2

Opleiding en die bou van ateljees het vroeg in 1980 begin vir die instelling van 'n tweede kanaal, TV2 – 'n diens in party van die Bantoetale.



'n Kompakte mobiele ateljee in 'n SAUK-buite-uitsendingsateljee.

A compact mobile studio in an SABC outside broadcast studio.

The Piet Meyer Building

The complex north of Artillery Road consists of four separate units, the towering office block having been named after Dr Piet Meyer on his retirement in 1980 as chairman of the SABC Board.

This part of the broadcasting complex comprises an administrative tower block, a podium and parking complex, a radio studio block, a workshop and a stores block. All units are connected by underground passageways that also house a comprehensive postal conveyer system and other services.

Canopies and columns shield the exterior of the Piet Meyer Building, preventing temperatures inside from rising as much as they otherwise would, thereby reducing energy consumption. The use of tinted glass in windows throughout the complex has likewise contributed to this economy.

Work began on the administration block in March, 1968. Because of the steep slope of the site from south to north, it was necessary to excavate a large part of its southern boundary for construction of the three parking basements and the podium. The podium forms an impressive rectangular apron from which the tower block rises majestically into the sky.

Basement and Podium Area.

The underground parking areas accommodate 765 vehicles and an automatic car washing machine, vehicles owned and operated by the SABC itself exceeding 200. Above these floors are various catering facilities.

It might be of interest to note here that more meals are served in Broadcasting Centre's various restaurants and cafeterias than in Johannesburg's five star Carlton Hotel. There are two cafeterias and an à la carte restaurant in the Piet Meyer Building, which also houses two blue collar cafeterias and four executive dining rooms. There are also two cafeterias in the television centre.

On the top level of the podium are an automatic telephone exchange, the main control area and a computer centre.

On the northern side of the tower block is a promenade garden with access to an auditorium as well as the radio studio block and the largest of the restaurants.

On the west side is a spacious promenade area, the piazza level, which includes several fountains and a clock tower connected to the SABC's main time system.

The tower block rises 146 m above the podium, and consists of 28 office floors and six service floors. Stained glass windows adorn the buttress walls of each floor, and the windows glow colourfully but softly, illuminated as they are by natural light from outside.

The main reception area and security control point is located within the core of the tower block, one level below that of the podium.

Banking facilities are available in the lobby area beyond the security control barriers.

Five passenger lifts serve the first 15 floors of the tower block, a further five serving the upper floors above Floor 15. Each travels at about 300 m à minute, and the waiting period for any lift should not be more than 30 seconds. There are two service lifts reaching all floors, including the service floors.

Typical floors contain fully carpeted offices, divided by movable walls. Some of the offices and the boardrooms on the 27th and 28th floors are panelled. Both boardrooms have film and slide projection facilities.

Die Piet Meyer-gebou

Die kompleks noord van Artillery-weg bestaan uit vier aparte eenhede. Die rysige kantoorblok is vernoem na dr Piet Meyer toe hy in 1980 as voorsitter van die SAUK-raad afgetree het. Hierdie deel van die uitsaai-kompleks sluit in 'n administratiewe toringblok, 'n podium en parkeerkompleks, 'n radioatelsee-blok, 'n werkwinkel en 'n magasynblok. Al die eenhede is verbind deur ondergrondse gange waarin daar ook 'n omvattende posvervoerstelsel en ander dienste is.

Gewelwe en pilare vorm skerms aan die buitekant van die Piet Meyer-gebou sodat temperature binne nie so baie styg as wat hulle anders sou nie. Dit verminder energieverbruik. Die gebruik van getinte glas in vensters deur die hele kompleks het ook tot hierdie ekonomie bygedra.

Die werk aan die administrasieblok het in Maart 1968 begin. Omdat die terrein so 'n styl helling van suid na noord het, was dit nodig om 'n groot deel van sy suidelike grens uit te graawe om die drie parkeerkelders en die podium te bou.

Die podium vorm 'n indrukwekkende reghoekige blad waarop die toringblok majestueus in die lug oprys.

Kelder- en podiumgebied

In die ondergrondse parkeergebiede is daar plek vir 765 voertuie en 'n outomatiese karwasmassjien. Die SAUK het meer as 200 voertuie wat hy self gebruik.

Bokant hierdie verdiepings is daar allerhande spysenieringsfasiliteite.

Dit mag interessant wees om daarop te let dat Uitsaaisentrum se verskillende restaurante en kafeterias meer etrus bedien as die vyfsterhotel die Carlton. In die Piet Meyer-gebou is daar vier kafeterias en 'n à la carte-restaurant en ook vier vername eetkamers. In die televisiesentrum is daar ook twee kafeterias.

Op die boonste vlak van die podium is 'n outomatiese telefoonsentrale, die hoofkontrolegebied en 'n rekenaarcentrum.

Aan die noordelike kant van die toringblok is daar 'n promenadetuin. Daarvandaan kan 'n mens in 'n ouditorium kom, en by die radioatelsee-blok en die grootste van die restaurante.

Aan die westekant is daar 'n ruim promenadegebied, die piazza-vlak. Daar is o.a. verskeie fonteine en 'n kloktoring wat aan die SAUK se hoofdstelsel verbind is.

Die toringblok styg 146 m bo die podium uit. Dit bestaan uit 28 kantoorverdiepings en ses diensverdiepings. Kleurvensters versier die stutmure van elke verdieping. Die vensters gloei kleurvol maar sag: die natuurlike lig van buite val deur hulle.

Die hoofontvangsgebied en sekuriteitsbeheerpunt is in die kern van die toringblok, een vlak onder die podium.

Daar is bankfasiliteite beskikbaar in die voorportaalgebied, anderkant die sekuriteitsbeheerversperrings.

Vyf passasiershysers bedien die eerste 15 verdiepings van die toringblok; nog vyf bedien die verdiepings bokant nommer 15. Hulle ry almal teen omtrent 300 m per minuut en 'n mens behoort nie langer as 30 sekondes vir 'n hysbak te wag nie. Daar is 2 dienshysers wat by al die verdiepings uitkom, die diensverdiepings ook.

