

The greatest professional CB magazine all over Europe. Official organ of the World CB Union and the European CB Federation

PRESIDENT ANDREW J.

**CB-Killer** from Outer Space. Ufo on 27 MHz.

Tested in Belgium.

CAR ARIELS

# **CB-Cartoon** YES DARLING YUNDERSTAAAAND ROGERLIIIII

Dear Readers,

I should like to begin by wishing you all a happy Christmas and a good start in the new year. As you know the CB-Euro-Revue is Europe's greatest specialist magazine for the Citizen Band radio operator, and appears in a total of five different languages. As such it has naturally become a strong advocate of the interests of the CB-radio operators. This is adequately demonstrated by the contacts which exist with most European parliaments and governments. Wherever in any land CB-radio has been permitted, or It's use liberalised, you can be sure that the CB-EURO-REVUE has had a hand in the matter. In the course of this last year alone CB-radio has been legalised in France, Ireland, Belgium and Holland, and also extended in West Germany. Only in Great Britain have we been without success. Therefore we intend, in close cooperation with the European-CB-Federation (ECBF), to intensify extraparliamentary pressure on the government in London. For this we need your help. Write your demands in the form of petitions, open letters or collections of signatures and send us a copy, so that we can publish the text. We thank you in advance for your co-operation.

Here is our address:

**CB-EURO-REVUE** 

P. B. 1523

D-6090 RÜSSELSHEIM

W. GERMANY

P. S.

The CB-EURO-REVUE is an international magazine. We receive manuscripts in many different languages. If, as a result, mistakes occur in the magazine, we ask for your indulgence.

Ralph M. Gorenflo, Publisher

"This magazine is aimed at those who are supporting the various campaigns to legalise CB in the United Kingdom and to provide information on government moves to allow an open channel as announced by the Home Secretary in early 1980. We intend to provide a publication to help readers make informed decisions about the type of equipment to purchase, either when CB radio is, in the near future, made legal, in those countries which already permit CB. It is not intended as any form of encouragement to acquire and operate a rig in advance of legalisation. Present operators are all breaking the law and face heavy fines, confiscation of equipment and imprisonment. We advice patience!

CB will probably be allowed at some time but on different frequencies to those of the smuggled rigs which will be redundant and waste of

money."

CB-EURO-REVUE



THE CB-EURO-REVUE IS
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EDITORIAL STAFF: WINFRIED BRITSCHO, RALPH M. GORENFLO, J. PH. KELLER, RÜDIGER LÖWE, HEINZ MAITH, RICHARD STOCK, CARLOS VICK

TECHNICAL EDITORS: ING. FRANZ J. NAGEL, PROF. DR. M. VOLKMANN

EUROPEAN EDITOR: DIRK DEWAELE LOSWEG 1 B-9910 GENT

ADVERTISING DEPARTMENT:

POSTBOX 15 23 D-6090 RÜSSELSHEIM TEL. 06142 / 5 95 65

GRAPHICS AND LAYOUT:
MARCUS GLATZ, KARIN HEMM,
W. MLETZKO, DORIS REPPIN,
K. TREUTEL, CHRISTIANE WEITZEL

INDEPENDENT CONTRIBUTORS: DANIEL CHAFFANJON, LINO GATTI, AL GROSS, YVAN PILLONEL, FRANZ VEDDER

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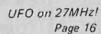
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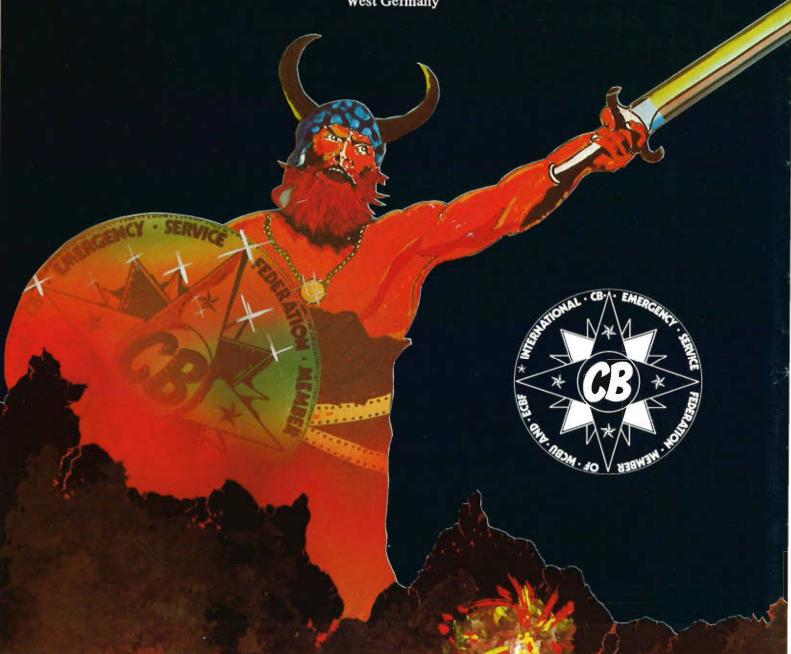
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Since the summer of this year there exists a worldwide organization for the CB Emergency Service - 'The CB-Emergency-Service-Federation'. This club is, of course, closely associated with the relative national and international main organizations, such as the World-CB-Union (WCBU), the European-CB-Federation (ECBF), the German-CB-Association (DCBD) and many others. We are informed by the presidency that every member of the CB-Emergency-Service may regard himself as a member of these organizations also. Every member can at any time identify himself by producing his representative medallion. (Supplied with chain for attachment to the trouser band.)

The enrollment formular, together with the medallion and chain in a velvet case, is obtainable through CB-radio dealers and through the CB mail order service anywhere in the world. Every member will be registered on request and will have an individual number, which will be stamped on the reverse of the medallion. There are no duplicate numbers, and medallions reported as lost or stolen will be deleted from the lists to prevent mis-use.

You will find further important information in the pages of this magazine. Information is also obtainable from the following address:

INTERNATIONAL-CB-EMERGENCY-SERVICE-FEDERATION
POSTBOX 1523
D-6090 RUESSELSHEIM
West Germany



#### Tested in Belgium.

# CARARIELS

We tested 14 car ariels. Not on a scientific basis, but in the way which everyone can.

For the tests we used normal anchorage systems and fixed the ariels either on the wing, roof or boot of the test vehicle and adjusted the SWR as well as possible. We checked the following:

- 1. The material used in construction.
- 2. The ease with which the ariel could be fixed or detatched.
- 3. The noise which they cause within the car (especially heavy ariels).
- 4. The voltage standing wave ratio on 40 channels.

It was impossible to test 14 ariels at the same time and under the same circumstances (same partner in conversation, same propagation etc.). We can however say that the longer ariels were the best and showed the lowest SWR. We should like to add that neither the manufacturers, importers nor sellers knew that we wished to test the ariels, and we obtained them just as the 'man in the street' would.

### FINAL RESULT

From the 14 ariels tested the 'K 40' from 'American Antenna' gave the best results. It was close on perfect, required no boring of holes, made use of a very thin rod (3 mm. diameter), did not vibrate at high speeds, and is constructed from rustless flexible steel.

As this ariel is very flexible it does not require to be dismantled when entering a garage.

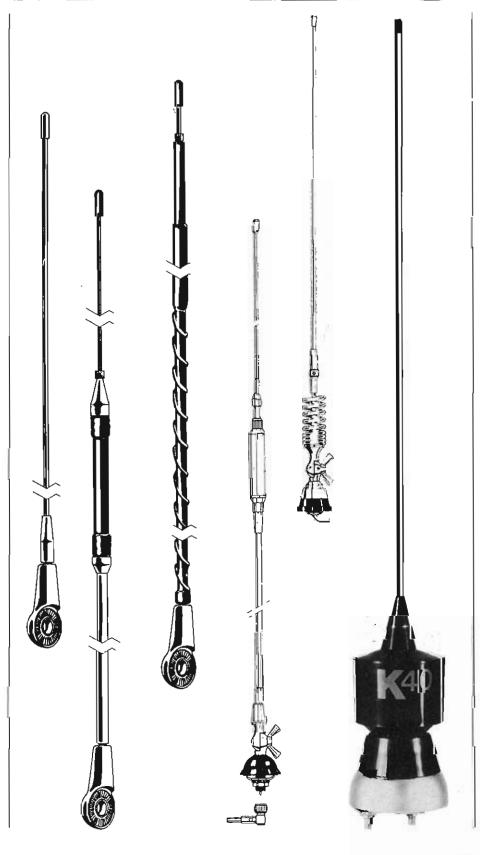
The material used is first class and voltage standing wave ratio on 40 channels faultless. It is delivered as a complete unit.

To mount it requires neither screwdriver nor soldering iron.

In second place came the well known DV 27, however at high speed it gave rise to vibration and loud noise in the car. It is, however one fifth of the price of the 'K 40'.

The DV 27 must be either lowered or detatched before entering a garage.

The 'Multi ariels' (CB + Radio) are neither good radio ariels nor good CB ariels.



CB-Test	1	EST	(A)								
Make Type	Lambda	Characteristics L = Lenght in m φ = Diameter in mm Ω = Impedance	System of Mounting	Material Used and Construction	Test Car	Where Mounted on Car	Voltage Standing Wave Ratio Accord- ing to Manu- facturer		PRO	CONTRA	Note Max: 10/10
Sirtel DV 27W	5/B λ	1,60 m 9 mm 50 Ω	8alt	PVC Black/ Tip and Mount- ing Chrome	VW Beetles	Roof	1,1-1.3	K1 = 1/1.4 K20 = 1.2 K40 = 1.5	5/8 λ	Length φ too thick Without Spring	6/10
Art.·No. 1057	1/4 λ	1,1 m 2—6 mm 50 Ω	Withdrawable 5 Elements Central Coil	Chromed Steel C8 + Radio	VW Beetle	Front Wing	-	K1 = 1/1.8 K20 = 1.5 K40 = 1.9	Withdrawable CB + Radio	SWR Sensitive (Near Coil)	6/10
H.M.P DV 27	1/4 λ	1,3B m 5–6 mm 50 Ω	8all	PVC Grey	VW Beetle	Roof	1.2	K1 = 1/1.1 K20 = 1 K40 = 1.1	SWR Price Control- able	Without Spring	9/10
H.M.P T 27	1/4 λ	0,64 m 5–6 mm 50 Ω	Ball + Strong Spring	Chromed Steel Black Coil	VW Beetle	Roof	1.6	K1 = 1/1.6 K20 = 1.3 K40 = 1.5	Length Spring	SWR	7,5/10
H,M P CT 27 S	1/4 λ	0,67 m 513 mm 50 Ω	Ball + Strong Spring	Chromed Steel	VW Seetle	Roof	1.3	K1 = 1/1.8 K20 = 1.5 K40 = 1.7		SWR	4,5/10
American Antenna K 40	1/4 λ	1,45 m · 3 mm 50 Ω	Clamp 1/4 Turn No Drilling	Stainless Steel Fixing Black	VW Be∈(le	8 oot	-	K1 = 1,1 K20 = 1.1 K40 = 1.1	Price 1. Quality Mounting Adjustment No Criticism		9,5/10
C.T.E GR 27 or CT 27	1/4 λ	0,9 m 6 mm 50 Ω	Ball + Strong Spring	PVC Black	VW Beetle	Roof	1.1	K1 = 1/2.1 K20 = 1.8 K40 = 2.2		SWR Adjustment See 3.	2/10

CB-Test		Γest (Ε	3)								
Avanti Astro- Fantom	1/2 λ	± 0,4 mm ± 6 mm 50 Ω	Sticks on Front Windscreen No Drilling	PVC Black Anchorage Chromed	VW Golf	Front Screen	-	K 1/2 K20/1.5 K40/2.2	Mounting	SWR	4.5/10
American Antenna Insider		50 Ω	Mounted Inside		VW Beetle	Rear Screen	1.5	See 2 please			
Dansei ''75''	1/4 λ	0,5 m 6—9 mm 50 Ω	8ali	PVC 8lack	VW Beetle	Roof	-	K1 = 1.B K20 = 1.5	Length	SWR No Spring	5,5/10
Dansei " <b>50</b> "	1/4 λ	0,5 m 6—9 mm 50 Ω	Ball	PVC Black	VW Seetle	Roof	-	K1 2.2 K20 1.7 K40 2.1		SWR	2/10
Sommer- kamp DV 27 X	1/4 λ	0,90 m 3—6 mm 50 Ω	8all + Spring F Coil	Chromed Steel, Coil PVC Grey	VW Scetle	Roof	-	K1 = 2.9 K20/2.5 K40/3.0		SWR	2/10
Avanti A 327	1/4 λ	1,4 m 3 mm 50 Ω	Fixed, does not swivel	PVC + Chromed Spring	VW Golf	Front Wing	-	K1 = 1.3 K20/1.2 K40/1.3	Quality SWR	Price Hardly Swivelable	7/10
The Antenna Specialists Co. MS 264	1/4 λ	- 3 mm 50 Ω	Fixed, does not swivel	Stainless Steel	Fiat Ritmo	Roof	2.0	K1 ≈ 1.5 K20 = 1.1 K40 = 2.0	C8 + Radio	SWR Hardly Swivelable	5,5/10

CTE's ariel GR 27 or CT 27 has been replaced. The standing wave adjustment is now by means of a moveable rod. (The adjustment on the model tested was made by shortening the affel, cutting off a bit at a time until the standing wave was right.)
 The 'Insider' ariel couldn't be fitted. The inanufacturer AUVICO took it back without question. The test car was not large enough.

#### Great CB-Euro-Revue OSL Card Compatitic

The best QSL Cards are published regularly on our "QSL page," All senders of QSL Cards take part automatically in our QSL Lottery. There are many valuable and useful prizes. Main Prize: A new generation 22 channell FM mobile station.

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CB-Euro-Revue, Our address:

> Stichwort: QSL 81, Postfach 1523, D-6090 Rüsselsheim







Ernie comes home unexpectedly in the afternoon. His wife is cleaning the steps. He creeps up behind her and slaps her smartly on the bottom. Without looking up she says: "One loaf and six bread rolls, please."

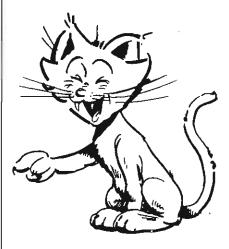
At the hairdressers the customer, after being cut several times during shaving, asks for a razor. Barber: "Do you want to shave yourself?" "No, defend myself."



"Is your father always as serious as mind?" "More or less. He always laughs twice a year." "When is that?" "When my mother has bought herself a new hat."



She: "Next week I have a birth day." Best friend: "How old wont you be then?"



Doctor: "Have you been checked for sugar?" Patient: "No, only for coffee on the Swiss border."



"How did you get rich so quickly?" "On account of the gambling casino." "Did you win so often, then." "No. I opened a pawn shop next door." The man in the railway compartment takes a cigar from his pocket and askes his fellow passenger. "Do you mind if I smoke?" "Do just as you would at home!" "Perhaps not, then."



One government official to another: Our job is very dangerous. I could fall asleep at any moment and crash my head on the desk.



Irate gentleman rings up the Meteorological Office. I want to congratulate you on the acuracy of your weather forecasts. I have just pumped 5,000 gallons of sunny weather out of my cellar.



In the Alpine village it has been raining for three weeks. Unhappy tourist: "Does it always rain here?" Local: "No. In winter it snows."



A man entering a brewery finds a man on the doorstep helplessly drunk. He asks: ,,What are you, an advert?"



"Waiter, this steak smells of whiskey." The waiter takes a step backwards and asks: "Still?"

"Young man, I should like to know what you are thinking of. You promised to bring my daughter home at midnight. Now it is four o'clock in the morning. Futhermore this is not my daughter."



"Darling, I haven't been able to cook anything today. There is a power cut." "But we have got a gas cooker." "Yes, but the tin-opener is electric."



"If you don't buy me a new summer hat, I shall jump out of the window!" "But, darling, not today!" Puzzled, she asks: "And why not?" Because I have just swept the pavement."



The surgeon has just washed his hands before the operation, and says to the Sister: "Alcohol, please." Patient: "Would it put you out too much if you didn't drink till after the operation.



"How do you make a living." "From the mistakes of my fellow men." "Ah, You're a lawyer." "No, I have a factory which makes rubber erasers."



An old lady is being rescued from a burning building. Before jumping into the witing sheet, the fireman says: "Now bite your teeth together hard before you jump." "Then" says the old lady, "We shall have to go back. They are in the bathroom."



# JOKES

After 48 hours driving instruction the learner asks: "How many more shall I need before the test?" "About three." "Only three more hours?" "No, not hours, cars."



"What are you doing in the garden?" "Pulling the weeds up." "Why, wont they come up on their own?"



"Goodness! Did you catch all these fish on your own?" "No, I've got a worm that helps me."



"My wife intends to divorce me on grounds of mental cruelty." "But you were always so kind to her!" "Yes. Every morning I took the coffee up to bed for her. All she had to do was grind it."



Two policemen are watching a cycle race. One says to the other: "Man alive, what money one could make here. 47 bicycles and not a lamp, bell or reflector between them."



Two villagers in the local cafe are enjoying watching the efforts of an American tourist to sprinkle salt from a blocked salt sprinkler. After a while the tourist clears the holes with a toothpick. Says one villager: "I don't care much for these Yanks, but one has to admit that they are technically further advanced than we are."

"Water, have you forgotten me?" Water: "No, madam. You're that fat lady who was here last week.



"Have you a good memory for faces, father?" "Why do you ask?" "Because I have just broken your shaving mirror."



"How do you know that the ship comes from Scotland?" "Because there are no gulls following it."



"Waiter, this lobster isn't fresh." "But it is. It came from the North Sea this morning." "Yes? On foot?"



"Who wears the trousers in your house?" "My wife bosses the children, the servants and the dog. I look after the flowers."



Boss to new secretary: "What is there in my appointment book this week?" Secretary: "Monday, Tuesday, Wednesday ————"



Mc.Tavish, a hairy Scott goes to the railway ticket office: "A dog ticket, please." The cierk eyes him carefully and says: "It's no use, you'll have to pay full fare like everyone else."



"Gladys, you must put some fresh water in the aquarium." "What for? The fish haven't drunk all the last lot yet."



It's little Angus's birthday. On the assumption that he will prefer a sparkling new shilling to a tattered note uncle draws a shilling and on old  $\mathcal L$  5 note from his pocket. "Which will you have?" "That there says the tiny tot, pointing at the coin. Then, indicating the note, Wrap it up."



The student sends a telegram to his mother: "Failed exam — Prepare father." Answer came: "Have prepared father — Prepare yourself."



Customer in furniture store to girl assistant: "What could you shew me in double beds?"



"Tell me daddy. Do fish sleep too?" "Of course. They have got the river bed."



"The Irish only play football till halftime." "Why?" "They are still trying to find out how to turn the pitch round"

,



"How much is a gallon of petrol now." "No idea, I haven't filled up today!"



Driving-school learner: "I wish these damn pedestrians wouldn't keep running in front of the car." Instructor: "Perhaps it would be better if you came off the pavement."

# Gerd Seyfried ZERO-ONE-FOUR, PLEASE COME IN !



























# What happens, if? Or: ls a CB-Radio useful in a car?

They had made one another's aquaintance through CB-radio. Soon it became clear that they had other interests in common. The two found one another's company congenial, and soon formed a friendship.