Tipies van die verdiepings, is volmatkantore. Verskuifbare mure skei hulle. Party kantore en die raadsale op die 27ste en die 28ste verdieping het muurpaneel. In al twee die raadsale kan 'n mens films en skyfies wys.

A conference theatre is located near the entrance to the underground garages on Level K1, and on the ground floor a second preview theatre has been built to accommodate 25 people. The other preview theatre is in the television centre.

Only half of the level above the 28th floor has been allocated as a service area, the remainder being a reception area, known as the Panorama Lounge, with facilities for social gatherings of up to 400 persons.

The communications systems within the tower block are second to none. They include what is probably the largest random access television relay system in the world. Known as Dial-a-Programme, it enables executives and heads of departments to monitor rehearsals, recordings and transmissions through Broadcasting Centre, these being relayed to office television monitors.

In this way some of the problems demanding the immediate attention of an official can be solved without the necessity of leaving the office. Selection of the relevant studio is made through dialling a desk console that looks very much like a conventional telephone. The system comprises 72 channels and can serve nearly 200 users at a time.

The SABC's automatic document and mail distribution system is far more complex and versatile than the old-fashioned pneumatic tube system, and employs individually routed plastic document containers carrying up to 15 kg each. These are conveyed within the tower block, the radio studio complex and the workshop.

The equipment can handle over seven tons of material an hour – a more than adequate amount, even for the enormous quantity of viewers' and listeners' mail that is received.

If telephone lines are engaged, senior executives can communicate with each other by means of a desk intercom system.

A loudspeaker system installed throughout Broadcasting Centre enables certain control room personnel to direct staff in the event of an emergency. Besides a smoke detection system throughout the tower block, there is firefighting equipment on each floor. Fire escape stairs are situated at the eastern and western extremes of every level, the lifts being housed in the building's central core.

Amenities for the general welfare of staff include a chapel for interdenominational services and quiet reflection, situated on the ground floor above Level K1. A fully equipped gymnasium and a billiards room are among the sport and recreation facilities available on the premises. A physician is in daily attendance.



Banking and comprehensive restaurant facilities are among the amenities of the centre.

Die sentrum het ook die gerief van 'n bank en restaurante.



Die Piet Meyer-gebou met die radioblok op die voorgrond.

The Piet Meyer Building with the radio block in the foreground.

Daar is 'n konferensietheater naby die ingang van die ondergrondse parkeerplekke op vlak K1 en op die grondverdieping is daar 'n tweede voorskouteater met plek vir 25 mense. Die ander voorskouteater is in die televisiesentrum.

Net die helfte van die vlak bokant die 28ste verdieping is vir 'n diensgebied bedoel. Die res is 'n ontvangsgebied, die Panorama-saal, waar tot 400 mense gesellig bymekaar kan kom.

Die kommunikasiestelsels in die toringblok staan vir niks agteruit nie. Onder andere is daar waarskynlik die wêreld se grootste stelsel om in te skakel op televisieprogramme, die "Dial-a-Programme". Hierdeur kan uitvoerende amptenare en hoofde van departemente repetisies, opnames en uitsendings deur die hele uitsaaisentrum dophou op stelle in hulle kantore.

So kan 'n amptenaar gou aandag gee aan 'n probleem sonder dat hy uit sy kantoor gaan. Hy skakel net 'n nommer op 'n konsolle wat baie soos 'n gewone telefoon lyk. Daar is 72 kanale op die stelsel en byna 200 mense kan hom gelyktydig gebruik.

Die SAUK se outomatiese stelsel om dokumente en pos te versprei, is baie ingewikkelder en ouliker as die outydse lugbuisstelsel. Dit gebruik plastiese houers. Elkeen kan tot 15 kg pos hou en 'n mens kan hulle stuur waarheen jy wil in die toringblok, die radioatelleekompleks en die werkwinkel. Die toerusting kan meer as sewe ton materiaal per uur hanteer. Dit is meer as genoeg, selfs met die ontsaglike hoeveelheid pos van kykers en luisteraars.

As telefoonlyne beset is, kan die grootbase met mekaar praat oor aparte telefone op hulle tafels.

Daar is luidsprekers deur die hele Uitsaaisentrum. Oor hulle kan 'n mens met die personeel praat as daar 'n noodtoestand ontstaan.

Orals in die toringblok is daar rookverklidders en daar is op elke verdieping toerusting om brande te bestry. Daar is brandtrappe oos en wes op elke vlak; die hysbakke is in die middel van die gebou.

Geriewe vir die algemene welvaart van die personeel is o.a. 'n kapel vir interdenominasionele dienste en stille bepeinsing op die grondverdieping bokant vlak K1. 'n Ten volle toegeruste gimnasium en 'n biljartkamer tel onder die sport-en-ontspanningsfasiliteite op die perseel. Daar is ook elke dag 'n dokter beskikbaar.



The Radio Studio Block: Planning and Design

Planning for this important section of Broadcasting Centre also began in 1968. And while the design and installation of technical facilities for the television studios were carried out by outside consultants, the SABC itself was responsible for the radio studios.

As a first step, an analysis was made of studio use and efficiency in the Corporation's former radio studios on Commissioner Street, in Johannesburg's city centre. Resulting figures were combined with a ratio involving the quantity of programme material produced and the total number of broadcasting hours.

As far as possible the essential requirements of individual programme services were taken into consideration in planning the number of production and continuity studios to be built.

The following facilities were eventually provided:

Continuity and Production Suites

Each consists of two areas: a presentation area and a control room. Each service has the use of at least one such suite for continuity purposes, that is to say for the presentation of programmes on the air.

Facilities in continuity suites are installed in such a way that the studio and control room can be linked to a computerised system for automated transmission, and can also be used separately as production and dubbing centres as and when required.

Similar suites are set aside solely for production.

The complex now includes 27 suites of this type.

Music Suites

There are five radio music suites in the complex. The largest is an orchestral studio which can accommodate approximately 100 musicians, a choir and an audience of about 120 people. It is provided with an excellent organ.

Next in size is a studio acoustically suitable for light or pop music, and can accommodate up to 40 musicians. A small soloist studio is also included in the latter suite.

There are two further suites of about 700 cu m in area; one designed for serious music recitals, and the other devoted to the production of light or pop music.

The fifth music studio is equipped for the recording of African music.

In addition there are three mix-down rooms where multi-track tapes are re-recorded according to the types of transmission required.



The comprehensive control desk adjoining Studio M1.
Die omvattende kontrolebank langs ateljee M1.



In ateljee M1 is daar 'n pragtige orrel.

Studio M1 is equipped with a fine organ.

Die Radioateljeeblok: Beplanning en Ontwerp

Beplanning vir hierdie belangrike seksie van Uitsaaisentrum het ook in 1968 begin. Terwyl buitekonsultante die ontwerp en installasie van tegniese fasiliteite vir die televisieateljees uitgevoer het, was die SAUK self verantwoordelik vir die radioateljees.

As eerste stap het die Korporasie 'n ontleding gemaak van ateljeegebruik en doeltreffendheid in sy vorige radioateljees in Commissionerstraat in die middestad van Johannesburg. Hy het daardie syfers gekombineer met syfers oor die hoeveelheid programmateriale wat hy produseer en die totale aantal uitsaaieure. Hy het sover moontlik die wesentlike vereiste van individuele programdienste in aanmerking geneem by die beplanning van die aantal produksie- en kontinuïteitsateljees wat hy moes bou. Uiteindelik het hy die volgende fasiliteite voorsien:

Kontinuïteits- en Produksiestelle

Elkeen bestaan uit twee vertrekke: 'n aanbiedingsvertrek en 'n kontrolekamer. Elke diens het die gebruik van ten minste een so 'n stel vir kontinuïteit, d.w.s. vir die aanbieding van programme op die lug. Die toerusting in die kontinuïteitsstelle is so ingerig dat 'n mens dit kan verbind met 'n gerekenariseerde stelsel vir geoutomatiseerde transmissie en die stelle kan ook gebruik word as produksiesentrums waar en wanneer dit nodig is. Sulke stelle is opsy gesit net vir produksie, waarvan daar nou 27 in die kompleks is.

Musiekstelle

Daar is vyf radiomusiekstelle in die kompleks. Die grootste is 'n orkesateljee wat plek het vir omtrent 100 musikante, 'n koor en 'n gehoor van omtrent 120, en dit het 'n uitstekende orrel.

Die volgende grootste is 'n ateljee wat akoesties geskik is vir ligte of "pop"-musiek met plek vir 40 musikante. Hierdie stel bevat ook 'n solistateljeetje.

Daar is nog twee stelle van omtrent 700 m³ in die gebied. Een is ontwerp vir die repetisie van ernstige musiek en die ander vir die produksie van ligte of "pop"-musiek.

Die vyfde musiekateljee is toegerus vir die opname van Afrika-musiek.

Daarby is daar drie mengkamers waar 'n mens veelbaanbande kan heropneem volgens die tipe transmissie wat jy wil hê.

Drama Suites

Although five drama suites were originally planned, the introduction of television in South Africa, announced in 1971, caused the Corporation to reconsider the facilities to be provided for radio services. It was decided to reduce the number of radio studios to four, the area to have been occupied by the fifth being redesigned as a training area for radio presentation staff.

The facilities in the drama suites are comprehensive, permitting most sound effects not available on recordings to be produced on the spot. Dead areas are provided for simulated outdoor acoustics, and a feature of the layout of each suite is an acoustic passage through which artists can enter or leave the studio silently without opening and closing doors. There are various walking surfaces for special sound effects in the studios as well as in the dead areas, and curtains are provided for dividing the studios into one or more smaller ones.

Variety Suites

Three variety suites had been envisaged, but as the introduction of television suggested that this type of entertainment would be less in demand on the radio services, the area set aside for the third suite was divided horizontally into two television rehearsal rooms.

The two variety suites that were eventually constructed can each accommodate about 150 people.

Other Facilities

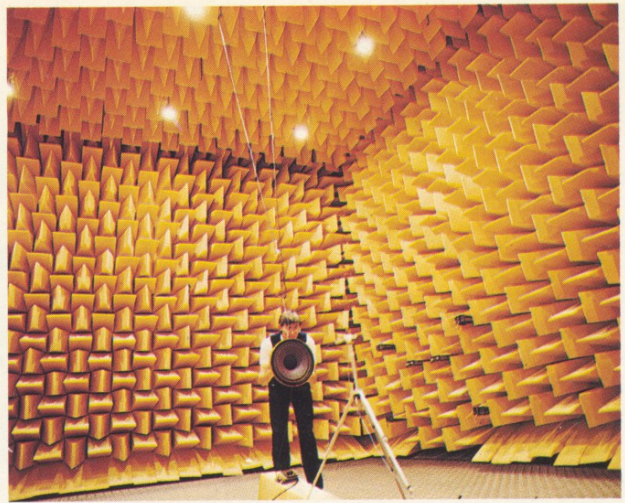
Other radio facilities include an echo chamber, three echo rooms, an echo machine room or echo-free chamber, two record libraries, the central control area, a re-recording room and nine editing rooms.

All production facilities not directly concerned with transmission are housed on the top level of the radio complex, the rest being situated on the lower level.

While many transmissions are made automatically through banks of computer-controlled tape machines, live presentation can be made without the need for a technical assistant to the announcer-on-duty.



Computerised tape banks in the main radio control room.
Gerekenariseerde bandbanke in die vernaamste radiokontrolekamer.



Die aneggoiese of eggovry kamer is om mikrofone in te toets.

The anechoic or echo-free chamber is used for testing microphones.

Dramastelle

Hoewel die Korporasie oorspronklik vyf dramastelle beplan het, het hy met die instelling van televisie in Suid-Afrika – in 1971 aangekondig – die fasiliteite in heroorweging geneem wat hy vir radiodienste wou verskaf. Hy besluit toe om die aantal radioateljees tot vier te verminder en herontwerp die gebied wat die vyfde in beslag sou geneem het as 'n opleidingsgebied vir radioaanbiedingspersoneel.