The 17th July was a holiday and a Tuesday, so a good many took the Monday off and made it a long weekend. Just the right time to spend at the camping place. So stations WEGA 4-1, Rio 8, Butterfly and LEO 20 sat in the warm evening air in fromt of WEGA's caravan. The conversation between the pairs was relaxed and entertaining. The winner of the fox hunt with his wife — CHRYSLER 1 & 2 — had been expected, but their friends waited in vain, in spite of the fact that the pair had accepted over the radio.

It is already 11,30 p. m. when suddenly the roar of a motor and the screeching of rubber on asphalt are alarmingly loud. The evening group see on the road, some 200 yards away and lying a little lower, lights wandering from one side of the road to another. Then a frightful crash. Sparks fly, then all is still. WEGA 4–1 jumps quickly into his car and gives an emergency call on channel 9, giving his 'skip', location, and location of accident, with the request, over 600, to call an emergency doctor and the police.

In the Bahnhofstraße in Deining two CB friends are sitting on the terrace. During their conversation they have their CB set running. They pass on the emergency call from WEGA 4—1, over 600, to Neumarkt. The hours which many CB fans have spent on a First Aid Course now turn out to be useful. In their two cars the midnight campers drive to the scene of the accident and take steps for the security of traffic. With the obligatory campers lamps the scene is brightly illuminated

A BMW, after having turned several somersaults, lay on the far side of a ditch on it's side in a wheatfield some 4 yards from the road. The youthful driver lay unconscious in the ditch,

and his girl passenger in the wrecked car bleeding from facial cuts. The radio fans lifted the young man carefully out of his cold and wet resting place. With the aid of all the textiles they could find at hand they covered him and did their best to keep him warm. With dressings from the first-aid box in one of the radio cars they stemmed the bleeding from the girl's facial wounds. In this they succeeded very well, as the ambulance attendant later confirmed,

In the meantime a number of campers had come on the scene, and had disconnected the battery on the wrecked car to avoid the risk of fire. Some 12 minutes after the emergency call the police appeared on the scene, and 3 minutes later the doctor on emergency service. The latter gave the two injured persons professional attention until they were transported to hospital. A specially equipped ambulance with doctor is one of the most important items in the rescue service. Of this there should be no doubt.

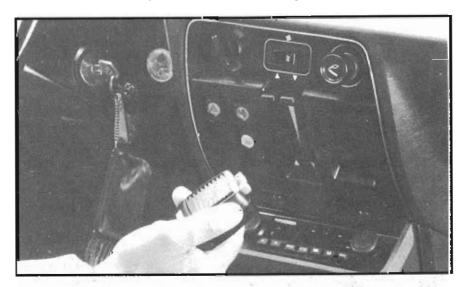
Probably as a result of the scant information in the emergency calls, without explanatory QSO's, the two radio friends from Deining had become suspicious, and turned up at the scene of the accident to satisfy themselves

about the call and it's results.

Although it was now 1.30 in the morning, no one was in a mood to go to sleep. All were too excited by the events of the evening. They gathered together in the camping place, and there was a lively discussion which continued into the early hours of the morning. The theme was if . . . if, for example the accided had happened on an open stretch of road, and the girl had had to go for help for her unconscious friend.

One, from a pair taking part in the discussion, who finds her partner's radio hobby a bit of a nuisance, and who takes no part in it herself, came suddenly to the point of view that a CB set in a car should be regarded in the same light as a first-aid outfit, a fire-extinguisher, tools or a spare can of petrol. These things are useless until they are wanted. In the case of the CB set her opinion was: 'If it's not needed for an emergency, then at least my companion gets something from it if he uses it for his hobby.' Certainly, with some pairs, the 'better-half', so far as radio is concerned, is on a 'different frequency'.

I can recommend these radio friends to offer their companion this article as reading matter.





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BRISTOL: CB Centre. 0272 554888

BURY ST. EDMUNDS: Denver Autos (Skid Parish), Troston, Bury St. Edmunds, Suffolk, Honnington 506

CARLISLE: R 6 Supplies, 29 Lamb Street, Upperby, Carlisle, Carlisle 38172

CHELTENHAM: Breakers Yard, 1 Moorend Terrace, Croft Street, Cheltenham, Glos. (0242) 39783

DERBY: RTS, 60 Osmaston Road, Derby, 0332 41235

EAST BARNET: Autospar, 271 East Barnet Rd, East Barnet, Herts. 01 449 5070

GRANTHAM: Castlegate TV, 64 Castlegate, Granthsm. 0476 66869

GREENFORD: Sound Around, 114 Ruislip Road, Greenford, Middlesex, 01-575 5030

ISLE OF WIGHT: Electronic Pastimes, 29 North Road, Shanklin, Isle of Wight. (098386) 6103

LEEDS: HI FI Servicing, 26 Moreland Grove, Leeds 17, 10532) 696960

LONDON (West End): Sonic Sound Audio, 248-256 Tottenham Court Rd, London, W1, 01-637 1908

NORTHAMPTON: Motorsound, 196A Kettering Road, Northampton,

N, IRELAND: J.C. Patterson, The Corner House, Lisburn, NI, 108462 203415

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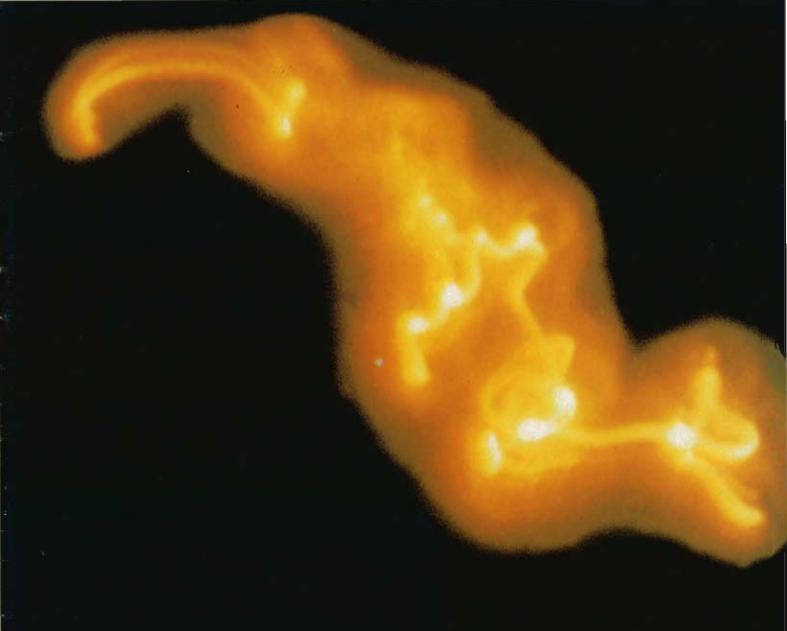
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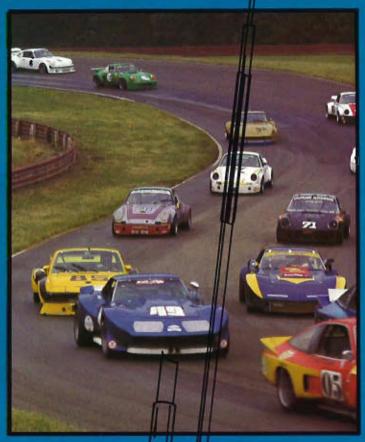
# CB-Killer from Outer Space.— Ufo on 27 MHz.

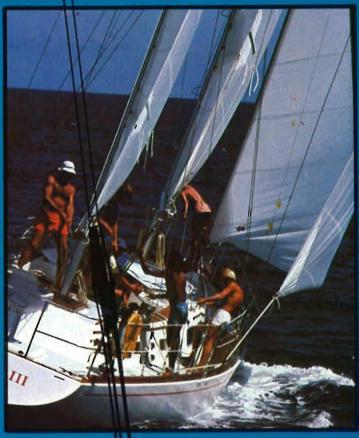


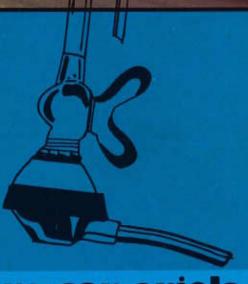


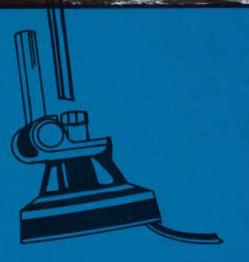
Here the Central Research Network for Extraordinary phenomena looks once agian into the archives and depicts for our readers some things which may occur at any thime and anywhere. It is not the intention of this organisation to give rise to panic, but to present aspects of a phenomenon which has always exercised fascination and offered a promise of adventure since men sought to explain such phenomena as 'Flying Saucers' and visitors from other planets. In these pages it will be clear to the reader that a visit from outer space is still a remote prospect, and that we have rather to consider Unexplained Atmospheric Phenomena (UAP), which are so far inexplicable here or elsewhere in the world.

# SWEDEN









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The author of this article, as well as being co-founder and Chief Investigator of CENAP, is also a co-worker with the oldest UFO-Network in the USA, the National Investigation Committee on Aerial Phenomena, on whose Board the well-known U. S. Senator, Barry Goldwater, sits. Senator Goldwater, from Arizona was in 1946 presidential candidate for the Republican Party.

The following, from the combined archives of CENAP/NICAP, is a case of particular interest:

# CB Operators encounter UFO Activity

A triangular area in the north west of Maryland surrounds the towns of Brunswick, Point of Rocks and Jefferson. In this area were a number of UFO sightings with unusual characteristics. On Tuesday, 16th March, 1976, the NICAP office : ceived a telephone call from a trusted collaborator, who explained that whilst 'break'-ing the previous night he had heard about some UFO activity. Within a few hours Dr. Wallace Garthright, NICAP's regional investigator, had assembled a competent team. Mr. Robert Rothenbuhler, another NICAP investigator, sooke with Dr. Garthright about this work before investigating the matter.

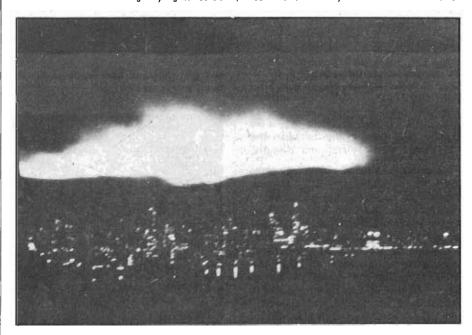
In view of the number of witnesses and the publicity which the case had received, the two men organised the investigation. The sightings began at 21,20 on the 15th March, 1976, and the last sighting was reported at 01.30 on 16th March. The first observer spoke over CB radio with other persons concerning mysterious lights with extraordinary manoeuvres in the clear night sky. Over the radio contact was maintained between 6, part of the time 12, separate stations. The witnesses were in a radius of 5-6 miles from one another. As all were equipped with CB apparatus, they remained in constant contact with one another during the observation. The descriptions given by the witnesses in the first interviews were basically the same, although not all gave all the information required in the NICAP questionaire for UFO sightings. Some reports shewed slight differences in the colour characteristics of the lights in question. The UFOs were described generally as being 'large, yellowish and vague in form'. The movements of the object during the sightings were



Faked photographs gave the American Air Force plenty to do, as here, taken by Mr. Weston over Bakerfield. UFO fans regard these as "splendid proof of the existence of UFOs" often meaning 'flying saucers'.

The noise of the disturbance was described as 'like water running through a pipe, a loud gurgling noise'. The disturbances were deep in tone and so loud that all communication was impossible. The disturbance in CB communication was definitively not the normal statics and could not be compared with that sort of disturbance in communication. During the sightings all the witnesses considered the movements of the object to be very odd.

Always when it hovered or moved which it did with improbable speed, the above mentioned CB disturbances were observed. This was during a period of observation which lasted two hours and 40 minutes. Then for a considerable time the object was no more to be seen. During a 3 or 5 minute period the object seemed to 'switch itself off'. The light disappeared for intervals of 10 minutes. Dr. Garthright and Mr. Rothenbuhler made use of every imaginable research method. A geiger-counter was used in an effort to discover any abnormal radio-acti-



A curious UAP photographed over a large American city, One of the few UFO cases that remain a mystery. The photo comes from the US Air Force archives concerning the so-called 'Blue Book' project, and is exclusively printed here for the first time.

described as absurd. The distance to the object during the sighting was said to be 1 000 feet above the ground.

One witness said that the object was for a moment directly over him at a height of 500 feet. The witness described the noise coming from the object as similar to that of a vibrating metal bow. A very unusual aspect was that during CB communication between the observers they encountered a 'strange radio disturbance'. As the object came closer to a CB station the disturbance increased on all channels.

vity, but without result. Various tours of the area were made by the investigation team to interview witnesses.

Enquiries were made among military security personnel at Fort Detrick, among Post officials at Fort Meade and among the Highway Police. A speaker from the Highway Patrol declared that no aircraft flight had been made by their department during the night in question. This invalidated the first assumption that the sightings might be of an aircraft or heliclopter. The NICAP team had considered the

possibility that more than one object had been observed during that eventful night. Later some 50 CB-Fans reported to the paper, widely circulated in the US NATIONAL ENQUIRER, that a Dr. Garthright's comment to these statements was: "The Brunswick sightings were the strongest and most interesting that I have experienced in my 4 years NICAP activities."



In the case of the CB operators in Brunswick a Police Highway Patrol spokesman

said that there had been no Police aircraft in the area at the time.

gigantic UFO had appeared over a 50 square mile border area between the US States of Maryland and Virginia,

This area lies some 40–50 miles northeast from Washington DC. It was repeatedly observed that all CB channels had been blocked. A radio expert stated that no known source of disturbance could have been responsible, since one CB station after another was put out of action, and not all at the same time. In the words of 'Super Blue', "It was so low that I thought it would crash on myscar. As it flew past my CB set was filled with such disturbances as I had never heard before.

The CB set was unusable on all channels." And 'Johnny One Time' reported: "I turned my CB set on at about 10 p. m. and heard everyone talking about the thing. About 15 minutes later I spotted it as it hung motionless in the air for a period of 15 minutes. I felt very small and embarrassed."

Robert Jackson from Lovettsville/Va. was driving over the State border towards Brunswick as he saw the massive UFO hovering over the Potomac River. "It was really gigantic, bigger and faster than any aircraft I have ever seen. It could stop suddenly. It could shoot up and down with lightning speed. It was 50 yards in diameter, and had little red and green lights around the edge. I was terrified."



A remarkable UAP photographed over Canada in 1973. This phenomenon was visible to the eye, but a radar station in a nearby military air station was unable to pick it up.

### Did an Ufo visit Disney World?

If thousands of Americans in Orlando/ Florida enjoy the phantasies of Disney World, it could be that a few extraterrestrial visitors do so too. On the 18th August, 1976, a family of four with their 15 year old babysitter were driving 30 miles outside of Orlando/ Florida. Suddenly they noticed a strange, saucer-shaped, machine which



Even pilots of commercial air-lines have reported UFO contacts. Here Capt. Robert Adickes.

appeared low, about 1 000 yards above their car. The driver stopped the car and opened the window to get a better look at the object. No noise could be heard from the machine. The driver of the car is an amateur pilot, and so trained to observe and report accurately. All the witnesses, except the youngest child, reported that the UFO appeared to have a dome shaped red light on its top, and that white lights similar to windows were arranged around this saucer-shaped machine.

The family watched the phenomenon for some 40 minutes before the machine disappeared behind a line of trees. They drove to the next town and reported their experiences at the local police station. The official there told the family that he had received several other reports describing a similar machine. The official did not seem particularly interested, as in this area an advertisement flight was being made. Here it seemed that the Disney World visitors might have had an emotional hang-over from their visit to the

Land of Phantasy. It must repeatedly be emphasized that this type of 'flyingsaucer'report often has a simple normal explanation, or arises from deception. In the past years UFO witnesses have been extremely unwilling to report their observation since they feared the derision of their fellow citizens. They were therefore reluctant to describe their UFO experiences to wider circles of people. On the other hand it is almost impossible for UFO investigators to enquire into events which occurred some time before. For example the records of flight observation stations are automatically erased after one month. Police reports after a space of time are confidential and can also not be inspected, and whether newspapers give immediate reports of UFO sightings is also questionable. Where then is one to enquire? As a result many reports must be classified as non-UFO on grounds of insufficient information.

more than 300 feet above the ground. Mr. Cunigan is a licensed pilot and a member of the administration of the local airfield. This suggests that he can be trusted to give accurate information about speed, distance, height and size of a flying object. The words of the witness are as follows: "This light appeared to be about 3 feet in size, and was moving in the east at a speed of about 80–100 miles per hour, losing height at about 10 degrees."

At first he thought of a low-flying helicopter, but no noise could be heard from the machine. The light from the machine was powerful and too large to be the signal light of an aircraft. Mr. Cunigan drove towards Auburn, which he took to be the destination to which the light was moving. He drove to the cemetary there, where he halted to get a better observation. There too he was unable to hear any noise from the machine. He drove home and told his eldest

Cloud over Springfield, Colorado, claimed by speculative author of a book to be a 'dematerialising' spaceship. According to

statments of CENAP almost 95 % of all UFO reports are false interpretations of common sky phenomena.

### Witness comes forward

A number of residents in the Auburn/Kentucky area said that they had seen an unindentified flying object in the neighbour-hood of their town in the summer of 1976. The statements of the witnesses are very similar, but none reported the matter at the time, but later one reported to the local newspaper after having read about a later sighting. Here is the story from Mr. Sam Cunigan, who is an active CB fan:

He was on his way back from visiting a patient in the Logan County Hospital. He was listening in on radio conversations when suddenly his set cutout. Ten to fifteen seconds later a red light appeared to his left. This was less than a quarter of a mile distant and

daughter about the matter, but had no intention of telling anyone else. After discussing the UFO with his daughter, he and his daughter decided to have another look for the thing. The witness got into his delivery van, and when he turned his CB set on he discovered that other stations were already discussing the object. Cunigan arranged a meeting with the other observers at a petrol station. One of the witnesses was an Auburn policeman. This official said that he had first noticed the light of the object as it was near a water tank. Seconds later it appeared to explode, made a turn to the left and made off in a northerly direction, whereby a thin cloud of light orange coloured exhaust gas appeared. He confirmed that he had seen either smoke, exhaust gas, or a cloud of light. He feared that a helicopter had caught fire and had made off in the direction of a place where it could land. Three miles north of

Auburn the officer saw the light travelling across the ground. It cut across the path of his car, so that he lost control of it and drove over the road verge. He declared that the UFO was not solid and that he had a feeling "as if he had flown into a tornado".