Die fasiliteite in die dramastelle is omvattend: die meeste byklanke wat 'n mens nie op plate kan kry nie, kan jy daar self maak. Daar is dooie gebiede om buite-akoestiek na te maak, en 'n kenmerk van elke stel se plan is 'n akoestiekgang waardeur kunstenaars saggies by die ateljee in en uit kan gaan sonder om deure oop en toe te maak. Daar is allerhande loopvlakke vir spesiale byklanke in die ateljees en in die dooie gebiede, en daar is gordyne om die ateljees mee te verdeel.

Verskeidenheidstelle

Die Korporasie wou drie verskeidenheidstelle bou, maar die instelling van televisie het hom laat vermoed dat daar minder aanvraag vir hierdie soort vermaak in die radiodienste sou wees. Toe verdeel hy die derde stel se gebied horisontaal in twee televisierepetisie-kamers. In elkeen van die uiteindelijke twee verskeidenheidstelle is daar plek vir 150 mense.

Ander fasiliteite

Ander radiofasiliteite is vier eggovvertreke, 'n eggomasjienkamer, twee diskoteke, die sentrale beheergebied, 'n heropnamekamer en nege redigeerkamers. Al die produksiefasiliteite wat nie regstreeks met transmissie te make het nie, is op die boonste vlak van die radio-kompleks; die ander is op die laer vlak.

Terwyl rekenaar beheerde bandmasjiene baie transmissies outomaties maak, kan die omroeper op diens lewend aanbied sonder 'n tegniese assistent se hulp.



Television Centre.

Construction and Acoustics

Transforming the SABC architects' final plans into reality presented a considerable challenge to the constructors as far as the provision of the desired acoustics was concerned. But these were successfully provided by the use of special building materials and construction methods.

For instance, the radio block was built from an outer concrete shell from which the various studios were hung so that there were no unnecessary sound transmissions between the outer shell and the studios, nor between the studios. But in practice the complex appears to be a solid interconnected unit.

The Television Complex

The creation of the SABC television complex, being the first of its kind in South Africa, demanded careful execution according to the advice of experts.

Nevertheless, the SABC embarked on its own research before appointing consultants to formulate requirements and systems.

The consulting team, including a management consultant responsible for all design and construction works, was appointed in 1971.

TV1, the first phase of the introduction of television, was to be operational from January 1976 in full colour, and the training of staff and the building up of a reserve of programmes to be accomplished in the intervening five years.

This deadline underlined the need for a flexible approach to the design of the building and its services, and dictated a modular method in the design of all mechanical and electrical services.

Meetings were held in London between SABC officials and the entire consultative team in September 1971, culminating in the preparation and approval of a site utilization and zoning plan with preliminary sketches.

The television complex as it now stands comprises a technical spine with ancillary accommodation, production and news studios as well as artists' facilities.

Die televisiesentrum.

Konstruksie en akoestiek

Dit was vir die bouers 'n aansienlike uitdaging om die finale planne van die SAUK se argitekte om te skep in die werklikheid wat die verskaffing van die verlangde akoestiek betref, maar hulle het dit reggekry deur die gebruik van spesiale boumateriale en -metodes. Hulle het byvoorbeeld die radioblok gebou in 'n betondop waarin hulle die verskillende ateljees gehang het sodat daar geen onnodige klankoordings was tussen die buitenste dop en die ateljees of tussen die ateljees nie en tog lyk die kompleks na eenhede wat solied is.

Die televisiekompleks

Die skepping van die SAUK-televisiekompleks, aangesien dit die eerste van sy soort in Suid-Afrika is, het versigtige uitvoering vereis volgens die advies van deskundiges.

Nietemin, die SAUK het self met navorsing begin voor hy konsultante aangestel het om vereistes en stelsels te formuleer.

Hy het die span konsultante, met inbegrip van 'n bestuurskonsultant verantwoordelik vir alle ontwerp en konstruksiewerke, in 1971 aangestel.

TV1, die eerste fase van die instelling van televisie, moes operasioneel wees van Januarie 1976 in volle kleur, en die opleiding van personeel en die opbou van 'n voorraad programme moes in die vyf jaar tussen-in geskied.

Hierdie vereiste het die behoefte aan 'n buigsame benadering tot die ontwerp van die gebou en sy dienste beklemtoon en dit het 'n modulêre metode in die ontwerp van alle meganiese en elektriese dienste noodsaaklik gemaak.

Die SAUK-amptenare en die hele raadplegende span het in September 1971 vergaderings gehou in Londen. Dit het uitgeloop op die voorbereiding en goedkeuring van 'n plan vir terreinbenutting en soneering, met voorlopige sketse.

Die televisiekompleks, soos hy nou daar staan, omdat 'n tegniese ruggraat met ondergeskikte huisvesting, produksie- en nuusateljees en kunstenaarsfasiliteite.

Single Level Production Access

Before construction began, the site had a natural fall of 1:10 from south to north, and therefore did not lend itself easily to a one-level development for studios and their immediate support facilities. Nevertheless the southern section was excavated and the television studios partially sunk into the hillside some distance below the SABC Tower.

All studios are on the same level, as originally envisaged, and a master plan for the complex provides for future studios to be built above basement level, likewise attaining the ideal of having all studios and scenery facilities on the same floor.

Technical Facilities

Below the studio floor level and under the technical spine, accommodation has been provided for film processing, film and tape storage, cable and telephone termination and general storage as well as for copper earthing rods sunk into the ground 30 m below the second basement level. The technical spine is a medium rise structure, clad externally in exposed aggregate precast concrete panels. It rises six floors above ground level with one full basement and two part sub-basements below.

Electrical Installation

The television complex has an 11 kV H.T. electrical supply. Standby power is available to allow safe movement within the building, and to maintain essential loads so that transmissions can continue. To prevent a period of total darkness between a power failure and the starting up of the standby generators, 8W fluorescent lamps, powered by nickel cadmium batteries, are installed in ordinary light fittings at strategic points throughout the building.

The many and varied technical services of the complex as a whole, such as air conditioning and ventilation, HT and LT switchboards, standby generators and lifts, are monitored and controlled by means of a computer-operated building automation system located in the tower block.