The officer turned his car and drove back to the town. Witnesses further declared that the object was similar to various things, such as a powerful signal falling to earth, or a shortcircuit in a transformer. However it was later clear that it could not be this as it moved in a deliberate manner. Three witnesses experience radio cut-out, Mr. Cunigan explained in his report that he would not have reported the occurrence if he had not heard that other people had made similar sightings. Here the problem is particularly clear: Years after the event a person reports a sighting, but without further details, so that research can lead nowhere, although the content of the report points to an interesting connection with later confirmed events. Certainly the reader will remember a report according to which Deputy Sheriff Val Johnson on the morning of 27th August, 1979, in Marshall County/Minnesota, experienced a supposed collision with a UFO, which made headlines in all the papers, such as 'Mysterious Occurrence' (Mannheimer Morgen), 'UFO Attack' (Die Welt), 'UFO Aggressive' (Rhein-Neckar-Zeitung), 'UFO Attacks Sheriff' (Salzburger Tagblatt), 'Deputy Sheriff UFO Victim' (AZ/Tagblatt für Österreich), and 'Glaring UFO attacks Police Car' (BILD). This event was the UFO event of the year 1979. The Center for UFO Studies in Illinois -Prof. A. J. Hynek - informed CENAP of the results of an extended investigation into this case, where apparently a natural phenomenon was capable of a static effect on a motor vehicle and of slightly damaging the eyes of the guardian of the law by infra-red radiation. The case is documented and is somewhat reminiscent of the description given by Mr. Cunigan. Here the particular character of UFO phenomena is demonstrated. It is less a matter of objects in the firm form of a flying machine, but more that of certain abnormalities in the upper atmosphere, which by the emission of light and through their general dynamics become noticeable from time to time, yet through the infrequency of their appearance remain unexplained. Of 191 phenomena reported as UFOs there remain 7 cases classed as 'Unexplained Atmospheric Phenomena (UAPs)'. All the remainder were explainable as joke, deception, mistaken impression, and misinterpretation of normal occurrences in the

























### Löwe Verlag "CB-Euro-Revue" Postfach 1523 609 Rüsselsheim

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In the course of it's 38 issues CB-ILLUSTRATED/EURO-REVUE has become the widest circulated and most read specialist periodical on the European market. It appears in 5 languages and in 8 separate regional issues. During this period our readers have remained true to us, and each issue brings us more.

It is not without reason that the magazine has become the unique official organ of the World CB Union (WCBU), The European CB Federation (ECBF) and the Federation of German CB Clubs (Deutsche Dachverband — DCBD).

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# Clothwig the bea

When Clothwig the Bearded wrote his initials 'CB' on his shield, he was very proud to have a fine swith so many shining points as a coat of arms.

All his life he fought at the head of his men with his CB shield. Always his star protected him from tattacks of his enemies. He Suffered a scratch or two but was never seriously hurt. When he was of an his red beard began to shew the first grey strands, he liked, in the long winter evenings, to tell grand-children about the adventures he had had with his CB shield.

Still today stories are told in his homeland about the adventures of the legendary Clothwig. Had known that, almost a thousand years later, some millions of people would call themselves 'CB'e he would have been even prouder.

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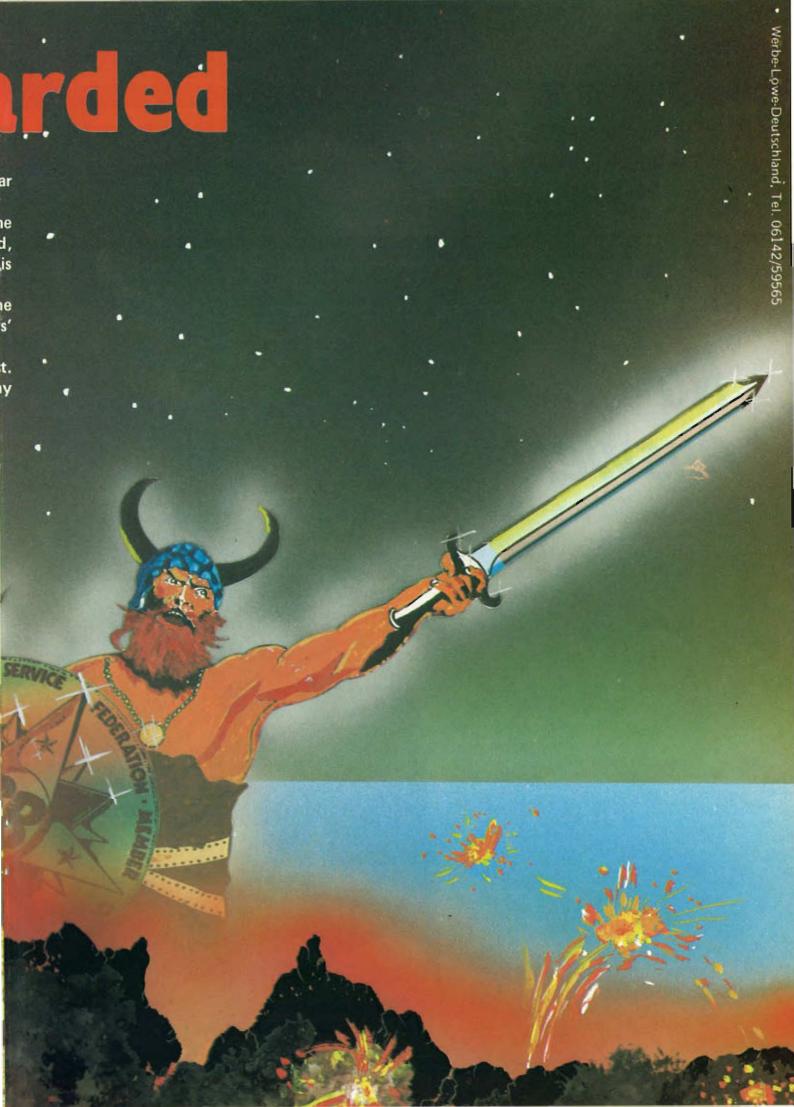
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Granny Gusti! No Answer!





# The first CB Novel is here! Exclusive to the CBILLUSTRATED/EURO-REVIEW! by the successful radio-authoress SUSANNE P. ARNHEIM. Part 1.

"QRZ Gustav from Teddy!"
"Yes — Here is Gustav, I'm calling Oli," "Here is Olli, I'm calling Ulla!"
"Here is Olli, I'm calling Ulla!"
"Here is Ulla, hello, Idefix please report!"
"Idefix reporting. You people are punctual! Just 1800 hours."
"QRX, QRX the frequency. Granny Gusti, report in, please!"
At 6 p.m., as on every other day, the group of youngsters, punctually this time too, on QRG 7 for their round of chatter. Only Granny Gusti has not reported.

They all tried to contact her. Hello Granny Gustil Report please!" Teddy calling Granny Gustil" "Here is idefix, Granny Gusti, Granny Gusti, come in!" "Here Saturn 2 — What's all that, that you are shouting over the air? The old girl is on holiday, for sure. Yesterday it was the same story." boomed a deep voice.

"Hi, Saturn 2, get off the line! Teddy, Gustav, Oli, Ulla and Idefix calling Granny Gusti! Granny Gusti! But from Granny Gusti there-is no answer. "Perhaps she is really on holiday" suggested Idefix. "But where would she have gone. She has nobody but her son. And he doesn't bother about her. And if she were away, she would have reported it, like we all do," said Teddy. "Could she be ill?" asked Ulla. "When she had the 'flu, she reported as usual. We went to the chemists's, and did her shopping." re-remembered Gustav.

"Here Saturn 2 again, excuse me for butting in, but try the other channels. Perhaps she has made a mistake!"

"Thanks, Saturn! We'll do that. Come on, all! Be back on channel 7 in five minutes!"

The children called on all the channels they could get, but Granny Gusti didn't answer. Instead there were annoyed calls from CBers, whose conversations had been interrupted. Radio pests and stupid minis, they were called. But they didn't give up. "Shut up, with all that fuss about your granny. If you are worried run around and see how she is." said someone in the end. At the end of exactly 5 minutes they all reported again on QRG 7. Saturn 2 came in again. He had been listening to their calls, and

said that it was not quite what he had imagined.

"The man was right that gave you the advice to go and look for her. The people in the house are sure to know if she is away. Perhaps gran's set is out of order. Maybe she is sitting there just trying to contact you. From what I have been able to gather in the last months, the old lady is not technically very advanced. You should really go and have a look."

"Teddy here. Saturn 2, thanks! We'll do that. Oli, you're the one who lives closest. Ask your mother to give you half an hour's holidy. If you tell her what's the matter, she's sure to let you. Take the set with. We'll stop QRV!"

Shortly after Oli reported and said that he had permission and was on his way.

At the first corner he came on the air again. My QTH at the moment is the corner of Heidestraße and Friedrichstraße, you still there?" "Sure, we're still QRV! Don't make so much of it — on your way. Report in again when you are there!" Gustav's voice sounded reproachful.

Oli ran on. Here was the chemist's, and there the baker's, where Granny Gusti bought her bread, and there the selfservice store, where the children had done her shopping when she was ill.

"I'm lucky that I have everything close," she had once said and laughed. "I certainly sha'nt get any younger, and my legs will be grateful one of these days that they don't have so far to go." The children had found that difficult to imagine when they saw how springhtly granny moved between ktichen and living room to serve them with tea and home-made biscuits.

Every Thursday at half past three they met at Granny Gusti's. Oli giggled to himself as he thought how they had disputed among themselves whether it should be half past three or 1500 hrs. Half past three had won. "It's a clear case," Gustav had argued at the time, "No mistake possible. No one makes visits in the night." So, every Thursday at half past three! "Sounds a lot better." Ulla had thought.

Then they sat around the big table in the living room. The herb tea that granny was brewing smelt wonderful.

"Secret recipe" gran had said the first time, winking her eye, but later they were officially initiated into the ceremony: "A large pinch of peppermint, a little pinch of camilla, a little bit of rose hip, dried apple peel from unsprayed apples. Brew it up and let it stand for five minutes, pour out and add a little lemon juice," The following Thursday they were all allowed to try out making the recipe. On the table there was always a bowl of brown candy sugar. Often they put a piece in their mouths and let the hot, sweet tea trickle over it. At Granny Gusti's each of them had a special cup, leftovers from the offee services of a long life time.

For every cup Granny Gusti had a story.

Oli's cup was part of a fine service that had been bought in 1930, for the christening of Granny Gusti's son, in another house, in another town, and had always stood on another table. It was quite a strange feeling to drink out of a cup which had been bought 37 years before one's own birth, and which had been part of a little family through hard and difficult times, and which in the end had been recovered, as the only undamaged piece, out of the ruins of a bombed house — a survival from the great war.

Oli quickened his steps. It was not much further now. He would be there soon.

Tomorrow was Thursday. He was looking forward to the game which Granny always conjoured out of a little box, always new games, the rules of which Granny often made up for herself. Had Granny, perhaps, already baked the biscuits?

Oli remembered how once they had all been allowed to help with the baking. That had been fun! "And to finish a little

grated lemon peel, unsprayed of course, and a scarcely noticeable pinch of cinnamon." Granny had explained, before the dough had been rolled out and the biscuit shapes punched out. The children had been very amused about the 'scarcely noticeable pinch".

Eventually Oli was standing in front of the house, Sandstraße No. 38, a large dark coloured building, with worn red sandstone steps leading to the front door.

"These old red houses survived the war." his parents had explained to him, "Nobody does much to them now. They ought to have been renovated long ago, no bath, toilet on the landing. But the rents are low, for those who can't afford anything better!" Certainly Granny Gusti couldn't afford anything better. The children had realised that. In a tiny box-room, leaning against the wall behind a curtain beside gran's broom and bucket was a metal bath. Ofi had long been curious how gran managed to bath there.

Up there on the third floor were granny's windows. Oli stretched his neck and looked up, as if he expected to see gran's head looking down from the window. She was always looking out of the window on Thursdays when the children gathered together in front of the house so that they could climb the dark wooden stairs together.

Why should she be looking out of the window not? It wasn't Thursday and it wasn't half-past three. Oli drew the antenna out of his set: "Here Oli, Here Oli! I'm in front of the house." "Well, at last!" he heard Teddy's voice, "Yes, and?" "Here Oli! What yes, and? I looks the same as always. I'll go on up. Hang on, and I'.. report back." Oli pushed open the front door and stood in the gloomy hallway. It smelt as ever, a little sour and of floor polish. The first time they had been invited by Granny Gusti, Ulla had said: "It smells as if several genera-

tions had cooked sauerkraut here, and polished the floor without ever opening a window." Ulla always said such things.

They had all laughed, and Granny Gusti had laughed with them as they had stood before her door and someone had repeated what Ulla had said.

On the wall at the foot of the stairs, faded and strict looking, were the house rules, a little tattered at the edges. Oli hated this piece of paper ever since Granny Gusti had brought them down and read a paragraph aloud to them. One of these days he would draw a little man on it, or better still, a funny face, although Granny Gusti had explained that the house rules had a good and proper right to be there. That was the time when they had found a little black kitten in the park and brought it up to gran because they thought how much alone she was. She had played with the kitten, and had been amused with it's playful springs, "Children, I can't keep the little thing. I'll show you later, why." Gran-ny Gusti had said. "Today I haven't even enough milk in the house." She had given the kitten tea and biscuits, because there wasn't anything else there. Granny Gusti had explained that the animal must be taken to the 'Cats' Home', where it

would surely soon find a new home. The children had begged that the kitten should be allowed to remain at least just one day, but Granny Gusti had remained adamant. Perhaps the kitten had just lost it's way in the park, and someone was looking for it now. The people would ring up the 'Cats' Home' Who knows whether they will ring up a second time when they have been told once that it isn't there. The children knew that granny was right. They ought not to have brought the cat to the house in the first place. Then granny had packed the playful little thing into her shopping bag and put her coat on. "Come, we'll go on the bus to the 'Cat's Home'. Oli had seen the tears in granny's eyes. At the bottom of the stairs they had read the house rules. There it was, black on white, about cleanliness and tidyness, who could go into the wash-house, and who had to clean the steps, that the tenants must be quiet, not play musical instruments, not make noise on the stairs and landings. And the keeping of pets was strictly forbidden. "I couldn't keep a kitten hidden for ever. That would be no life for a cat with me on the third floor. Always in fear of the neighbours. We couldn't do that to it. Your meant well, of course," Granny Gusty had said in the end, as she stroked the little kitten in her bag.







Then they all went together to the 'Cats' Home'. Granny had paid for the bus journey. Ide-fix had cried at the 'Cats' Home'. "I'll never, never, go again to the 'Cats' Home'. One feels so mean about it."

Oli knew every step of this stairway, the ones which creaked. There were a lot of creaking steps. On each one he stood for a moment and hopped. On the one which creaked particularly loudly he hopped twice. That was how he had gone up the stairs every time since the affair with the cat. After all, there was nothing about hopping in the house rules, although he felt that it must, nevertheless, be forbidden. somehow shouldn't he hop today too?

Granny Gusti will be sitting. surely, up there now behind her Break, twiddling the knobs in despreation. "Hallo Oli, Idefix, Ulla, Gustav, Teddy. Aren't you listening any more. Here is Granny Gusti. Report your-selves." He could just hear granny's soft voice.

Up there he will ring the doorbell. Granny will open the door and welcome him in. "Look at that set." she will say, "Ever since yesterday I can't get any connection." Oli imagined how, with expert fingers, he would examine granny's set, what

could it be? The accumulator, of course! "There is no more juice there." he would say, and put in batteries out of another set. Granny would watch him with admiration. "Shall I make some tea for you." she would ask. Of course he would decline:

"QRZ Gustav, Teddy. Ulla, Idefix, from Oli. -All well, it was just the accumulator.

"Don't make yourself trouble. I have to go back home anyway." Then a little noise in the set and his report: "QRZ Gustav, Teddy, Ulla, Ide-fix from Oli. All in order now. It was just the accul" Granny would come to the door with him. "Thank's so much Oli. Your're so clever with sets! What should I have done if you hadn't come?"

Of course, that's how it will be when I get up there, thought Oli, and hopped till the stairs fairly rattled. On each landing hung a faded notive: "Careful freshly washed!"

Then Oli was there in front of Granny Gusti's door. He turned the old-fashioned door-bell, Inside he could hear the thing rattle. The bell had worked itself loose again. How often have tightened the thing up, he thought. Oli was aquainted with the system from his experience with bycycle bells. That is careless of Granny Gusti. She is sure to be sitting in the room at the back, and can't hear that thing rattling, Oti turned the bell wildly. Nothing moved in the flat. He put his ear to the door and listened. Nothing! Then he knocked, at first gently, and then louder. Oli waited, but there was no noise from the He knocked again. In vain. He ran a haif-flight down to the landing window, opened it and put the antenna out. Gustav, Teddy, Ulla, "QRZ **idefix** from Oli. I am outside Granny Gusti's flat. Granny Gusti does-n't open." "Here Teddy, here Teddy! Oli I can hear. Have you knocked hard? You know that the bell is sometimes weak!" "Here OII, here OII! I have thundered on the door. Nothing moves in the flat." ORZ Oli from Idefix! Have you asked the people in the house whether they know anything?" "Here Olil No, not yet. I'll knock again. Then I'll ask in the house. Till then. End," Oli shut the window and ran up the stairs again. First he listened at the door, then he rang the bell and knocked. In the end he hammered with his fists on the green painted woodwork. It echoed dully in the high landing. Why didn't he know where Granny Gusti was? She had never done that before, simply go off without saying where. Up on the 4th floor a door opened. A young

woman leaned over the banisters. A baby was crying in the flat. "Are you crazy. What's all the noise about? Are you trying to break the door down? she complained. "Have you seen Granny Gusti? Do you know where she is?" shouted Oli breathlessly up the stairs. "If with Granny Gusti you mean Mrs. Wollmar, I haven't seen her today. A bit earlier I went down to see if she would look after the baby for me this evening, but she wasn't there." The young woman pointed to the door fo her flat. Oli realised that she was talking about the child that was crying there. "You are one of those children that visit Mrs. Vollmar?" the woman wanted to know, and came a few steps down the stairs. Oli recounted that Granny Gusti had not reported on CB-Radio and the conversations daily at 6 p.m. "Wait a minute." and the young woman seemed to struggle with her memory for a minute, "No, yesterday I didn't see Mrs. Vollmar. Perhaps she has had to make an unexpected journey. Ask Paulsens on the ground floor. That's the caretaker family. If any of us goes away for some time we leave the doorkey there. I must go in now. The baby is hungry. She ran back up the stairs, but

before she went in she called over the banisters: "If you find anything out, let me know. Oli ran down the stairs and quite forgot about the creaking steps. In the hall stood Gustav,

whose name was really Norbert. "Questioning the people could take a long time. I'll help you. My father thought that I should do that." he said, and rang the

door bell.



Mr. Paulsen opend the door. The family were apparently having their evening meal. There was a confused sound of voices and music. A clatter of crockery was audible and there was a smell of fried potatoes and onions, which reminded Oli that he was hungy.

Mr. Paulsen was still chewing as he asked, surprised: "Well, what

can I do for you, this evening?" 'Do you know where Mrs. Vollmar is?" asked Gustav. "Is she away? Has she left her flat key with you? The words bubbled out of Oli. Mr. Paulsen shook his head, and called into the flat: "Else, come here a minute. Do you know if Mrs. Vollmar is away?" Mrs. Paulsen came to the door, wiping her hands in her apron. No, she didn't know whether Mrs. Vollmar was away, and she hadn't left the key with her. Nor had she said that she intendid to go away in the morning when she had emptied the rubbish bucket. "What was that, did you see Mrs. Vollmar this morning then? asked Gustav, and explained that Granny Gusti hadn't reported the previous day on the 6 p.m. CB roundcall.

"What did Mrs. Vollmar say, Else, when you met her with the rubbish bucket?" Mr. Paulsen asked his wife. "She is sure to have said something." Mrs. Paulsen said that Mrs. Vollmar was not one who talked a lot. "Wait a moment, I've got it now. She said that with this bad weather one didn't get out of the house much," Mrs. Paulsen nodded in confirmation. "Yes, that's what she said." Mr. Paulsen looked puzzled. That couldn't be right. Today the weather had been fine. But yesterday morning, though, it had rained, and the wind had been so strong that a flower-pot had fallen from Meier's window. "It must have been yesterday that you met her." That could have been, thought Mrs. Paulsen, she could n't be so sure. In any case no key had been left. Furthermore couldn't remember that Vollmar had ever been away from home. Perhaps because of this she had not known that the others were in the habit of leaving their keys if they went away. 'We'll ask all the people in the house," Oli explained, "Let me know, if you find out anything" said Mr. Pualsen as he went in and closed the door. "I'll begin here at the bottom, and you go up to the top, Oli, because you know who you have spoken to already." decided Gustav. The two boys ran up and down the stairs and rang the doorbells. No one had seen Granny Gusti. Only Mrs. Meier on the second floor remembered meeting her the day before in the early afternoon carrying her shopping bag. No, nothing had been said about going away.

At two of the flat doors there was no answer.

Suddenly Teddy and Ulla were in the stair-well, too. "You did n't report any more, Oli, so Ulla's father brought us here in the car. He's waiting outside." said Teddy. "He'll take us all home."
"First, let's try once more on Granny Gusti's door" requested Ulla. "There is no one there," explained Oli. "We rang and knocked every time when we passed the door."

"Never mind that." demanded Ulla, and went off up the stairs. "Take me with you!" shouted Idefix, who was really called Michaela, and who was standing with her mother in the hall. "Well, come on then, we're all together now." laughed Gustav.

So, there they stood all together in front of the door, and rang and knocked and listened. "It's no use." said Michaela's mother.
"Come-on, let's go." "Granny Gusti is a good woman," thought as she went down the stairs. "I've heard such a lot about her, and hope that she really is away somewhere." One day Michaela had had a pair of green gloves, which her mother had not seen before. Where did they come from, she had asked Michaela, and where were the expensive ones from last Christmas. She remembered Michaela's embarrasment when she told her that she had lost the new gloves long ago, and rather than have to admit that she had lost them, had gone around with none. Granny Gusti had noticed her hands, blue with the cold, and had unpicked an old scarf and knitted the green gloves with the wool. She had gone at once to Mrs. Vollmar, and had been invited into the room. which Michaela had so often described enthusiastically as a childrens' paradise, and had made in her mind a comparison with the impoverished reality. Here the children had thought themselves well cared for and happy. How often had Michaela struggled for the Thursday afternoon at Granny Gusti's, when she herself had something else she wanted to do with Michaela. She had thought about her own, well cared for, flat, and the modern children's room. Here the coloured paintings of the children hung alongside faded photographs. Here she had, for the first time, a feeling of doubt, a vague feeling of having wandered into an alluring jungle. The realities of life where clearly elsewhere. Granny Gustí had stood before her friendly and anticipating, with questioning "I have come about the eves. gloves. It's really not right that you should give my child gloves I should like to pay you for them. You haven't very much yourself." At once she had reyourself." At once she had re-alised that she had said the wrong thing, and was doing the wrong thing when, embarrased and at the same time ashamed, she opened her handbag.

Leave that, please, Granny Gusti had said, laying at the same time a detaining hand on her arm. How young and how purposeful the hand of the old lady had seemed. Michaela's mother remembered precisely the feeling of relief she had experienced with the gentle pressure of that hand. Then Granny Gusti had

laughed, a gentle, kind laugh. "You must know that one cannot set a cash value on the gloves. I have knitted in so many good wishes for your child!"

Later she had sat at Granny Gusti's table and had drunk the famous tea. Biscuits, there weren't any. They were there only on Thursdays. She knew that they were carrying on a good and immensely important conversation. She had gone home pleased, and with the certainty that something basic in her life could be altered.

On the ground floor Paulsen was standing in front of his door. "Have you found anything out?" he asked. "Nothing" Gustav's voice was subdued. "Nothing. No one knows a thing. No one came to the door at Parner's and Sanchez's." "Go on home. They come home late from their work. I promise you that I will catch them in the hall and ask them. Come again tomorrow. By then I am sure the puzzle will have been solved. Come back tomorrow!" The caretaker turned back into his flat.

You will see that tomorrow will clear everything up. A person can't just disappear.

In front of the house Ulla's father was waiting in the car. In answer to his question they all shook their heads unhappily. "Well, get in," he said. "Tomorrow, you will see, will bring a simple explanation for Granny Gusti's absence. A person can't simply disappear," "We'd like to walk a bit, wouldn't we Michaela?" said Michaela's mother. "Good night all!" Michaela stared at the others. Nevertheless she turned and trotted after her mother. "Till tomorrow" schouted the others. But Michaela did not answer.

"Come-on, get in!" Ulla's father opened the car door wide. The children looked up once more to the dark windows on the third floor. "Come-on." he said again, and thought: "It's hard to understand, the way these children hang on to the old lady — or maybe it is understandable."

He had only met Mrs. Volmar once. That was the time she visited Ulla in the hospital. They had exchanged a few words without any particular significance. Then the old lady was gone. Ulla had shown him the doll, which Granny Gusti had sewn herself amd brought with her. To be sure the doll was nothing beautiful, but, nevertheless, amusing and colourful.

She should simply talk to the doll when no one else was there, Granny Gusti had said. And

when other children in the room were sad she could simply let the doll speak. Then the others would be happy again. "You are sure to be able to think of something." she said. And, in truth, many things had occurred to Ulla. When she was fetched home from the hospital the other children were very quiet. At the door Ulla had suddenly turned around. She ran back and laid the doll in the hands of the eldest child. "You know what to do." she whispered and ran out of the room. At the time he had grumbled that it

clearing up and such like," Gustav stood on his toes and Oli hopped up and down. The shop was empty. At the side there was a wide gate, and there was a bell, too. "Do you think we could ring the bell?" whispered Oli. "Sure", said Gustav, and pressed on the knob. They had to wait a long time for someone to come to the gate. It was the baker's wife. The children had seen her before in the shop. No, she said, Mrs. Vollmar hadn't been there all the week. Mrs. Vollmar only came on Friday mornings. She knew that



wasn't right to give away something which one had received as a present, immediately to someone else. But Ulla had looked earnestly at him and said: "Granny Gusti did that, too."

Then they had heard the laughter and chatter from the sick-room. Ulla had said, radiantly: "Do you hear."

Ultimately they had all squeezed into the car and could drive off. But they didn't get far. Suddenly Gustav cried: "Stop." Ulla's father looked for a place to park: "What's up now?" "There, over the way, is the bakery where Granny Gusti was last seen with her shopping bag. Perhaps she was in the shop and the people know something!" "Man, the shops have been shut for ages," cried Teddy. "I" go, nevertheless," insisted Gustav, and ran across the street. Oli was already with him. "I'll go, "Then we'll go to the selfservice store." said Ulla. "Comeon, Teddy!" The two children got out of the car, too. Ulla's father sat at the wheel, shaking his head and watching them.

The shutter of the baker's was down, but the window was dimly lighted. "Perhaps there is someone still in the shop for certain, because she always kept a one pound wholemeal loaf for Mrs. Vollmar. Last Friday she had certainly been there. She was sorry, but she didn't know anything else. The children trotted back to the

The self-service store lay quiet and empty. Ulla pressed her face against the glass door. Inside it was dark. She could only see the front shelves and the neatly arranged trolleys. "There's no one there any more." Then the children heard noises. They ran through the open drive-in at the side of the store. Behind the house an old man was clearing up and tidying cardboard cartons. No he, himself, had nothing to do with the store. He just came evenings to clear up behind the house, so that in the morning there would be room for the delivery vans. The shop assistants were all gone. No, no one lived here. He was sorry, but there was nothing else he could tell them. Ulla and Teddy were disappointed. What had they actimally expected? Gustav's idea had simply carried them alsong. Ulla's father brought the children home. "Till tomor-row." they said. The next day was Thursday! And half past three at Granny Gusti's. The tea

would smell deliciously, and Granny Gusti would laughingly bring the biscuits. She had had to travel urgently to her son's, she would say. She hadn't reported leaving, because it had all been so sudden. The next time she would certainly leave her key with the Paulsens. She was sorry that they had all been so worried.

Gustav, who was really called Norbert, could not sleep for a long time. Where was Granny (justi? Then he ran up and down stairs in strange houses, and rang and knocked at strange doors. The white faces, which looked through doors and win-

There sat Granny Gusti in the sunshine on a red bench, and watched the childrens' radio operations.

dows, gave no answer. He ran through the streets of a strange town. The grey people moving about there shook their heads negatively, and shrugged their schoulders ruefully.

And there, suddenly, sat Granny Gusti in the sunshine on the red bench at the side of the pond in the town park, smiling and strewing bread-crumbs on the water, while the fat goldfish and brightly coloured ducks snapped greedily at them.

He woke up, and felt somehow relieved and happy.

That was how he had seen Granny Gusti for the first time as he had sat down, with his new Break beside her. "Here Gustay, calling Teddy." he had cried. Granny Gusti had looked at him with interest. As she looked at him he felt enormously expert. In fact, at that time, they had all just received their first new sets, and had posted themselves about at various points in the town park, to try out the exciting CB-Radio.

Their radio-names were brand new too, and all was not yet quite right with their technical jargon.

How long ago was that? Norbert reckoned back. More than a year, in fact! They had been almost every day to the town park, trying out their sets. His post had always been the red bench by the pond. And there, too, was always the friendly old lady, smiling and strewing bread on the water for the ducks and fishes. Then she had spoken to him, and got him to explain how to use the set, and what the jargon, which he now understood, all meant. One day he had simply put the set in her hand just at the moment when Teddy was calling him: "Try it for once!" "QRZ Teddy from Gustav. I hear you." she had said, "My! Gustav, what a queer

voice you suddenly have." Teddy had wondered. "Sounds like a granny!" "Yes, here is Granny Gusti. Gustav was so kind as to let me speak to you." the old lady had said. 'Granny Gusti' it had remained, as Granny Gusti had reported herself in the next days to the others on his set. "You give me a lot of pleasure." she had told him with a smile. It is wonderful, you know. The fishes and the ducks don't give any answerl

Later, one day they had all come to the red bench. They wanted to make Granny Gusti's acquaintance. They had only known her from her radio calls, but were enthusiastically interested in her. It was, Granny Gusti said this, and Granny Gusti said that, Teddy had called him a braggart, not without some justification. He had been so proud of the fact that Granny Gusti had talked so earnestly to him. Quite different to the usual grown-ups. So they had all stood in front of the red bench and introduced themselves. Granny Gusti had invited them all on Thursday at half past three, number 38 Sandstraße, third floor, right. So they had, for the first time, drunk the aromatic tea and eaten biscuits. And for the first time the box of games was opened. Then they had persuaded Granny Gusti to get herself a set. They had gone with her from specialist shop to specialist shop for advice, But Granny Gusti had alweys shaken her head. "Children, at that price I can't afford it." In the end they got the adress of a CBer who wanted to sell his set because he had bought himself a house station. Granny Gusti had bought it, and the daily round-call at 6 p.m. began "QRZ Gustav from Teddy!" "Yes, Here Gustavl calling Ofi." "Here Oli, here Oli, calling Ul-lal" "Here Ulla, hello Idefix, report yourself!" "Idefix report-QRX the frequency!" "Granny Gusti, report pleasel" Then came always Granny Gusti's gentle voice: "Here Granny Gusti. Receiving you well. I'm listenina.'

Norbert could hear the voice. He knew every tone of it. The rustling and crackling in the set. Why hadn't she answered in the last two days? Where is she? And again he was running up and down stairs, and being scared by heads which always made negative gestures. Then, once again Granny Gusti was sitting in the sunshine on the red bench, and she smiled at him. And then he woke up—covered in perspiration.

The others, too, had an uneasy night.

Already early the next morning Teddy's mother found him dressed and sitting by the telephone. He was turning over the leaves of the telephone book, "No one in the house at 38 Sandstraße has a telephone, not even the caretaker." he said, as he saw the quastioning glance of his mother. He sighed: "Granny Gusti's son hasn't got a phone, either. I've tried Enquiries. — Kurt Vollmar! - Nothing! And she had always said how well they were doing." "It is possible to do well without having a telephone, and someone with a number of telephones can be doing badly." Teddy noticed that his mother was going her best to console him. And he had been so pleased with himself in the night when the thought of the telephone had occurred to him. Splendid idea. What would the others say, if he could say "Everything is O.K. Granny Gusti is at her son's. I have spoken to her myself. She sends her greetings." He had not been able to sleep for excitement, and he had been pleased when the grey morning light had eventually been visible through the bars of the shutters, "Child, don't be so silly. There will be a simple and plausible explanation as to why Granny Gusti isn't home," Does she really believe herself in this plausible explanation, after all that she had heard about Granny Gusti?

For a year, now, every day Granny Gusti had reported in at 6 p.m. punctually on the radio.

For a year the children had gone every Thursday to her, and had come home with a sack full of good ideas. The visits had only been missed once, when Granny Gusti had the 'flu. Even then she had reported on the radio. The children had done her shopping. The shopping bag with the purse had stood in front of her flat door. What they had to buy they had heard over the break. Then the full bag had been left for her in fron front of the door. No one was allowed to come in. "You would all infect one another." Granny Gusti had radioed. Teddy's mother remembered that on that occasion she had baked a little cake. The others had brought fruit and vegetable juice. Then the children had gone with the packed plastic bag, and left it in front of Granny Gusti's door, pressed the bell and run down the stairs. Thursdays at half past three.

Teddy, a little breathless with pleasure, had told her that evening how they had stood in the street and tooked up at Granny Gusti's window, until her white face had appeared behind the glass pane, and she had waved to them.

Read further in the next CB-Illustrated/Euro-Review.



**S.S.B. sets:** 146, 148, 148 DX

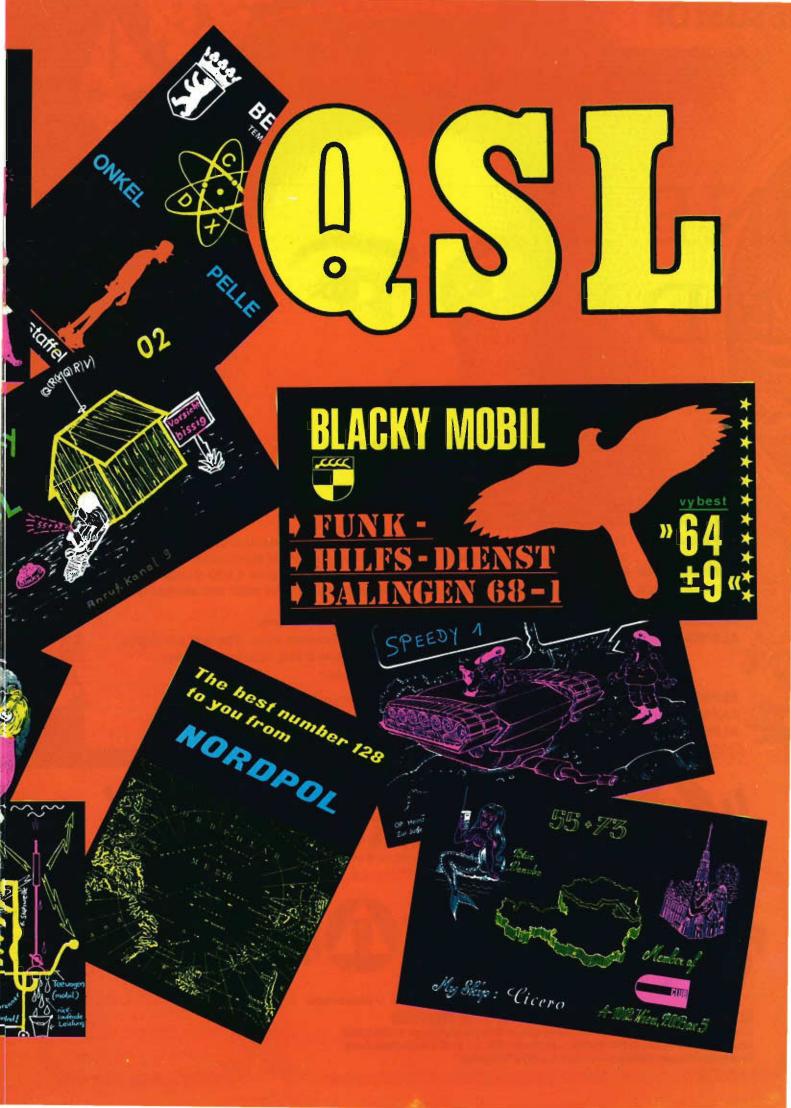
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# Half Will Do

We all know that the few channels we have are bursting with signals. Some wait for night to fall before they begin to look for a gap in the thicket to be able to make themselves heard.

# A slice of the wave — cake to each!

There's a fact we cannot deny: the frequency space usable for radio, given us by Nature, is not unlimited. It is the same as with the resources of our planet — they are all limited, and the more is used up, the more difficult and expensive does it become to look for possible remainders. In such a situation it is obvious that when traffic tests are made, the moneyed and mighty help themselves so greedily that little is left for others.

What does that mean in real terms? It means that the biggest morsel of the available frequencies goes to those who have a direct connection to the State — authorities, the commercial, military and other radio-communication services and the large broadcasting stations.

These broadcasting stations may be subordinated to political parties or, as is the case in the USA, be strictly commercial enterprises out to make quick profits. In any case, all that is left to the citizen is to watch. What there is in wave ranges should be distributed fairly, so that everyone gets his just share. Then one should consider how to make the best possible use of his share. Again, as in the case of energy and all other resources, the watchword is SAVING.

### There are other ways

It is difficult to believe; we indulge in tremedous waste as regards our channels. Few know that for a radio conversation only HALF a channel is really needed. Thus, every existing channel could become two channels. We shall look here at the technical aspect of this dodge while remembering that it is not a technical but a political problem whether this will bear fruit for us,

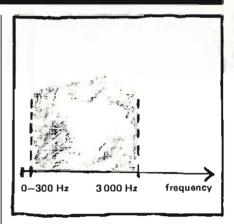
### Where modulation takes place . . .

Our language consists of sounds of different height — air vibrations of different frequency correspond to them. To transmit speech intelligibly it suffices to make audible all vibrations lying between approximately 300 and 3000 Hz (1 Hz or 1 cps being 1 vibration per second). It could also be said that intelligible speech transmission requires a bandwidth of 2700 Hz. This fact can be pictured by means of what is technically known as a spectrum. On it one sees the frequency of a wave and its intensity.

Since radio waves have a very high frequency (in CB-radio around 2,7 million Hz) it is necessary in a radio device to modulate an electric current possessing this high frequency — the carrier frequency — this entire band of yibrations (oscillations).