The average monthly consumption of electricity in Broadcasting Centre as a whole is 6 680 000 units, but a thermal storage system ensures an economic distribution of power, resulting in a saving of approximately R25 000 a month.

Enkelvlakproduksietoegang

Voor konstruksie begin het, het die terrein 'n natuurlike helling gehad van 1:10 van suid na noord. Dit was dus nie sommer geskik vir 'n eenvlakontwikkeling vir ateljees en hulle onmiddellike steunfasiliteite nie. Nietemin, die bouers het die suidelike seksie uitgegrawe en die televisieateljees gedeeltelik ingebed teen die bult 'n ent anderkant die SAUK-toring.

Alle ateljees is op dieselfde vlak, soos die oorspronklike plan was, en 'n meesterplan vir die kompleks maak voorsiening daarvoor om toekomstige ateljees bokant keldervlak te bou en 'n mens bereik dus ook die ideaal dat jy al die ateljees en dekorfasiliteite op dieselfde verdieping het.

Tegniese fasiliteite

Onderkant die ateljeevloervlak en onder die tegniese ruggraat, is huisvesting vir filmprosessering, film- en bandopberging, kabel- en telefoonente en algemene opberging, asook vir koperardingstawe wat 30 m onderkant die tweede keldervlak in die grond ingeslaan is.

Die tegniese ruggraat rys redelik hoog. Die buitebekleding is blootgestelde aggregaatopslaanbetonpanele. Dit styg 5 verdiepings bokant grondvlak uit met een volle kelder en twee gedeeltelike subkelders onderkant.

Elektriese installasie

Die televisiekompleks het 'n 11 kv hs elektriese toevoer.

Reserwekrag is beskikbaar vir veilige beweging binne die gebou en om noodsaaklike laste vol te hou sodat transmissie kan voortgaan.

Om 'n tydperk van algehele duisternis te verhoed tussen 'n kragonderbreking en die aanskakeling van die reserwegenerators is 8 w fluoressente lampe, wat hulle krag kry van nikkeldadmiumbatterye, geïnstalleer in gewone ligte op strategiese punte deur die hele gebou.

'n Rekenaar bedien 'n bou-otomatisasiesetstelsel in die toringblok en monitor en beheer die baie en allerhande tegniese dienste van die kompleks as geheel, byvoorbeeld lugversorging en ventilasie, hs- en ls-skakelborde, reserwegenerators en hysbakke.

Die gemiddelde maandelikse verbruik van elektrisiteit in die hele Uitsaaisentrum is 6 680 000 eenhede, maar 'n termo-opgaarstelsel verseker 'n ekonomiese verspreiding van krag. Die gevolg is 'n besparing van omtrent R25 000 per maand.



The set-building area is on the same level as the studios in Television Centre.

Die stelbougebied is op dieselfde vlak as die ateljees in die televisiesentrum.



A control room in Television Centre.

Air Conditioning

The air conditioning plant has to contend with head loads of 250 kW in every studio with an average of 320 watts/m³ and possible concentrations of up to 640 watts/m³.

Human occupancy can be as high as 400 persons in a single studio; persons who have to be provided with air conditioning in such a way that the necessary equipment does not obstruct lighting installations above or below the high working grids, the cycloramas or the scenery sets. At the same time, unacceptable noise levels have to be avoided.

These requirements were met by means of a variable volume supply to four separate zones in each studio, having a control range of between 10 and 200 percent of the quantity of air required to dissipate a heat load of 320 watt/m³ in all zones.

The controlling thermostats are in the return of the zones.

Incidentally, the air conditioning ducts run in high hats above the studio roof levels so as not to increase the extent and therefore the cost of acoustically treated wall surfaces.

Water Consumption

Broadcasting Centre uses approximately 17 712 kilolitres a month, but as 15 352 of these are obtained from an artesian stream beneath the centre, an average monthly saving of R3 525 is achieved.

Technical Details

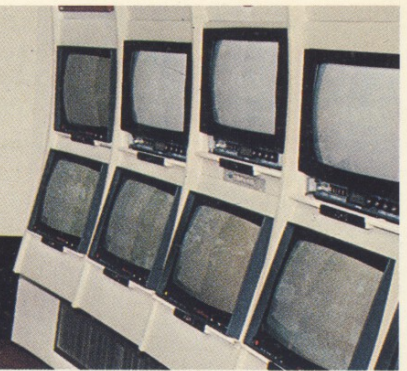
Readers interested in the technical details of television electronics might like to digest the information in the next few paragraphs.

A computerised lighting control system is installed for the operation of production lighting in each studio. This makes it possible to store up to 100 variations in the memory of each system.

A scene consists of a special selection of lighting circuits in the studios, with a separate intensity selection of each circuit. Each illumination thus devised can be faded up and down or cross-faded with another scene. The circuit number and the intensity level of each circuit selected in the relative studio is displayed on a television screen in that studio. Some of the other facilities provided are:

- modification of circuits or intensities after recall from the memory system.
- simultaneous addition or subtraction of scenes.
- a pin-board matrix with manual control as a back-up system.
- portable remote control consoles to facilitate the setting up of lighting plots in the studios.

Control consoles are located in the vision control rooms of the studios, operators relying on television monitors to follow the courses of productions.



'n Kontrolekamer in die televisiesentrum.

Lugversorging

Die lugversorgungs-aanleg het koplaste van 250 kW in elke ateljee met 'n gemiddelde van 320 watt/m³ met moontlike konsentrasie van tot 640 watt/m³.

Daar kan tot 400 mense in 'n enkele ateljee gaan. 'n Mens moet vir hulle lugversorging verskaf op so 'n wyse dat die nodige toerusting nie in die pad kom van liginstallasies bo of onder die hoë werkroosters, sikloramas of toneelstelle nie. Terselfdertyd moes die bouers onaanvaarbare ruispeile vermy.

Die bouers het aan hierdie vereistes voldoen deur middel van veranderlike volumevoorsiening na vier aparte sones in elke ateljee met 'n kontrolestreek van tussen 10 en 200 persent van die hoeveelheid lug wat nodig is om 'n hittelas van 320 watt/m³ in alle sones te versprei.