## ... Side frequencies emerge

Here something specific takes place. The modulated wave, it appears, no longer has a single frequency. Along with its carrier frequency it now has also side frequencies. The picture of a modulated wave does not show it, it seems that it simply has the carrier frequency, and that the height of the vibration, the amplitude, vacillates in tact with the speech vibrations. A small drawing will show us how deceptive appearances are in this case. On it we see a vibration that is rising and falling. If you care to measure it, you



will find that the upper curve is the sum of both lower curves.

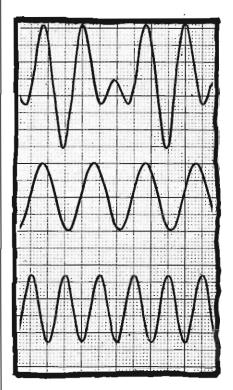
This example shows us that in an oscillation there are frequencies whose existence we would not suspect at first glance. This is always the case when a frequency is modulated. Another example is known to everyone playing a guitar. When a guitar is tuned every string is tuned according to the one next in depth, which is plucked so that both strings give the same sound. If one of the strings is not tuned correctly, the two sounds differ - we hear them as a single tone, but one that rises and falls, that trembles between loud and less loud. This trembling is here the modulation and shows clearly and unmistakeably that there is a hidden difference in frequencies between the two strings, one that possibly would go unnoticed if the two strings were plucked alternately.

Every modulated radio wave acts in a manner similar to the rising and falling guitar tone in our example. In addition to the carrier frequency it contains other hidden frequencies, namely, for every modulated audio frequency 2 side frequencies in the case of AM modulation, and even many more in

### It's the sidebands that matter!

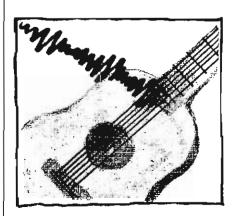
the case of FM modulation (We shall consider here only AM modulation,

since it forms the basis of the SSB method).



Hidden frequencies! At first glance one does not notice that the upper curve is the sum total of two curves with different frequencies.

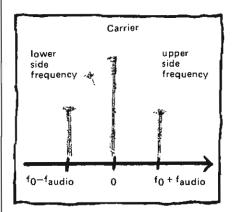
If we now modulate our wave with speech, i. e., with a whole band of frequencies, two side-bands are gener-



If two guitar strings vibrate with slightly different frequencies a rising and falling tone is generated.

ated. This can be easily seen in the spectrum: on the left and right next to the line, representing the carrier frequency, we see one side-band each. The side-band on the left side of our drawing is lower on the frequency scale. It is therefore called the lower side-band. The other, on the right, lies higher on the frequency scale. It is correspondingly called the upper side-band.

The two side frequencies lie equidistantly above and below the carrier frequency. Their distance to the carrier

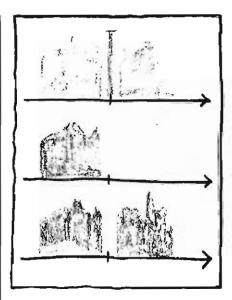


If a carrier oscillation is AM-modulated with a tone, two side frequencies emerge.

frequency equals in each case precisely the total of the modulated-on audio frequency (tone frequency). If the carrier has, for example, 27 005 000 Hz (CB-channel 4) and we sing with 440 Hz (pitch 4) into the microphone, side frequencies 27 004 560 Hz will emerge as lower side frequency and 27 005 440 Hz as upper side frequency. Since the side-bands are generated by modulation, it is they who contain the entire information of our language.

### What channels really are

From the above it clearly follows that the receiver too must receive the sidebands to be able to reconstrue the spoken word. This means that it has to receive all the frequencies from the lower end of the lower side-band to the upper end of the upper side-band. The 6 000 Hz wide range is what we call a channel.



This is how spectra of spoken sounds look.

Top: a carrier with AM side-bands Centre: the same sound of SSB-signal on

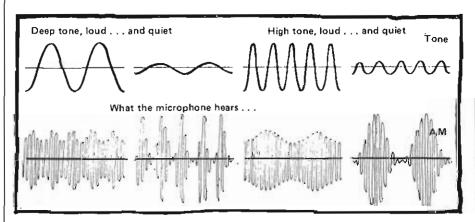
the upper side-band

Bottom: Here another radio operator speaks simultaneously on the lower side-

band

If somewhere a conversation is held by radio all frequencies within the channel are taken up by waves (except the two small gaps in the middle). If two more operators should want to communicate at the same time, they must choose a carrier frequency so that their channel begins where the neighbouring channel stops. A little distance for the sake of security is recommended because it could happen that one "talks himself" into the other, neighbouring channel.

In CB-operations a distance of 4000 Hz is therefore left between the edges of the channels. Now we can see how much "space" a CB-channel needs: on both sides of the carrier frequency at 3000 Hz up to the edges of the sidebands and an additional security range of 2000 Hz on each side. That makes



To remeber, we have here once more the diagram in which the A, modulation is illustrated. The black curve on top represents the tone vibration. The coloured curve be-

low shows how the vibrations of the carrier frequency carry with them information over the sound vibrations.

Frequency in MHz 26,965 26,975 26,985	USA channel No. 1 2 3
26,995 27,005 27,015 27,025 27,035 27,045 27,065 27,065 27,075 27,085 27,105 27,115 27,125 27,135 27,145 27,145 27,145 27,145 27,145 27,125 27,145 27,125 27,125 27,125 27,125 27,125 27,125 27,125 27,125 27,125 27,125 27,125 27,125 27,125 27,125 27,125 27,125 27,125 27,125 27,125 27,235 27,245 27,255 27,275 27,275 27,275 27,275 27,275 27,275 27,305 27,315 27,325 27,335 27,335 27,335 27,335 27,335 27,335 27,335 27,335 27,335 27,335 27,335 27,365 27,375 27,385 27,395 27,395 27,395 27,395	4 5 6 7
	8 9 10 11
	12 13 14 15
	16 17 18 19
	20 21 22 24* 25* 26 27 28 29 30 31 32 33 34 35 36 37 38

(Observe the interchanged sequence of channels 23, 24, 25). The channels without numbers are banned for CB-operations also in the USA.

10 000 Hz or 10 kHz in all, i. e., there can be one CB-channel for every 10 kHz. All other users of the 27 MHz-band also work with these 10 kHz channels, on the position of which there is an international agreement. It can thus be said that the band has a 10 kHz array or raster.

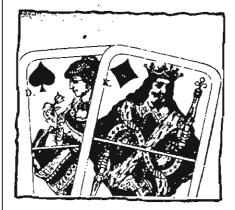
The table shows channels 1 to 40 of the 27 MHz band with the relevant carrier frequencies. All the numbered 40 channels are free for CB-operations in the USA. There are among them a few channels without numbers, which are not to be used for CB-radio.

How then should it be possible to lead

more conversations than there are channels?

### Half will do!

How much must we see of a playing card to recognize it? The answer is half a card, for the other half looks exactly like the first. (We could recognize the card even by seeing the corner but only half the card will show us how the queen of diamonds really looks). Theoretically, when playing bridge, we could cut all the cards in half and yet continue playing.



To know what is shown on a playing card, we need look only at half of it.

How much do we have to see of a line of text to be able to read it? Try it for yourselves. Take a piece of cardboard and move it from below over the lines of writing. It is enough to see the upper half of the letter to be able to recognize them, even though most letters are not symmetrical. If half the line were left out and the half-lines were moved a bit closer together more text could be typed on the page . . .

The SSB-method is based on a similar line of thought. Let us look at the picture with the spectra of modulated radio signals once more. These spectra too are mirror-symmetrical, i. e., the left half looks exactly like the right half, it is, in fact, its mirror image. It was said above that the side-bands carry the information on what sounds the wave is transmitting at the time. If the left and right side-bands look identical this would mean that the information is contained twice — once in the upper and once more in the lower side-band.

This means that in transmitting it should be possible to omit one of the two side-bands, and as a result one could do with a narrower channel. In that case the place of the superfluous side-band could be used for the sideband of some other transmitter, sending something entirely different.

Let us, for example, assume that when

transmitting we are filtering the lower side-band away, so that it is not sent. We can then use the lower part of the channel, now free, for sending by another station, one that has filtered its upper side-band away. This would mean that we have made one channel

Evoluciv für uncara CR-Illustriarta varfaceta dia funkanda Schriftetallarin Sucanna P Arnhaim dan CR-Romani 'Oma Gueti antwortat nicht!'

A text can be read even if only the upper half of the letters is visible.

do the work of two. This can really be done. Because this method uses only one side-band it is called the single side-band method or SSB. SSB transmission is relatively simple. In an AM transmitter a carrier oscillation is amplitude-modulated and the modulated oscillation is then passed through a filter circuit that does not allow one of the two side-bands to pass, while allowing the other to reach the aerial.

### SSB transmission is no problem

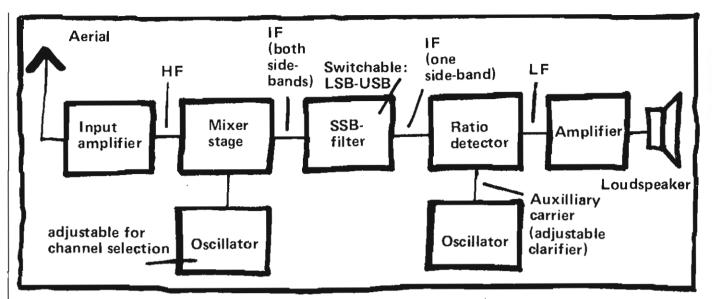
If the upper side-band is sent this is called USB (upper side-band) operation. Accordingly, transmission on the lower side-band is known as LSB.

What happens with the carrier in the middle? It can also be left on the aerial and transmitted. It can be sent along or it can be filtered off, and the sideband alone can be transmitted. This is the actual SSB method, as used by US CB-operators.

### SSB reception: a delicate matter

How do SSB-receivers work? Notably, in the same manner as other receivers: oscillations of all possible channels come from the aerial to the input, where a first filter, the channel selector, selects a definite channel. By now only the oscillations of the two sidebands of that channel remain. According to the principle of the superhet both these side-bands are lowered in their frequency to an intermediate frequency IF.

Now come the two decisive steps. First



Block diagram of an SSB receiver operating according to the superhet receiver principle. The SSB-filter serves to select the desired

channel half. In the ratio detector the content of the side-band is transformed into

a form understandable to the ear by mixing with the auxilliary carrier.

the signal passes through the SSB-filter, which can be switched to the up upper or lower side-band. It passes only the side-band desired at the moment. After that the signal goes to the clarifier. The clarifier transforms the side-band fed into it into speech oscillations (vibrations) and through the amplifier passes them to the loud-speaker.

To cope with its task the clarifier requires an auxilliary signal. This auxilliary signal must have the exact frequency of the carrier from which the side-band must again be "modulated down". In a superhet the side-band is on the IF, serving as uniform auxilliary carrier, The auxilliary signal fed must be precisely of the intermediate frequency (IF) in order to make it possible to obtain the original speech signals. This, in fact, is one of the main obstacles SSB-broadcasting has to overcome. This is because it is difficult in technical respects to generate an oscillation of a very precise frequency. Even if this were possible, it could turn out that the carrier of the transmitter is already slightly out of tune, that our side-band initially arrives with a slight slip to the side at the receiver, and maintains this "slant" up to the clarifier. In that case the fed auxilliary signal has to be shifted (or slanted) by exactly the same value as the transmitter carrier. But how are we to control this?

### When one hears the quacking of ducks

In SSB-transmission it is easy to notice if there is such out-of-tuneness between transmitter and receiver: all sounds of the language are reproduced

higher, resp. lower by the value of the shift. This can distort the voice of our interlocutor to such an extent that it becomes completely unintelligible — we may suddenly hear him speak in perfect imitation of Donald Duck. Every SSB receiver, to cope with this problem, has a fine-tuning knob — the clarifier. With it the auxilliary signal can be tuned very finely, until our interlocutor's voice becomes intelligible again.

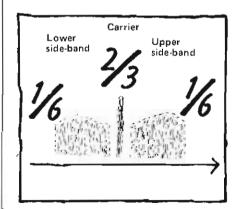
In quartz-operation too, which helps attain the highest frequency accuracy, that accuracy is generally not accurate enough. Therefore those communicating with SSB usually have one hand on the clarifier. Some may ask why, in the presence of these problems, the carrier is not being transmitted as well, in order to enable the receiver to make precise comparisons. There is a reason for it, in fact, one showing us clearly an important advantage of the SSB method. Let us remember that the radio wave is a form of energy. The transmitter sends energy into space that is why we need current for transmission.

### Three times stronger without the carrier

Every part of the spectrum we transmit contains a share of that energy. In figures this looks as follows: in the case of a 100 %-modulated AM-signal, the transmitter uses for the carrier alone 50 % of its transmission energy. The side-bands receive 1/4 each. This means that half the used energy carries no information and practically goes to waste. The ratio is even worse if there is less modulation to avoid overdriving. With 80 % modulation the

carrier uses up 2/3 of the energy. If one transmits a side-band with carrier, the carrier accounts for 4/5 of the power, which means that there is even more waste. Thus, if one transmits with SSB without the carrier, one saves a good two-thirds of the transmission energy and transmits via the information-carrying side-band as strongly as before. Hence, our batteries last three times long!

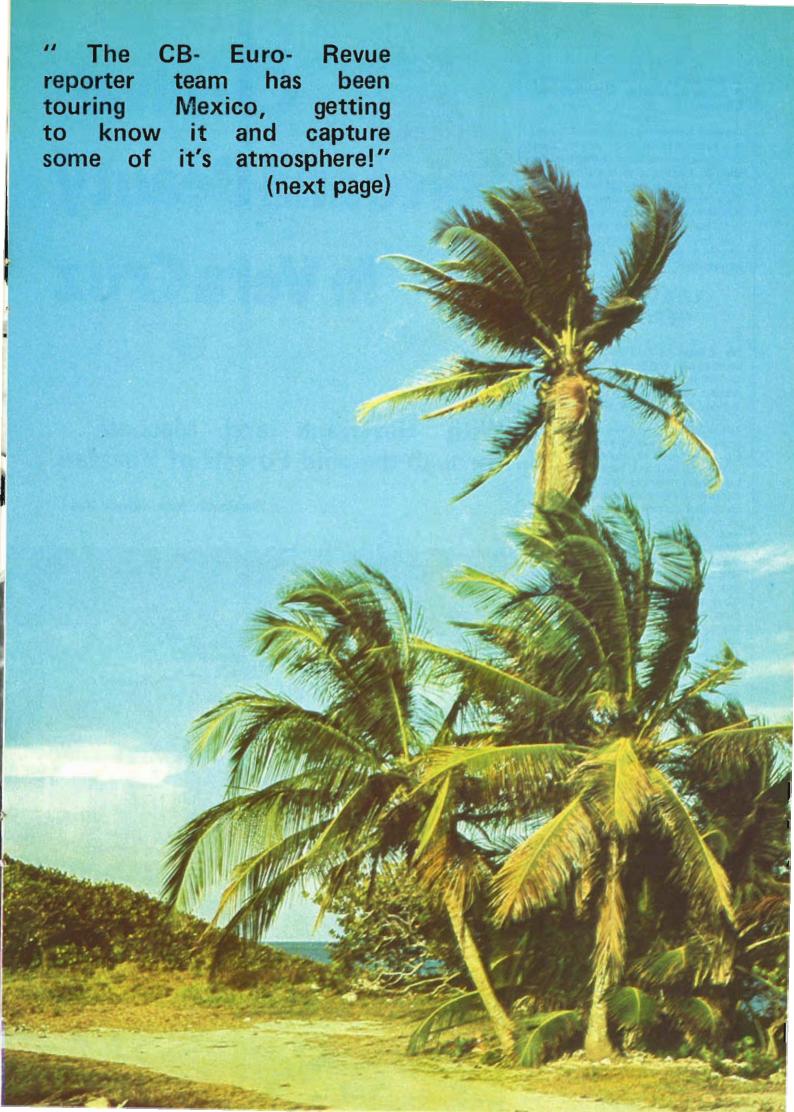
When one transmits by means of the SSB-method, it is therefore possible to increase the amplification of the transmitter three-fold. The side-band then carries the entire transmission power, as compared with less than 1/3 in normal AM-operation. This means that the transmission power effectively trebles, without us having to use more current!



The carrier consumes the main part of the transmitting energy without contributing to the transport of speech.

A third advantage of the carrier-free SSB-method is its insensitivity to carrier fading. It is important only in radio conversations over very long distance and mentioned here only for the sake of completeness.

Eng. Franz Nagel



Wednesday, 14th February, 9 p. m. — Mexico City Railway Station.

Günter, Georg, Francois and I hump our haversacks into the train for Vera Cruz, the ancient Spanish town on the Gulf of Mexico, a town distinguished by it's venerable tile-clad houses, with their wrought-iron 'Romeo and Juliet' balconies. For the past two weeks I, with the others of the reporter team have been touring Mexico, getting to know it and capture some of it's atmosphere.

### TRAVELLING REPORTER

We manage to find seats in the last second-class coach. We are surprised to find it partly occupied by Mexican soldiers, who apparently are there to protect the train from desert bandits.

The soldiers, youngsters of 16 to 17 years of age, have spread themselves out lazily, each occupying two seats, whilst the civilians have to squeeze themselves together on the remaining seats. Some have to stand, For the cardboard cartons and countless bags of the Mexican travellers it is hard to find room. Some soldiers doze whilst others flirt with the prettiest girls in the carriage. Tinny U.S.A. pop-music, which one seldom hears elsewhere in this country, scratches penetratingly from a portable radio. The secondclass coaches on the train can be compared with some very uncomfortably equipped European trams, The seats are small and hard, so that it is difficult to remain still on them for more than a minute or two. Nevertheless, the local people, used to such conditions, quickly doze off, or carry on animated conversations, during which they eye us curiously. It is a sensation for them to find foreigners travelling with them on the train.

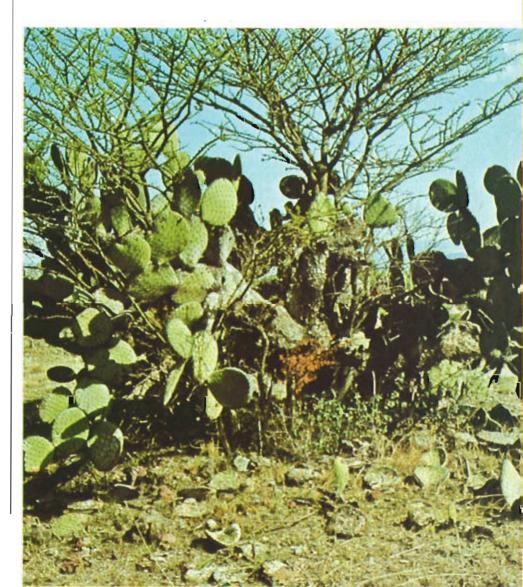
Some from the remoter districts have never before seen a foreigner. For these small, black-haired, dark-eyed people such enormous pale and blondhaired figures as Georg and Günter are curious creatures.

An Opuntien bush growing around the stump of a tree. However dry the ground, catci are to be found everywhere. This sort is even regarded as a delicatesse. Prepared without it's spines, of course, it is cut into slices and either baked or boiled.

# Carnival, Spice and Beauty in Vera Cruz

### With Haversack and Machete through the wild Forests of Yucatan

Travelogue from Margit Nagel.



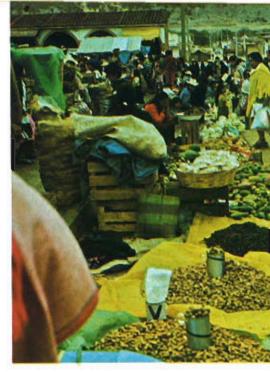
### SMOG, CORRUGATED-IRON HUTS AND FACTORIES.

Outside it has been dark for some time. During the first hour we pass by the shadowy forms of corrugated-iron and board hutments of the enormous poor quarter which rings the city.

Among these the endless smoking factory complexes. The 2,000 meter high Mexican valley is filled by them.

Even by day the smog which hangs continually over the city makes it impossible to see the neighbouring Popocatepetl.

The Indians meet each week in the market. where they come to sell or exchange their home produce products. Here the market is held just as it was a thousand years ago. Cristabel de las Casas altitude 2,000 meters - is an example of how, in Indian villages, time stands still. Nowhere else in the world is it possible to study so directly the culture of past centuries as in Mexico.



around their tootling radio, and the train resumes it's journey.

With the music and under the bright lights I find it impossible to sleep on the uncomfortable seat. In addition the night air has cooled considerably, and most of the windows are open.

The cold penetrates my thick winter jacket. The Mexicans, however, seem unaffected by the drop in temperature, although many, both men and women, are only lightly clad, and some even barefoot.

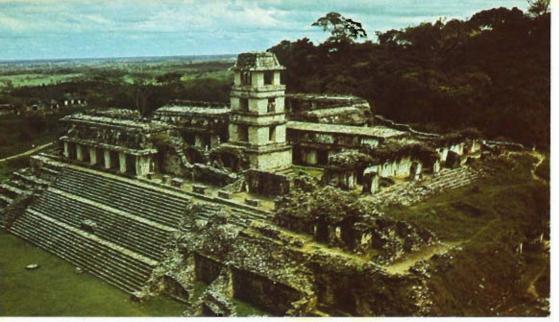
At the numerous little stations at which the train halts there are long waits. At each stop a troop of children and older people, laden with baskets and comestibles, press through the train. They acclaim loudly their 'cafe con leche', that is coffee with milk filled into old Cola bottles, and their 'tacos', meat, tomatoes and Mexican peppers — 'chilies' — folded into flat maize cakes.



Suddenly there is a sharp jerk and the train comes to a standstill. What has happened? An accident? The soldiers, startled into activity, spring one after another out of the rearmost door. We stare out of the little windows, but can make nothing out. Many Mexicans run excitedly this way and that. Some of them climb out of the train and carry on a lively debate in Spanish. We are uncertain what we should do until François, who is our interpreter, gathers from scraps of conversation that the train has collided with a motor car. After a time the passengers calm down and roll themselves in their blankets and prepare to sleep, as if it were all part of a normal day. Eventually, after two hours, the soldiers have spread themselves out once more

Every other day the men of the tribe put to sea in their self-built dug-out canoes. Almost always they return with full catches. In Yucatan a centuries-old custom continues into the present day. The senior man of the tribe judges who has the best catch. With song, smoked fish and home-distilled Tequilla the winner is feted on the beach until late in the night, On the occasion of the next fishing expedition he is allowed to remain at home with the women to recuperate!!!











### ETERNAL GREEN

In the early morning I awaken from an uneasy sleep. A glance out of the window robs me of my breath. Around us green, just green, a continual mass of leaves and branches. The air is warm and moist, At a snail's pace we pass through the deepest green virgin forest that I, even with the aid of many volumes of travel pictures, could have imagined for myself. Suddenly the curtain of trees is broken. In the morning light a line of fantastic exuberant mountains emerges. We are skirting a steep slope, and a glance into the deep ravine which opens below us turns my stomach over. At many points waterfalls roar downwards. We have only a few minutes to absorb these scenes, for the dense forest soon closes again around the train. Meanwhile the other passengers are awake,

and the sun and now warmer air spreads a friendly atmosphere through the train.

In the morning, after an adventurous journey we arrive at last in Vera Cruz. For the journey of 450 km., with an altitude variation of 2,000 metres, we have taken 12 hours.

In Vera Cruz in a few days it is the beginning of Carnival. Had we not made friends with Lucia, a young Mexican girl, we should never have been able to find accommodation. From her we receive the intimate hospitality which in most Mexican districts is accorded, naturally and as a matter of course, to visitors from afar. There is rice, frijoles (black beans — a frequent and economical dish) and with fresh chillipods. We had already made the acquaintance of hotly spiced Mexican cooking, but the chillis are too much for us. One little bite and my throat is

a furnace, then, to my misfortune a droplet spurts into my eye. The next ten minutes had to be spent washing it out with previously boilded water.

During the evening we make friends with Lucia's entire family, who are keen to arrange a party in our honour. Such celebrations are much enjoyed here, and an excuse for one is always welcome. The people we meet here radiate a captivating cordiality, something which is unfortunately often missing in the cooler central-European make-up.

The following day we were gathered into a gay and hectic party. Not only all the members of Lucia's family are there, but also the neighbours. There is much laughter and dancing, and beads of perspiration trickle down the faces of the dancers. Of course, no one gives us any rest. The hot-blooded, black-haired beauties are much at-

The traveller through jungle or virgin forest must beware of snakes and catci. The spine of the Devil's Catcus is quite as poisonous as a rattlesnake.

One of the best preserved pyramids of Mexico is the Moon pyramid. The snakes' heads on the outer walls are intended to protect the spritis from evil intruders. It is recounted that the Aztec priests required each visitor to lay his hand in the stone jaws of the snake. The hand of evil liars was bitten off. Lesser swindlers lost only the little finger. It is said, too, that the other hand of many a man rotted away years later if he did not mend his wavs.

tracted by our tall, blond, blue-eyed photographer, Georg, who is constantly in demand. In spite of confined space, the most extravagant, mouth-burning, dishes appear on the table, around which friendly black eyes

laugh and smile at us from sweatgleaming faces.

Then on with the dance — all the night through.

Thursday, 15th March, 5.30 a.m. in Mexico City's Hotel Imperial

Suddenly I am startled out of my sleep. What was that?!!! Before I have come to my senses there is another sudden jerk, that flings me almost out of the bed. Then the bed and the whole room rocks. Günter is already out of his bed and shouting at me: "Out — here out!!". The air quivers and there is a dull, sinister, rumbling. At last I realize: EARTHQUAKE. Holding on to the bed to prevent ourselves from being thrown to the floor we dress in haste.

In the corrridor we run into Georg and Francois, and the four of us dash down through ten floors. In the hotel foyer the guests, mostly only half-dressed, are banded together. There is a confusion of voices, ringing telephones, excited shouts and howling sirens. Meanwhile the rumbling has ceased. Everyone's thoughts at this moment are filled with a terrible, crushing, uncertainty. Is the 'quake over, or is there worse to come? I feel sick with fear. An apparently end-

less time passes. In the past hour there has been no further shock, but in the foyer discussion continues until, from necessity, we return to our rooms to await events there. Still dressed, we lie on the beds, but find it impossible to sleep. The least imagined vibration fills us with terror.

However, all remains quiet, and the next day we are able to continue our journey none the worse for our adventure. On the way we see the damage that the earthquake has done to this city with it's millions of inhabitants. Some streets are torn open and traversed by deep fissures. Houses here and there have collapsed. Burst water mains have flooded whole streets a meter deep.

Earthquake or no earthquake, Mexico will not easily lose it's hold on me. I shall certainly pay it another visit. In my mind's eye I see still the radiant faces and friendly people, the impressive temple ruins of the Mayas and Aztecs, the endless impenetrably dense virgin forest, and the white cone of the eternally snow-covered Popocatepetl. Every traveller to Mexico can be best advised to make friends with the local people. These will understand better than any other guide how to introduce him to the charms of this beautiful land and it's friendly people.



As a result of the new situation in 1975 I left my old homeland, Angola, — with all that I had there — and arrived here with my OW in Catalonia

There was more CB in Catalonia, particulary in the area around Barcelona. We live in a mini-appartment in Castelldefels, about 20 km south of Barcelona, a district where in summer there are many holiday visitors from all parts of Europe. I assume

therefore that news about CB activities in this district could be of interest to readers.

First some information about the legal position in Spain. Actually there is no legal position, or if there is one, it is unknown and no one takes any notice of it, neither about the ownership and use of a set nor about the strength of it's output. Normally the CB colleagues here have 4–5 Watt sets, and a considerable number operate with an Alpha-Lima (Amplificador Linear) up to 200 Whisky!! Naturally they are mostly beginners, who want immedia-

tely to be stronger than the others. As a result they fail to understand that an A-L can be damaging over a short distance and is only good for very distant DX connections.

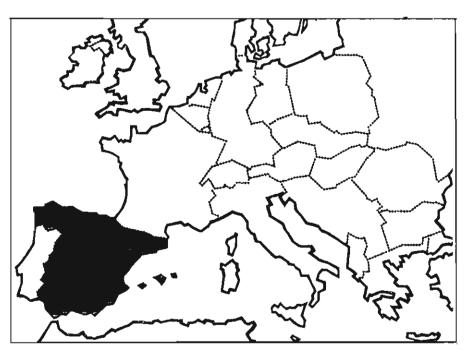
A CB colleague from Wiesbaden told me, on the occasion of a visit to him (at which he regaled me with a nice whisky), that every time he comes camping at Castelldefels he first obtains a formular from the Head Post Office in Madrid, which he returns with a small fee and receives an authority to operate his set (with derisory

500 mW output). For my part I have never seen such a form, much less filled one out. Furthermore on the motorway from La Junquera (French frontier) to Barcelona I see an unbelievable number of cars with CB ariels (also since some time with 'rabbit ears' and such things). It is hard to believe that all these have first got in touch with the Head Post Office in Madrid. However, for those who want to the address: Direccion General de Correos, Madrid.

Now to return to our district. The first personal luxury which I allowed myself, after arrival as a refugee here, was a CB set, 4 Watt 40 channels AM, which I arranged to have sent to me from Hong Kong as a 'present'. The cost per airmail was around DM 160 and a customs duty of DM 9,90. Additionally I bought a generator, Spanish made, with an output of 13.8 Watt, and an ariel (Ground-plain, 1/4 wave, with coils and three radiators), similarly locally produced. With the ariel I am having difficulties for which I have not been able to find an explanation. Nor could other CB fans here enlighten me. During cooler weather, and with the sky overcast, it functions perfectly, with standing wave 0.5 on channel 20, i. e. in the middle of the band range. However, as soon as the temperature rises above 18 degrees C or as soon as the sun shines on the roof the fat is in the fire and I have V.S.W.R. to the stop! That means that in the warm wheater I am unable to broadcast, only receive. I must explain that the flat roof of our house is covered with protective sheeting similar to aluminium, so that the reason may lay in the reflected heat or UV radiation. I would be grateful for any advice which any colleague can give me.

Now back to our area here, I will deal with the channels systematically.

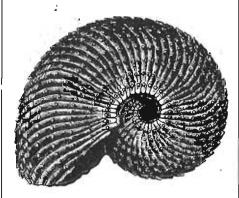
Channel 2. Coming from France it will be noticeable that the highway help and towing vehicles operate on this channel on the motorway A-7. It is. however, unnecessary to use this channel in the case of a breakdown since there are S.O.S. telephones every 2 km. These function excellently and give the best service. So in the case of a breakdown, leave the road clear, bonnet and boot open and display the warning triangle, Even if it takes a little time, the service vehicle comes. Towing away, according to European standards is not expensive. The SEAT service vehicle gives service without payment (also for cars other than SEAT) and require payment only for replacement parts. On arrival in Barcelona one can use channel 2 to make connection with other CB operators and to get information about streets or districts, naturally



to the extent that one is able to speak Spanish.

Channel 3 and 4: Particularly channel 4 is used in the week by professional fishermen, and at the week-end by sport fishermen and boating enthusiasts. Mostly it is useless to try these channels as the majority of connections are in the Catalonian language. One can, however, on channel 4 get a connection with various boat clubs, that at week-ends are continually QRV, and in emergency, naturally, have a telephone. In our district we have clubs in Gava, Castelldefels (two clubs: 'Maritimo' and 'Nautico'), Garraf and Sitges, etc. etc.

Channel 7: As one leaves Barcelona to the south one finds countless CB fans on this channel in Hospitalet, Prat, San Justo Desvern, Viladecans, Gava, Castelldefels, Garraf, etc. and among them a goodly number of Germans.



You only need to whistle the first two bars of the German National Anthem into the microphone, and from somewhere someone comes in, Now something which is important on channel 7:

The CB fans in this district are well disciplined and have a custom which I had not encountered in many years of

CB activity in Angola. Instead of CQ or 'break', one calls QSO. When one has made a connection and is carrying on a conservation, one must never forget, at each change-over, to call QRX, leave a moment blank and then answer. This QRX and blank gives an opportunity to hear a new QSO. The QSO must then wait until he is invited to join in, when he is expected to give his QRA and QTH.

Channel 9: This channel here, as elsewhere, is the emergency channel. The channel is not elsewhere always kept clear as such, but here it is in fact respected. On it are the mobile station. of the Red Cross, ambulances, and voluntary highway helpers, like DIA and RUTA.

Channel 25: During my long QRV periods in summer I have found that this particular channel is much used by central and north Europe. One gets the most unlikely connections, all parts of Germany, Holland and Denmark, Norway, Sweden, Portugal, Azores, Madiera, even occasionally Brazil — not to speak of Italy, which can be found on every channel.

Furthermore I heard recently from a new sort of competition in Italy. On Saturday afternoon — who makes the most QSO's with OW's? So, the OM's as hunters and the OW's as hares — not bad! Now a short tip for the home journey. Why not travel over the 'wonderland', Andorra? Friends of mine recently brought back from there a Korean built set AM 5 W — SSB 15 W. 40 Channels digital. Price 10 000 pesetas. Further every possible Alpha Lima and everything else that is to be found in the international electronic field — 'Alice in Wonderland'.

Beste 73-51 MACAPL (Mario Pirelli)

# CB-Radio ©

### —A Hobby of the Less Educated?

### by Karl-Heinz Merten

In the article "CB Radio — A Hobby of the Less Educated?" I have spoken very frankly about the conditions which prevail on the 11 meter band. I am, however, convinced that the readers of CB Euro Review can bear with such an article, particularly as they certainly don't belong to the group about which I write.

Every social group has its hobbies, as for example photography or the collection of various objects. Some hobbies are confined by their cost for the wealthier social groups. It is obvious that not everyone is in a position to take part in expensive pastimes.

CB radio has the advantage that a very wide section of the population can afford it. From this point of view CB Radio can rightly be described as 'Everyman's Radio'.

The fact that everyone can use the 12 authorised channels suggests that every social class is represented among those using the 11 meter band. That CB radio requires some financial outlay might lead one to think that those of middle income and with corresponding education would be more numerous than the less well off.

Those who have occupied themselves for some time with CB Radio will have found that this is not the case. Up to the moment no one has taken the trouble to make a thorough investigation. Exact figures are therefore not available.

After making careful observation and listening over a period of several months to CB Radio in two towns in Rihnland-Pfalz (100,000 and 22,000 inhabitants) I feel that I am in a position to say something relevant.

The majority of users of CB Radio are manual workers and less well off employees. Housewives form the second strongest group, followed by minor officials and better paid employees, persons of middle education. A dwindlingly small percentage are those of Grammar School or higher education. It is to be supposed that the numbers of unemployed, and of those who have attended Special

Schools, or did not satisfactorily complete their education in elementary school is not great. It can, however, with certainty be assumed that this group exceeds, at least by a few, that last mentioned.

I know people who consider it a social stigma to belong to the band of CB fans. For these people the 11 m. Band is a playground of the weak-minded, for interferers and marathon rubbishtalkers. This one-sided point of view is false. Nevertheless, as CB fan, one cannot be suprised. If one has the dubious pleasure of listening for a whole day to the happenings on the 11 m. Band one experiences something nearer to an inferno than the use of a means of communication by sensible people. Since often almost all takes place on the call channel, one might suspect that the Post Office, with it's endless generosity, has authorised 11 channels too many. If one listens to an interesting conversation, it is often only a matter of minutes before some weakminded person jams the conversation or chimes in with some pointless remark. If one has the luck to carry on a QSO without being jammed by an interferer, then it is only a matter of time before someone comes in with a hearty greeting and has nothing more to say. That is certainly the best that a circle discussing a particular topic can expect. Often this queer breaker wants to know how he is coming in and an estimate of his radio value. Ultimately one is called upon to disclose for the fifth hundred time what sort of set and what antenna one is using. When, in the end, each participant has said his piece, no one can remember what the original subject of conversation was. The breaker can congratulate himself on once again having ruined a QSO. The worst is that there is nothing against an X or a 'break' that once can do, not even against the weakest. It could be that, hidden behind all this, there could be some one in need of help, or who genuinely wants to take part in the QSO. One must not, of course, refuse to accept such stations. There remains nothing but simply to live with the unpleasant breaker. Also the reception of general calls turns out in most cases to be quite superfluous. From ten general calls eight or nine are from callers who are looking for someone to talk to. In the assumption that they disguise their pointlessness, they ask how one is and if all is well. What can one sensibly answer to such silly questions.

Any one who really has something to say does not need to make a general call. Everyone has the possibility to X into a QSO and say what he has to say. Anyone, on the other hand, who needs information or help, should intelligently specify his CQ, so that the purpose of the general call can be seen.

Another unsatisfactory feature on the 11 m. Band is the exchange of courtesies, which flourish on all channels. What sense can it have when in a steadily growing and then diminishing circle each greets and says 'good bye' to the other. Such ways can only meet with favour from those who have nothing to say.

So long as one is not a member of a circle, one can console oneself with the thought that one is not compelled to listen to one's fellow CB fans. Jammers, blabberers and other pests continue in the meantime their nuisance until one, despairing of humanity, switches off one's set. Under these circumstances it is understandable that many who think of becoming a CB Radio fan quickly drop the matter. What intelligent person wants to enter a madhouse or take part in a game in which the most elementary rules are continually broken.

The sad thing is that CB Radio owes its bad reputation to a small group of simpletons, against which the disciplined majority is not able to prevail. Repelled by such happenings many will condemn CB Radio before they have really got to know it. Those who are prepared to steadily ignore the radio terrorists will meet through CB radio people who are good for something more that an occasional conversation on the 11 m. Band, This advantage outweighs all the unsatisfactory features of Everyman Radio.

# CB-Radio (4) in Denmark

CB radio was first authorised in Denmark in September, 1965. At first it was only channels 1–10, 11A and 16 and a maximum output of 100 mW. Since July, 1975, 22 channels have been authorised, plus Channel 11A. The authorised channels have the frequencies 26 965 to 27 225 MHz, plus 27 095 MHz (Channel 11A).

In the official announcement No. 213 of 30th May, 1975, ist the following:

'Every private radio station must be authorised by the Post and Telegraph Authority and must carry a licence plate, on which the following details must be given: Make, Type, Serial No., P & T number. If the P & T number is a four figure one no ariel may be used, unless the number is followed by an 'A'.

An approved CB-Radio station must comply with the following conditions: The unmodulated carrier may not exceed 500 mW. The emission on the neighbouring channels must not be more than 10 Mikrowatt, and the effective transmitter output not more that 2 Watt.