Die beheertermostate is in die terugvoer van die sones.

Die lugversorgingsleidings loop bokant die ateljeedakvlakke om nie die omvang en dus koste van akoesties behandelde muuropervlaktes te vermeerder nie.

Waterverbruik

Uitsaaisentrum gebruik omtrent 17 712 kiloliter per maand, maar aangesien die SAUK 15 352 hiervan uit 'n artesiëse bron onder die sentrum kry, spaar hy gemiddeld R3 525 per maand.

Tegniese besonderhede

Lesers wat in die tegniese besonderhede van televisie-elektronika belangstel, het dalk lus om die inligting in die volgende paar paragrawe te verteer.

Daar is 'n gerekenariseerde ligbeheerstelsel geïnstalleer vir die werk van produksiebeligting in elke ateljee. Dit maak dit moontlik om tot 100 variasies in elke stelsel se geheue te bêre. 'n Toneel bestaan uit 'n spesiale seleksie van ligkringe in die ateljees, met 'n aparte intensiteitseleksie van elke kring. Elke illuminasie wat 'n mens so ontwerp, kan jy op- en af- of met 'n ander toneel kruisdoof. Die kringnommer en die intensiteitspeil van elke kring wat 'n mens in die betrokke ateljee selekteer, wys op 'n televisieskerm in daardie ateljee. Party van die ander fasiliteite is:

- modifikasie van kringe of intensiteite na herroeping uit die geheuestelsel.
- gelyktydige byvoeging of wegneming van dekor.
- 'n spelbordmatriks met handbeheer as steunstelsel.
- draagbare afstandbeheerkonsoles om die opstel van ligplanne in die ateljees te vergemaklik.

Daar is beheerkonsoles in die visiebeheerkamers van die ateljees. Operateurs maak staat op televisie-monitors om die loop van produksies te volg.



*An operator on a lighting grid above a television studio.
'n Operateur op 'n beligtingsrooster bokant 'n televisieateljee.*

Each production lighting circuit is controlled by modular withdrawable thyristor dimmer units installed in dimmer racks adjacent to the studios. Most of these dimmer units have ratings of 5kW, although some are rated at 10kW. As each dimmer has an inherent voltage regulation booster, transformers were needed to provide a nominal 240 V input and a regulated 220 V output from the dimmer units. This feature is important in maintaining the correct colour temperatures of the luminaries.

Each dimmer must have a filter of sufficient quality to prevent interference and hum in the studio.

The power distribution in each studio is installed in overhead metal channels fitted with copper braided harnesses.

The power outlets, consisting of decontactor plugs and sockets, are connected in parallel to each dimmer unit. Through this arrangement, suitable coverage of the studio areas has been obtained with half the anticipated number of dimmers.

The parallel connected outlets have been carefully arranged to ensure that no parallel sockets are likely to fall within studio scenery arrangements. Pilot lights indicate when circuits are being used, and in this way warn operators not to connect luminaries to parallel outlets.

Most production lighting outlets are installed above the lighting grids, though some are at floor levels to control low-level lamps on stands, or special effects.

To keep the studio floors clear, all production lighting is suspended from above. To minimise the turn-around time of a studio, point suspension walk-over grids were decided upon as these allow production lighting to be set up overhead while scenery is being changed below.

The grid floors are about nine metres above the studio floors and have 65 mm wide slots spaced at 850 mm intervals to allow working staff to see through them.

Point suspension monopoles, consisting of bogies with wheels that fit into the grid slots and suspension rods that telescope to desired heights, are provided to suspend the luminaries.

Modulêre verwyderbare thyristor-verdofoonhede beheer elke produksieligkring. Hulle is in verdoofrakke langs ateljees. Die meeste van hierdie verdofoonhede het ontwerpvermoëns van 5 kW, hoewel sommige 10 kW het. Omdat elke verdoower 'n inherente spanningsreëlingsaanjaer het, was transformators nodig om 'n nominale 240 V-inset en 'n gereguleerde 220 V-lowering van die verdofoonhede te voorsien. Hierdie kenmerk is belangrik om die korrekte kleurtemperatuur van die luminêre te behou.

Elke verdoower moet 'n filter hê van genoegsame gehalte om steurings en brom in die ateljee te verhoed.

Die kragverspreiding in elke ateljee is geïnstalleer in oorhoofse metaalkanale met koper gevlegte harnasse.

Die kraguitlate, bestaande uit dekontaktorproppe en sokke, is in parallel met elke verdofoonheid verbind. Hierdie reëling verseker geskikte dekking van die ateljeegebiede met die helfte van die verwagte aantal verdoowers.

Die parallel verbinde uitlate is versigtig gerangskik om te verseker dat geen parallelsokke dalk binne ateljeestelreëlings val nie.

Leiligte wys wanneer operateurs 'n kring gebruik en waarsku hulle om nie luminêre aan paralleluitlate te verbind nie.

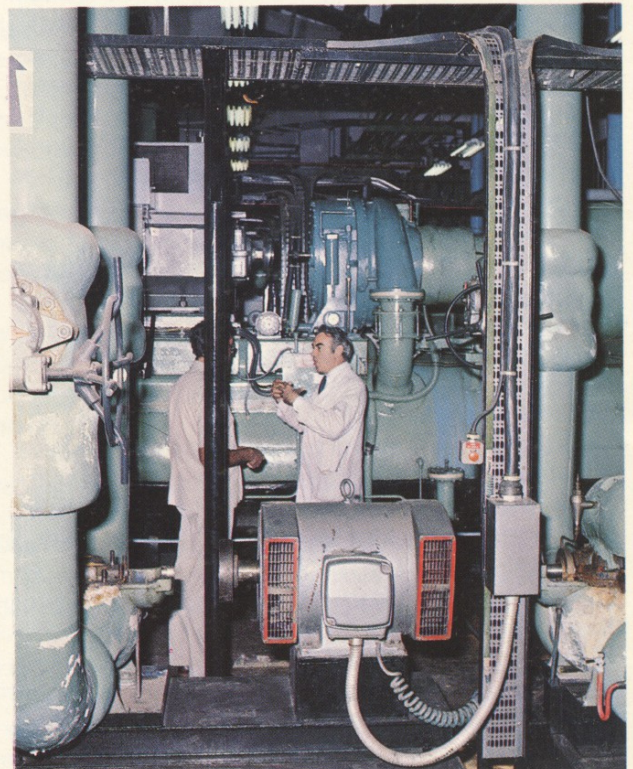
Die meeste produksieliguitlate sit bokant die ligroosters, hoewel party op vloervlakke is vir laevlaklampe op staanders, of spesiale effekte.

Om die ateljeevloere skoon te hou, hang alle produksieligte.

Om die omdraaityd van 'n ateljee op sy minste te hou, is daar puntsuspensie-oorlooproosters – met hulle kan party mense bo produksieligte opstel terwyl ander onder die toneel verander.

Die roostervloere is omtrent 9 m bokant die ateljeevloere en hulle het 55 mm wye gleuwe elke 850 mm sodat die werkers deur hulle kan sien.

Puntsuspensie-monopole loop op wiele wat in die roostergleuwe pas en het suspensiestawe wat kan uitrek en aan hulle hang die luminêre.



*Die lugpompkamer.
The air conditioning pump room.*

Luminaries are attached to monopoles at the edges of the grids and are pushed along the slots to the desired positions and plugged into the nearest available lighting control system outlets.

Compressed air tools have been provided to raise and lower the monopole slots on the grid floors, and there are slots to facilitate the suspension of scenery or effects without interfering with the free movement of the monopoles.



Ediing film in Television Centre.

Redigering in die televisiesentrum.

Production Resources in the Television Centre

The television centre contains 250 racks of electronic equipment, 20 audio consoles, 48 special consoles, 30 monitor bays, 1 200 control panels, 18 telecine machines, two off-line videotape editing systems and 25 colour cameras with a full complement of equipment for editing, dubbing and review. A central bank of video tape machines is linked electronically to the control rooms of the various production suites, recording time being allocated according to a schedule of bookings. Twenty-one such machines are available to producers, and the instant replay which the system permits represents a considerable saving in time since the days when only film could be used for television broadcasts.

When film is nevertheless used, for example in some documentary shoots and some drama productions on location, the finished productions are recorded onto videotape before transmission.

There are some 5 000 km of electronic signal cable of various types involving approximately 400 000 terminations which are required to connect R14 million worth of electronic equipment in the centre.

Facilities for Artists

The artists' block is a two-storey building on the west side of the studios. There are both individual and common dressing rooms around a central make-up room, and a nearby restaurant for staff as well as artists.

The main kitchen in the tower block services the television centre with fresh and chilled food for preparation or reheating in smaller kitchens.

There are also rehearsal rooms of various sizes, including a ballet room with mirrors and barres.

There is a fully-equipped wardrobe section, including a design section on the top floor. The wardrobe index is computerised, and the costume section is nearly self-sufficient.

Luminêre is aan monopole aan die kante van die roosters. 'n Mens stoot hulle in die gleuwe waar jy hulle wil hê en prop hulle in die naaste ligbeheerstelseluitlate. Daar is lugdrukgereedskap om die monopoolgleuwe op die roostervloere te lig en laat sak en daar is gleuwe om dekor of effekte makliker te hang sonder om die vry beweging van monopole te belemmer.

Produksiemiddele in die televisiesentrum

Die televisiesentrum het 250 rakke elektroniese toerusting, 20 oudiokonsoles, 48 spesiale konsoles, 30 monitorkassette, 1 200 kontrolepaneel, 18 telesineemasjiene, twee aflynvideobandredigeerstelsels en 25 kleurkameras met 'n volle komplement toerusting vir redigering, kopiëring en oorsig.

'n Sentrale bank van videobandmasjiene skakel elektronies met die beheerkamers van die verskillende produksiestelle. Regisseurs kan een en twintig van hierdie masjiene bespreek. 'n Mens kan ook tonele dadelik terugspeel en dus baie tyd spaar, anders as in die dae toe jy net film vir televisie-uitsendings kon gebruik. As hulle tog films gebruik, bv. in party dokumentêre skote en party buitendramaproduksies, neem hulle die produksies wat klaar is voor uitsending op videoband op.

Daar is omtrent 5 000 km elektroniese kables van allerhande soorte en omtrent 400 000 eindklemme wat nodig is om 14 miljoen rand se elektroniese toerusting in die sentrum te verbind.

Fasiliteite vir kunstenaars

Die kunstenaarsblok is 'n tweeverdiepinggebou aan die westekant van die ateljees. Daar is individuele en algemene kleedkamers om 'n sentrale grimeerkamer, en 'n restaurant naby vir personeel en kunstenaars.

Die hoofkombuis in die toringblok bedien die televisiesentrum met vars en verkoelde kos vir voorbereiding of herverwarming in kleiner kombuise.

Daar is ook repetisiekamers van verskillende grootte; ook 'n balletkamer met speieles en stawe.

Daar is 'n volledig uitgeruste garderobeafdeling en 'n ontwerpseksie op die boonste verdieping. Die garderobeindeks is gerekenariseer en die kostuumseksie is amper selfgenoegsaam.



In grimering is eksperte met baie ondervinding in rolprente en televisie.

The make-up department is staffed by experts with wide experience in the cinema and television industries.



Variety shows in particular call for imaginative costumes and set designs.

Verskeidenheidskonserte veral vra verbeeldingryke kostuums en stelontwerpe.

Production Studios

There are two production studios of 200 m² in extent, one of which is a news studio, four of nearly 500 m², and one of 900 m².

The studio floors have a levelness specification of not more than three mm in three m, and are covered in corklino. The walls are clad in acoustic material.

Each studio has an audience gallery with locally-produced folding seats.

The studios are equipped with storage areas at floor level, above which technical spaces are connected to separate control rooms on the second floor of the centre.

Décor

Alongside the studios, to the east of the centre, are facilities for backdrops, décor and scenery in general.

As it is necessary to be able to change a studio quickly, removing and replacing scenery and equipment, this area is directly accessible from the studios.