Unauthorised or so-called export sets are not allowed in Denmark. If one is caught using such apparatus, the apparatus will be confiscated and the user subject to a fine, minimum 350 DM. The Post and Telegraph Authori is

authorised to examine the station at all times and must not be prevented from doing so.

In Denmark the use of CB radio apparatus is free of any licence fee. Also one may use any type of modulation . . . except SSB! One must, however, say that FM had no great success in Denmark.

On the air one may speak about anything — but not broadcast music or advertising matter or propaganda. The minimum age for the use of a CB set is 12 years, but under the age of 15 the user must be under supervision of an adult. Above that age one can broadcast alone without registration and, as already said, free of any fee.

Similarly one is free to use any sort of ariel. Here any sort of ariel may be used from the small GP 1/4 to the large Big Gun Beam. One must, however, observe the local regulations as to it's erection.

If a tourist wants to use a set temporarlily in Denmark, he should get in touch with the Danish Post and Telegraph Authority by letter. The address: Generaldirektoratet für das Post & Telegrafwesen, Farvergade 17, DK 1007, Kopenhagen.

Further, in Denmark it is forbidden to broadcast across the frontier.

The following channels are almost continually engaged in Denmark: Channel 4: general call channel for the whole land, thereafter look for a free channel, Channel 9: Emergency call channel for all car drivers. One can only get help if one uses a selective call on the frequency 967.5 and 1340,0 Hz. In this way the nearest 'FALK' Station (Help Station) may be opened. On this frequency, however, one must speak continually if one wants help, as many stations are stand by here. Channel 11: This channel is held free for emergency calls by maritime stations, and must only be used in case of emergency at sea. Channels 16, 21 & 22 are conversation channels for ships, but are often used by various other people. Channel 10: is in principle a normal conversation channel, but is often used for fox hunting or the diffusion of club messages. Channel 20: 'Bingo' games are conducted



Torben Duedahl-Andersen

on this channel. These received written authority in 1980. The organiser must, however, be a closed club. On this channel, too, are the 'normal' QSO's. Channel 19 is here the Trucker Channel'.

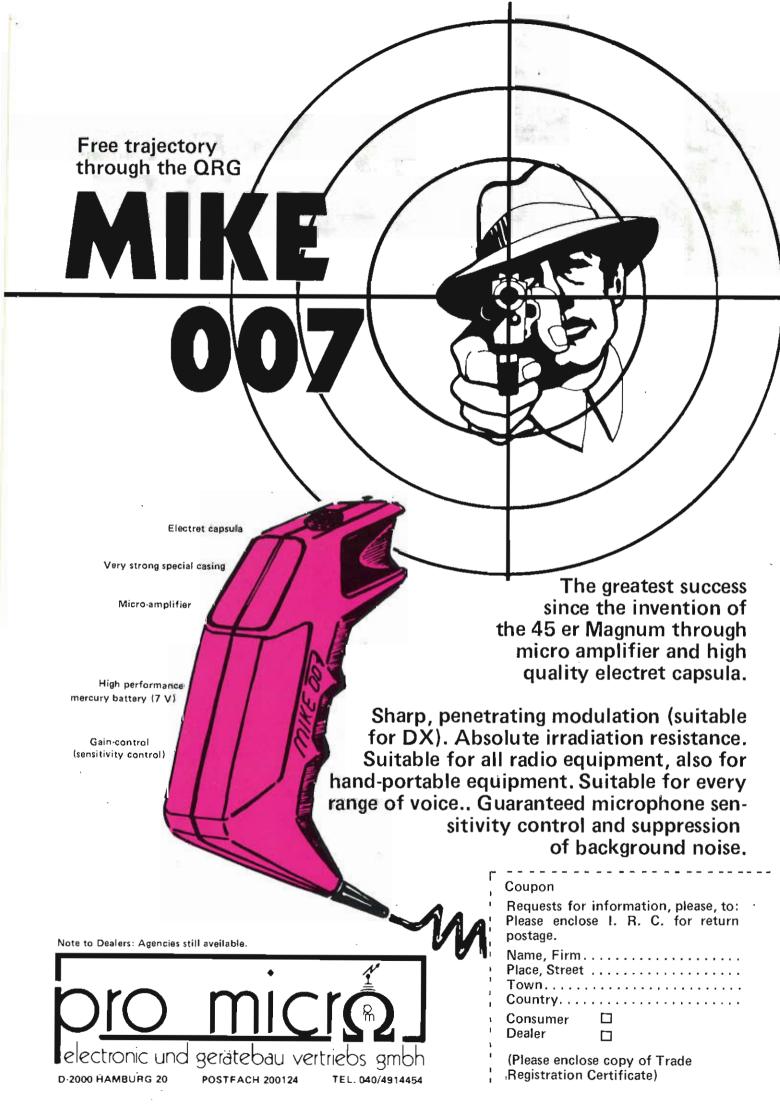
It is estimated that in Denmark there are at least 200,000 to 300,000 CB users and around 300–400 CB-Radio clubs.

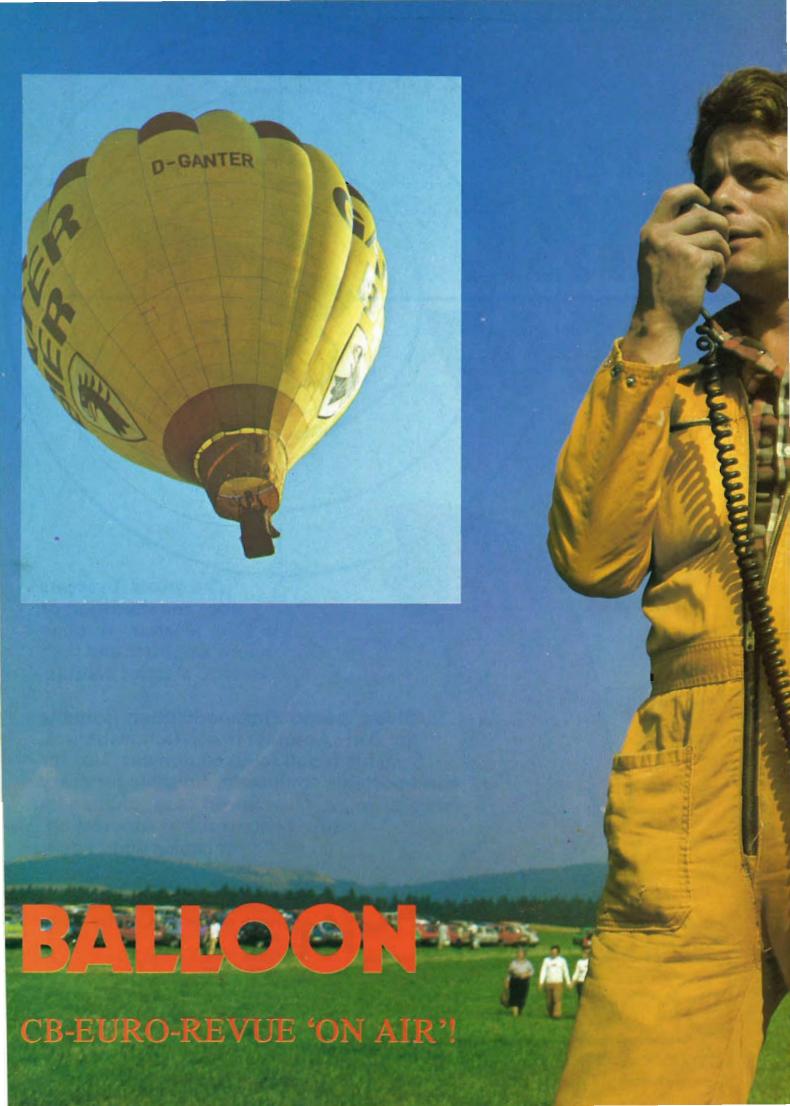
I, myself am the president of one such club: Sorø Walkie Talkie Klub 'ULTRA'. Sorø lies about 70 km west of Kopenhagen. We have at the moment around 400 members. Our meetings take place in our own clubbouse

In addition we have our own club newspaper, which appears quarterly. If you are in our area come and visit us.

Our post address: Postfach 22, DK-4180 SORØ.

Torben Duedahl-Andersen (Ultra80)







It is 4 o'clock in the morning. The horrible shrill noise of the alarum puts an abrupt end to my sleep.
4 o'clock! and a Saturday at that. But there is no help for ist, I must leave the warm bed.

At 9 a. m. punctually I must be at the starting point. There, in the course of the morning, a hot-air balloon is due to soar into the sky. And the press (me) must be there.

9 a. m. I arrive punctually (unusual). No trace of the balloon or it's crew. So I listen in on the band. 4 or 5 stations are on the air, and exercise such discipline as as I have seldom heard. There the 'mike' is passed on — pause — 'skip' given — in short, it was a pleasure to hear. I had already had experience of the readiness to help shewn by the CB fans of Donauesching, when I had asked for directions. My request brought immediatehelp. And not only per radio — the station appeard in person within a few minutes and piloted me directly to my destination. Unfortunately I have forgotten the name of the station, but, once more, hearty thanks.

10 a,m. Still nothing to be seen or heard. Continue waiting.

12 noon. In the meantime Station

LIMA 10 has arrived, but we are still waiting for the balloon and its crew.

12.30 p.m. At last we are all here. Everyone is looking forward to the start, which, however, doesn't take place.

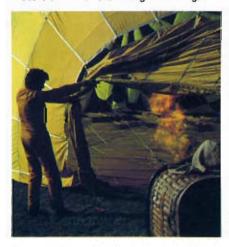
Bureaucracy has done us a dirty trick. There is nothing to be done about it. Without having done anything we must depart. And so our way leads us to Hütten-Hotzenwald, where a second start is planned on the occasion of an air-display.

3 p.m. We arrive at Hütten. Every sort of aircraft is present — home constructed — biplane — helicopter — gliders — to 'our' hot-air balloon.

Here we find that our start is planned for 4 p.m. Time in plenty for a chat with the boss of the team, Herr Lange.

As is usual in most sport, we are getting financial help from industry. Our balloon carries today the emblem of a brewery.

Our call sign is DELTA GANTER. This balloon has a surface area of 1200 square metres, its volume 2500 cubic meters and it's total weight 890 kg.



The preparations for the start begin with the heating-up of air in the envelope.

The diameter is 18 metres and its height 25 metres.

Our accompanying vehicle, a jeep, is complete with radio. With aircraft radio and with CB radio. Unfortunately today the vehicle has already another engagement. Of course we remain in radio contact with the accompanying vehicle. Today we are accompanied by a VW bus.

According to weather conditions, we fly at a height up to 3,000 metres, although there is hardly any upper limit. The world record at the moment

stands at 11,000 metres. A short time ago the balloon in which wer are flying flew over the Alps.

From Arosa to Bosen, at a height of 5,500 metres. The maximum climbing



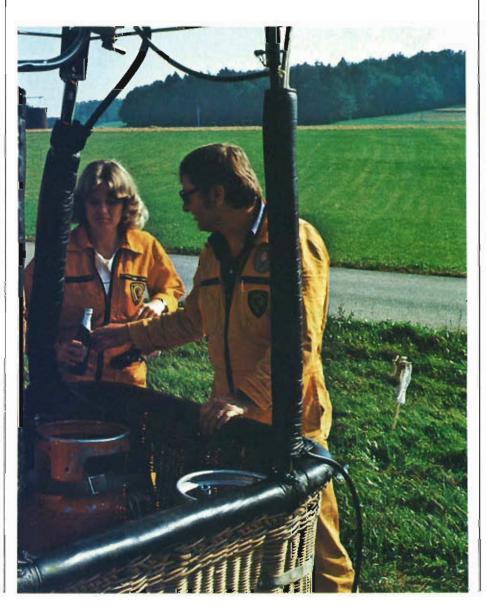
'Our' balloon rolled out on the ground. Here one gets a first impression of the enormous size of the envelope.

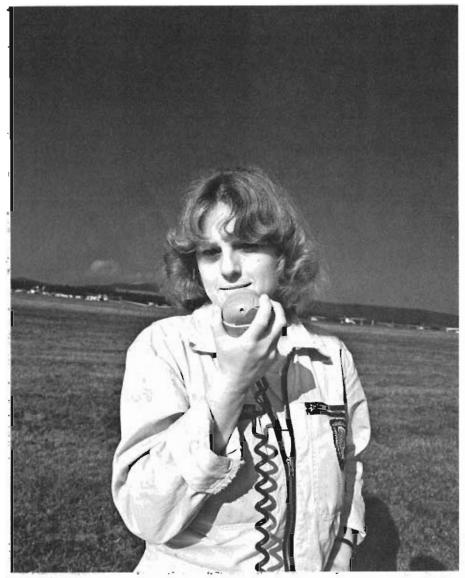
speed which this balloon must not exceed is around 5 metres per second and the speed of descent around 4 metres per second.

Accident risk is considerably less than in sport flying. There has never been a fatal accident in Germany since the last war. Naturally there are some bumpy landings with a few injuries, but the risks are not great.

I would have liked to have talked longer with Herr Lange, but the preparations for the start must be gut under way. When the balloon has been spread out and then filled with air, one gets one's first impression of its enormous size. And when I think that in a few minute I shall climb into that little basket, I begin to feel a little uncomfortable.

4 p. m. The last preparations for the start are made. The balloon, fully inflated, stands in front of me. Herr Lange, 'my' pilot, is waiting for permission to start.





So, with mixed feelings, and a little shaky at the knees, I climb into the basket. After 2-3 minutes the burner over our heads begins to roar.

At first slowly, and then with increasing speed, we rise into the air.

The balloon gains increasingly in height. The waving onlookers grow steadily smaller, and slowly the 'butterflys' disappear from my stomach

One or two sport machines accompany us for a short while. The pilots wave or waggle the wings of their craft.

I am overcome by and indescribable feeling. Up here everything is so wonderfully quiet. No noise disturbs the first impressions. It is overwhelming.

From time to time this quiet is interrupted by the roar of the burner.

Slowly the balloon gains height. We are now at about 500 metres. We fly over a village, which from here looks like the scenery of a toy railway.



This biplane, part of the Swiss air-show squadron, accompanied us during part of our journey.

Indescribable, how the balloon moves through the air. Absolutely still. Unfortunately little wind either.

We hang for a few minutes motionless in the air, then the slow journey

continues. We let the balloon rise a little to a height of about 850 metres. Slowly our journey comes to an end.

Unfortunately the wind conditions are not of the best. Herr Lange brings the balloon down a little. The people below us stand still and wave. Our accompanying vehicle, informed by radio of our intentions, is ready waiting for our landing. One has the impression that the whole population of the place is on it's feet to witness the descent of the balloon.

In a few moments all the roads leading to the projected landing place are jammed with traffic. Everyone wants to be present at the landing.

And then we are there. Gently the basket touches the ground. We are immediately surrounded and besieged with questions.

As the gas bottles are being changed for a further flight, I leave the basket. At least I try to ... On the second run up I succeed — rather bad than good. By the time I have made my way through the crowd of spectators the balloon is ready for another start.

Now my colleague Wenzłau (LIMA 10) is feeling weak at the knees. For him too it is his first trip in a balloon. We get into our car and follow the balloon's accompanying vehicle. The second start took the balloon to a height of almost.1,100 metres.

Unfortunately wind conditions worsen steadily, so that a long journey is out of the question.

We try to keep as close to the balloon as possible.

We are, of course, not always successful, and so we do not arrive at the landing place until after the balloon is down.

Here too there is a crowd of interested spectators.

After the balloon, with the combined efforts of the team, has been rolled up, and with it's basket, on-loaded, we sit for a while together. Impressions are exchanged, and Herr Lange, pleased with our interest in the balloon trip, invites us to a week-end with journey over the Black Forest. Naturally we accept this invitation with thanks.

Late in the evening we separate and got our several ways.

Many thanks to LIMA 10, who 'engineered' the whole journey, and hearty thanks to Herr Lange and his crew.

Auf Wiedersehen too to DELTA GANTER, until the winter of 80/81. Marco Polo

Pictures: FFS, A. Wenzlau

## **POWER STICK** The ones with the yellow tip are here.





Antenna made in Germany, Larger and stronger foot. New constructionnow in strengthened nylon finish. Computer wound coil.

Wide range - good performance over 80 K

SWR less than 1:1,5

Colour: Black, silver, white, red.

Actual

Dealers: Price list on application.

### **DV 27 Helical Extremely strong**

A production from



electronic ambh — D-6082 Moerfelden

Including screw fixing. DV 27 foot, cable, kranked plug, bolts and wing nuts.

Computer construction set for a scanner. With exact description for Univers, Paloma and WKS sets. Convertable for: LED frequency indication (5 figure)

Set automatically on channel 9 When switched on.

10 + 100 KHz interval Conversion set for FM can be supplied.

tél. 06105--1867 Prospectus on application.

# INDUSTRIAL NEWS

## TC 3112

CB Radio Set with Connection Socket for Testing Meter

Here at last is a mobile CB set with connection socket for separate testing meter: The TC 3112.

Still more: This brand new CB set offers the discriminating operator, in addition to digital channel indication, all the technical advantages which are expected today from a modern set.

Transmitter and receiver in PLL technique, double-super with noise inversion receiver (kills all ignition noise).

In place of the old-fashioned needle S Meter, this set already has the new LED lines with red and green luminous diodes. The integral modulation limiter prevents over-modulation.

When transmitting a red diode lights up, and when receiving a green one. At the back of the set are connection

points for the separate testing meter, extension loudspeaker and amplifier.

Technical details:

- 12 Channels (fully equipped)
- 28 Transistors/21C's
- Sensivity 0,3 uV
- Input 2W/HF Output 500 mW
- Digital illuminating diodes S u
   RF-Meter
- Integral loudspeaker
- Noise inversion
- Connection for PA
- Connection for separate testing meter
- Microphone socket with screw coupling (suitable for all amplifying microphones normally on the market)

- Power supply: 12 V 13,8 V
- Measurements: 175 x 230 x 55 mm
- Weight: 1 650 g

Simply clip on the 12 Volt board circuit and, with the cable supplied, connect to the TC 3112 - ready.

Now you have a separate super-accurate S-Meter with luminous diodes. Indispensible for checking receiving and transmitting signals.

Obtainable from: Fellecs Information Technique,

Poolstraße 32, 2000 Hamburg 36 West Germany



# mainsfilter EM~504

This filter is effective in almost all casses of mains interference. It is an intermediate adaptor for earthed plug connections, designed for apparatus up to 500 Watt. The EM-504 cuts out high-frequency interference from the lowest wave range (3 MHz) to the highest UKW range (well over 100 MHz) up to 50 dB.

Obtainable from: Richter & Co., Alemannstr. 17–19, 3000 Hannover. West Germany



### HIRSCHMANN

The telescopic car antenna for CB radio Auta 3500 S, with the additional part identification letter S, can now be supplied — in the same way as similar radio antennas — with a mounting only 31 mm in diameter. This mounting does not extend over the narrow bodywork areas on which antennas have to be fixed on certain

vehicles, e.g. Opel, Audi, Fiat and some others. The angle of inclination between antenna rod and mounting surface is adjustable up to 40 degrees with the new small mounting as before with the larger one.