Other Facilities

An early warning fire detection system, comprising smoke detection and temperature monitoring thermostats, has been installed throughout the complex, with provision for future extension.

Other installations include a generating plant to provide compressed air, particularly in the studios where it is used to power the raising and lowering of lighting monopoles and other equipment.

The laundry in the artists' block is equipped with two washer-extractor units, one tumble drier, a steam-operated laundry press, a dry-cleaning machine, dry-cleaning presses, automatic leggers and toppers, a vacuum unit and drying closets.

In the scenery factory there is a dust extraction system and a six cu. m hydraulic-operated waste compactor.

The SABC Tower

The SABC Tower can be seen for many kilometres on the Johannesburg skyline. The second tallest tower in Africa (the tallest being the Post Office Tower in Hillbrow) it was the first of 127 transmitting stations for the SABC FM radio service, introduced on a full-time basis in 1967; it now includes television transmission facilities.

There is a restaurant on the ground level at the base of the tower.

Produksieateljees

Daar is twee produksieateljees van 200 m² (een is 'n nuusateljee), vier van 500 m² en een van 900 m²;

Die ateljeevloer het 'n gelykheidspesifikasie van nie meer as 3 mm in drie m nie en is met kurklino bedek. Daar is akoestiekbekleding teen die mure.

Elke ateljee het 'n gehoorgalery met plaaslik vervaardigde voustoole. In die ateljees is daar pakeplek op vloervlak en daarbo is tegniese ruimtes verbind met aparte kontrolekamers op die tweede verdieping van die sentrum.

Dekor

Langs die ateljees, oos van die sentrum, is fasiliteite vir agterdoeke en dekor.

Omdat 'n mens 'n ateljee gou moet kan verander en dekor en toerusting wegvat en vervang, kan 'n mens direk van die ateljees af in hierdie gebied kom.

Ander fasiliteite

'n Brandklikstelsel met vroegtydige waarskuwing, rookverklikker en temperatuurmoniteertermostate is deur die hele kompleks geïnstalleer, met voorsiening vir toekomstige uitbreiding.

Onder die ander installasies is daar 'n genereeraanleg om druklug te voorsien, veral in die ateljees, waar 'n mens dit gebruik vir krag om die ligmonopole en ander toerusting te lig en laat sak.

Die wassery in die kunstenaarsblok het twee wasser-ekstraktoreenhede, 'n tuimeldroër, 'n stoompers, 'n droogskoonmaakmasjien, droogskoonmaakperse, ander outomatiese masjiene, 'n vakuumeenheid en droogkaste.

In die dekorfabriek is daar 'n stofuittrekstelsel en 'n hidrouliese afvalkompaktor van ses m³.

Die SAUK-toring

'n Mens kan die SAUK-toring baie kilometers ver teen die silhoeët van Johannesburg sien. Hierdie tweede-hoogste toring in Afrika (naas die Poskantoororing in Hillbrow) was die eerste van 127 sendstasies vir sy FM-radiodiens wat die SAUK in 1967 voltyds ingestel het; die toring het nou ook televisietransmissiefasiliteite.

Daar is 'n restaurant op grondvlak aan die voet van die toring.

The SABC Radio and Television Network

Most of the planning of nationwide production and transmitting facilities is carried out at Broadcasting Centre, which was built at a cost of R110 million.

The SABC's main source of income is advertising revenue from television spots as well as from spots broadcast on Springbok Radio, the three regional commercial services, Radio 5 and the Services in Bantu Languages.

This income has risen from £430 000 in 1951 to R88 million in 1980.

Further income, from radio and television licences, amounts to R56,6 million.

Despite the extensive radio coverage provided by the SABC, the operating budget for five hours of daily television transmissions in 1976 was 10 percent more than the total budget for all radio services.

Only 50 percent of the running costs of television were financed by TV licences, and even before the first television broadcast took place, the total fixed assets and establishment costs of the medium were R104 million, of which the television studios, including the television training studios, accounted for almost half.

This amount was financed from local and overseas loans, and it is interesting to note that, with the introduction of commercial television on January 1, 1978, the SABC broke even after about a year, the fourth year of television operation.

It is to the credit of the television staff, largely South African as they are and therefore previously inexperienced in the medium, that they have been able to provide 44 hours of viewing a week.

What they lacked in expertise, they have more than made up for in enthusiasm and willingness to learn.

Die SAUK se radio-en-telesienet

Die SAUK doen die meeste beplanning van landswye produksie- en sendfasiliteite in Uitsaaisentrum, wat hy teen 'n koste van 110 miljoen rand gebou het.

Die SAUK se vernaamste bron van inkomste is uit flitsadvertensies op televisie, Springbokradio, die drie handelstreekdienste, Radio 5 en die dienste in Bantoe-tale. Hierdie inkomste het gestyg van 430 000 pond in 1951 tot 88 miljoen rand in 1980. Ander inkomste, uit radio- en televisielisensies, bedra 56,6 miljoen rand.

Al gee die SAUK so 'n wye radiodekking, was die werkbegroting vir vyf uur daaglikse televisie-uitsendings in 1976 10 % meer as die totale begroting vir al die radiodienste.

TV-lisensies finansier net 50% van die lopende koste van televisie, en selfs voor die eerste televisie-uitsending was die totale vaste bates en vestigings-koste van die medium 104 miljoen rand, waarvan die televisieatelsees, insluitende die televisie-opleidingsatelsees, byna die helfte beslaan het.

Plaaslike en oorsese lenings het hierdie bedrag gefinansier. Dit is interessant om op te let dat, met die instelling van handelstelesie op die 1ste Januarie 1978, die SAUK gelyk uitgekome het na omtrent 'n jaar, die vierde jaar van televisie. Dit strek die televisiepersoneel, grootliks Suid-Afrikaners, en dus voorheen onervare in die medium, tot eer dat hulle dit reggekry het om 44 kykure per week te verskaf. Vir wat hulle in ervaring ontbreek het, het hulle meer as vergoed in geesdrif en gewilligheid om te leer.



The tower block from the piazza level at Broadcasting Centre.

Die toringblok vanaf die piazza-vlak by Uitsaaisentrum.