Suppliers: Richard Hirschmann, Richard-Hirschmann-Str., 19, D-7300 Esslingen/N. West Germany

### **CAR ANTENNAS**



# INDUSTRIAL NEWS

### WORLD-WIDE RECEIVER



#### RF - 2900 LBS (DR 29)

The discussion of the varied range of radio programmes, particularly news programmes, tends to leave short-wave fans cold. They have no need to base their views on the news broadcasts of a regional station.

The DR 29, with it's meticulously accurate tuning in all frequency bands, is a great help in this respect.

Furthermore with five figure luminous indication in addition to the usual tuning scale, it provides for tuning with an accuracy of 10 kHz.

An abundance of further controls and devices indicate the top quality of this super-radio: band selection switch, BFO pitch regulator, separate bass and high tone regulators, connections

for UKW and KW antennas, for headphones or extra loudspeaker.

Technikal Data:

Wave Bands: UKW 87.5 108 MHz KW 1 3,2 -8 MHz 16 MHz KW 2 - 8 30 MHz KW<sub>3</sub> 16 MW 520 1610 kHz LW 410 kHz 150

Output: 3 Watt Power supply: Mains and battery

Weight 3,6 kgm Colour: Black

Measurements: 38,1 x 24,6 x 12 cm Suppliers: National-Pansonic-Vertriebsgesellschaft mbH, Ausschläger Bilddeich 32, D-2000 Hamburg 28,

West Germany

## FSI 500 TEST BRIDGE STANDING WAVE



Apparatus with eff. performance measurement up to 1 000 Wattl A successful combination for KW/UKW and HF – LED indication.

Impedance: 50-52

Frequency Range: 3,5 - 150 MHz

SWR Range: 1:1 to 1:5

Power Range - siwtchable: 0-20

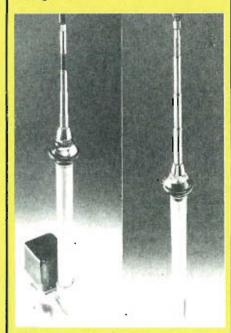
Watt, 200 W, 1 000 W Power supply: 12 V. DC

Measurements: 180 x 75 x 90 mm Obtainable from: Inter-Mercador GmbH & Co., KG Sonneberger-Str. 17, D-2800 Bremen 41. West Germany

# HIRSCHMANN TELESCOPIC

The automatic antenna, Moba 9000, and the telescopic antenna 3500 S. Both antennas are designed with a future 40 channels in mind. The telescopic rods can be fully sunk within the bodywork and are thus protected from damage in car-wash installations, and largely protected from willful damage.

**ANTENNAS** 



Technical details: Moba 9000:

Frequency Range: 26,8 - 27,5 MHz, adjustable by regulating screw at upper

end of telescope rod. Impedance: 50 Ohm

Telescope length: Total approx.

1070 mm

Telescope parts: 4

Sunken depth: Approx. 360 mm Mounting: Adjustable through 40

degrees

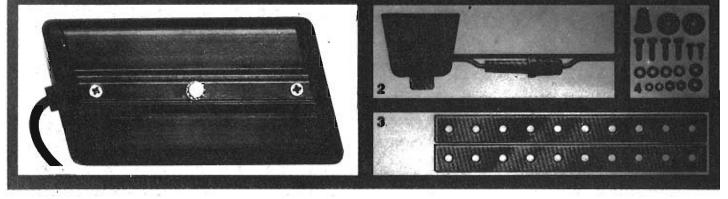
Diameter of hole to de drilled in body-

work: 22 mm

Supplier: R. Hirschmann Richard-Hirschmann-Straße 19 D-7300 Esslingen/N. West Germany

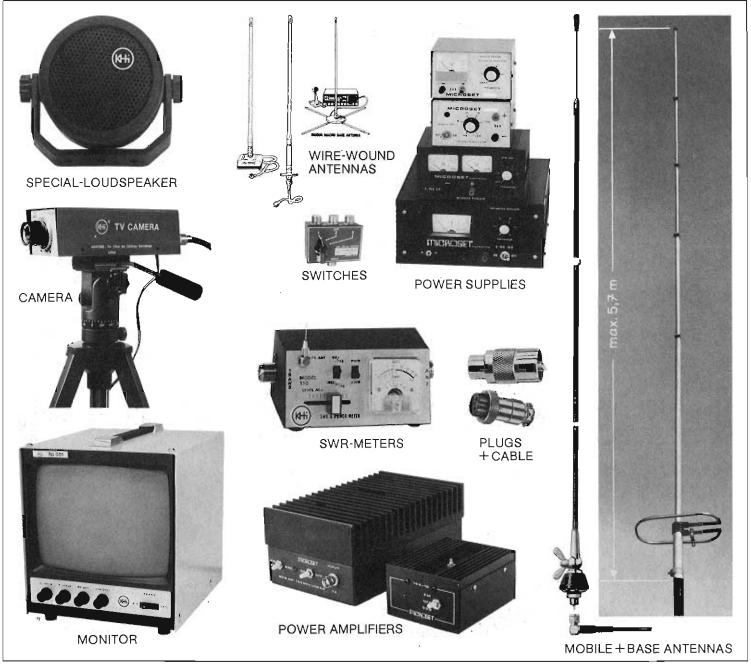
# S.A.M. SYSTEME ANTI-COLLISION MARINE







# ACCESSORIES FOR RADIOCOMMUNICATION AND VIDEO



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120 cm (

100 cm

60cm

30 cm



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## PRESIDENT ANDREW J



### ANDREW J. from PRESIDENT: AM/FM, 80 channel, portable equipment of quality.

Even though the justifiable use of AM and FM on the same band is really questionable because of considerable mutual interference, and even though the large amount of background noise with no FM carrier present is extremely annoying and made bearable only with an extended squelch, one must say one thing in favour of the FM part of the ANDREW J. It's H/F transmission curve being flat in the middle and falling off only at the edges (see figure 1) ensures that the AM interference becomes audible during FM reception only when the interfering AM carrier is fully operating on the edge of the channel, an event that is hardly likely to happen. We have for the first time a piece of FM equipment that satisfies the special conditions for combined AM and FM operation on the CB band, brought about not only



#### Technical Features PRESIDENT ANDREW J.

Channels: Mode of operation: Frequency range: Frequency generation: Frequency tolerance: Transmitting power:

AM/FM 26 965 to 27 855 MHz PLL synthesizer 7.10

Modulation:

80 channels

Low frequency band width: Receiving sensitivity:

100 %, adjustable 300-3 000 Hz 0.7 μV (10 dB, S+N/N, 1 kHz 30 %)\* 80 dB\*

Adjacent channel selectivty: Squelch:

controllable up to input voltage of 1,8 mV controllable at 270 μV

H/F amplification: Channel display: L/F output power:

LED 4 W\* 3 % at 2 W

Distortion factor: Loudspeaker inpedance: Intermediate frequency: Measuring instruments:

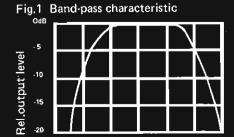
internal 16  $\Omega$ , external 8  $\Omega$  1 I/F 10.695 MHZ; 2 I/F 455 kHz S meter / H/F power measurement 13 V DC

Operating voltage: Dimmer for instrument illumination

The measurements were carried out using DYNATRADE equipment.

These figures deviate from those supplied by the manufacturer for this particular sample. They are however not representative for the whole production.

by the limiting steps taken but also by the flat portion of the H/F transmission curve. The remaining data for the equipment is just as impressive. Frequency generation by the PLL synthesizer with an accuracy of 7.10-6 (measured deviation: + 180 Hz), and double super with I/F of 10.695 MHz and 455 kHz are the two most important factors that guarantees success for this equipment. The test sample had a receiving sensitivity of 0.7 µV at a signal to noise ratio of 10 dB and 30 % modulation with 1 kHz and therefore was considerably lower than the figure of 1  $\mu$ V given by the manufacturer.



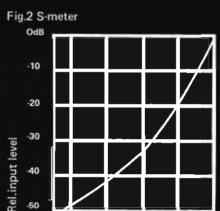
-6

(Channel centre) frequency



# GRANT ANDREW J.

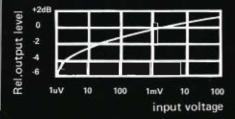




7 9 S-stage

The quality of individual samples is very much dependent on the care given to the final alignment of those parts that determine the frequency. Not only is the flat middle portion of the H/F transmission curve for the test sample worth noting, the neighbouring channel selection is also very good. The fact that at 180  $\mu$ V the reference value of the S meter at S9 is almost double that which is generally applied, namely 100 µV, and that the curve for the S meter is not exactly linear (figure 2) having an average slope of approximately 8 dB/S step which is a little too high, would only displease those radio fans that insist on reading S values whilst in motion. The majority however do not. In this respect the slight deviation is probably of little importance even for the professional. The A/F power at 4 W is excellent. The distortion factor of 2 % at 1 W and 3 % at 2 W output power similarly indicates high quality. The shape of the characteristic curve for the automatic gain control (figure 3) is quite good and permits squelch and H/F amplification to be controlled at well over the corresponding ranges of

Fig.3 Automatic gain control



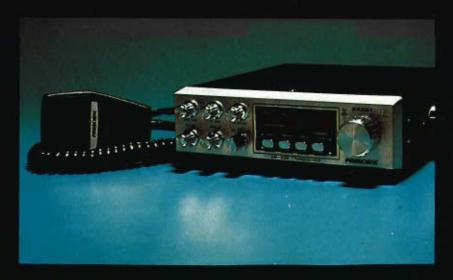
1.8 mV and 270 µV input voltage. The optional automatic interference limiter reduces the useful signal by only 0.5 dB, the spurious signal however by a factor of 3. The receiving sensitivity is thereby made worse and rises to a value of  $8.5~\mu V$ . On the whole the interference limiter is really well designed and is very practical. If one speaks too loudly when transmitting then overmodulation can occur. The modulation limiter is presumably not functioning correctly. However this can be counteracted in that one sets the variable gain microphone to a value corresponding to approximately 100 % modulation. The impedance of the aerial is given as 50  $\Omega$  a value that corresponds to currently accepted standards.

The built-in dimmer, that at first sight might appear to be a little childish and unnecessary, can really be appreciated when driving at night. The matching of the illumination of its measuring instruments and channel display to that of other instruments in the car is a practical solution to improving safety. The ANDREW J. by consuming a maximum current of 1,5 A when transmitting demonstrates that it is thrifty and energy conscious. Taken as a whole, the ANDREW J. gives the impression of being a piece of equipment that not only is well designed but for which the necessary care has been given to its final manufacture. This is so essential if the user wishes to make use of all the advantages that has been designed into it.

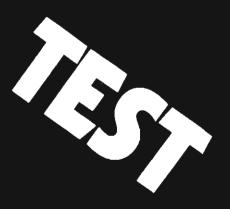
#### GRANT — AM/SSB Mobilisation from PRESIDENT

With PRESIDENT GRANT we have on the market an 80 channel AM/SSB mobile set with a place in the mobile programm of this manufacturer. The PLL Synthesizer on the set tested, with a deviation of around 200 Hz with 7.10<sup>-6</sup>, was more accurate than claimed by the manufacturers. On the receiving side the

disadvantages of the simple-super were compensated by the fitting of a ceramic filter (AM) or 2 crystal filters (SSB) respectively. The Hf-passage curve is smooth in the channel centre, but with 8 kHz rather wide, since the Nf passage zone with 2.5 kHz makes this Hf band width certainly unnecessary. The figures for adfacent channel selection lie therefore around  $-60~{\rm dB}$ . The reception sensitivity with AM at 0.76  $\mu\rm{V}$  (with 10 dB interference interval and 30 % modulation



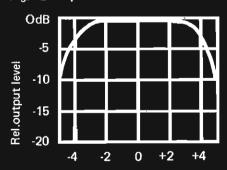




with 1 kHz) was somewhat worse than the manufacturer's figure of  $0.5 \mu V$ .

Squelch and Hf amplification with adjustment range of 920 respectively 170  $\mu$ V were within normal limits. The S meter had a reference value of 80  $\mu V$  for S9, a middle pitch if 5 dB/S step and is with that sufficiently

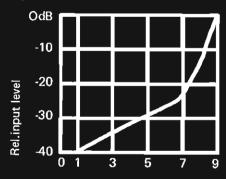
Fig.1 Band-pass characteristic



(Channel centre) frequency

usable. The automatic amplification control functioned quite well (Fig. 3), and even the disconnectable noise inversion, with a noise reduction around a factor of 3 at only 1.5 dB loss of usabel current gives very acceptable values. With 2,3 W output the set tested is relatively weak in this respect, nevertheless with the Nf out-put when necessary it should be pos-sible to overcome vehicle and external noise. The distortion factor at 5 % by 1 W, which however increases rapidly with higher output, is a very aceptable value. On the transmitting side

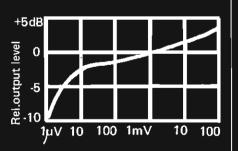
Fig.2 S-meter



S-stage

the set has the usual 4 W output respectively 12 W PEP at SSB ab. It should be noted that the ariel impedance is given at 52 ohms, which using

Fig.3 Automatic gain control



input voltage

a 50 ohm cable, gives only very slight mis-match (SWR 1:1.2 to 1.3). The modulation is adjustable by means of a microphone adjuster, but is, how-ever, by means of a modulation limiter held exactly at a pre-set value (with the set tested 85 %). When transmitting, the built-in meter allows the measurement of the Hf output as well as the depth of modulation. Meter and channel indicator can, during night driving, be adjusted by means of a dimmer to an illumination intensity agreeing with other surrounding instruments.

The built-in noise inversion is coupled with an effective noise limiter. During mobile transmitting maximum current consumiiton is 3 A.

#### Technical Features - PRESIDENT GRANT

Channels: Mode of operation: Frequency range: Frequency generation: Frequency tolerance: Transmitting power: Modulation:

Low frequency band width: SSB: Carrier suppression: Suppression of unwanted adjacent channels:

Receiving sensitivity:

Adjacent channel selectivity:

80 Channels AM and SSB 26,965 27,855 mHz PLL synthesizer 7.10<sup>-6</sup> AM 4 W SSB 12 W PEP

100 % adjustable 350–2 500 Hz better -45 dB

better -45 dB ---60 dB

SSB: 0,25 μV (10 dB (S+N) / N 1 kHz, 30 %)
AM: 0,76 μV (10 dB (S+N) / N 1 kHz, 30 %)\*
Controllable up to 920 μV input voltage
Controllable at 170 μV input voltage

Squelch: High frequency amplification: Channel display: LED display Nf output power:

2.3 W\* 5 % at 1 W Distortion factor: External loudspeaker con-

nection:

Intermediate frequency: SSB: 7.8 mHz AM: 455 kHz Indicating instrument for S meter or HF output/modulation depth SSB - beat frequency

± 1.25 kHz 13.8 V d.c. oscillator (clarifier): Operating voltage:

Semi-conductors: 44 transistors, 3 FETs, 6 ICs, 62 diodes, 3 LEDs Dimmer for instrument lighting.

These data vary from those given by the makers, and are not necessarily representative for all sets of this series.

The measurements were carried out using equipment from DYNATRADE, Düsseldorf.

# RADIO GLEBE

CB operators often complain that they and their hobby are not taken seriously enough.

There is, however, no reason why the CB operator shall not take himself seriously. Those who practice their hobby expertly and are well informed, those who understand the possibilities and limits of 27 MHz radio, those who understand how best to operate within the limits imposed by the Post Office, can as CB operators have considerable success.

Such success necessarily depends from the conditions which govern shortwave transmission. Those who are not satisfied with radio contact within visual limits or just around the corner, need to be able to find their way around among the maze of frequencies, and be able to sum up under what circumstances they could make an interesting connection to the other side of the Alps. The oft admired instinct of some hobby colleagues, in almost impossible conditions to find the best opportunity, is not something which simply falls from Heaven. The

fact that it is so often the same person who has this luck seems to indicate that it is more a matter of understanding. From this point of view the FUNKGLOBUS (Radio Globe) from M & F Amateurfunkbedarf GmbH (Idee and Redaktion) can, even for keenly interested CB operators, bring an appreciable extension of their understanding of the world. The globe is equipped with a map designed for the special needs of amateurs operating on short wave radio. The needs of the amateur radio operator are met equally with those of the DX-er (Short-wave listener). A special mechanism (Columbus Verlag, Stuttgart/Berlin) allows adjustment of the globe, which shews with great accuracy, almost to the minute, the world conditions affecting short-wave radio communication in such a way as to make them readily observable on the desk or work-table. An almost 50 page accompanying booklet explains explicitly for the beginner the possibilities, and not merely limited to short-wave radio communication. The mechanics of the heavens are also graphically

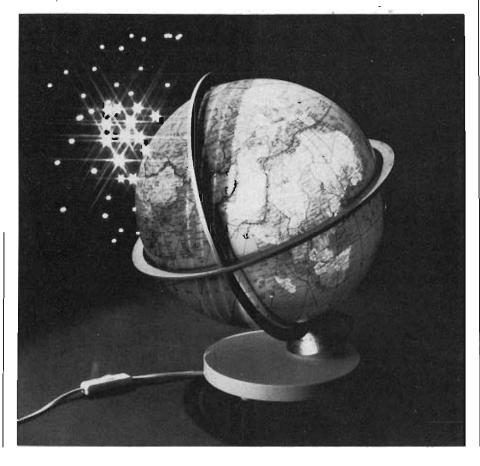
pictured, so that the globe, in spite of its special adaption as a radio globe, may be equally well used for any other purpose for which a globe is required. Of particular interest to the CB operator could be the Europe centered circles (central point Luxembourg) which have cross-markings at 1,000 km intervals. In this way the distance from a well known transmitter can be quickly seen.

Particularly useful is the fact that the globe can be adjusted for any day of the year, and day can be adjusted for any time. In this way the radio operator or receiver can estimate the structure of the lonosphere, which is such an important feature in short-wave communication. The globe indicates also, accurately to the minute, the twilight zones, so that even for the short-wave newcomer it is possible to judge the possibilities of distant radio contact.

The Radio globe offers, through its time graduations on the equator ring, the possibility of use as a world time calculator. The instructions deal explicitly with this. Since it shews the frontiers of the ITU Regions, it is useful, when reading specialist radio literature, for rapid orientation and basic information. In certain circumstances also the WAZ-Zones can be of interest to the CB operator.

The globe offers therefore, apart from the posibilities of it's practical use, stimulation and guidance for further education beyond the 'limited' CB horizon. Understanding of the relevance of the radio amateur can be highlighted, and for those who have hitherto given little thought to the globe on which we live, the mechanics of the days and years and the wanderings of the subsolar point raises and answers questions of understanding at the same time.

The globe is so clearly and practically arranged that even my cat took it between its paws, to inform itself about the planet on which it lives. Under this treatment the globe shewed it's only weakness. The otherwise so clear chart could not quite cope with the cat's claws, and as a souvenir of this (certainly unusual) interest, shows deep scratches in the North Sea. Very few CB operators are, however, likely to be bothered by this.



# 40 Antenna One of the most widely sold antennas in the world

- K<sup>40</sup> Power sends further and receives more clearly.
- US-American quality product many international patents.
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High load capacity.

- Computer designed insullation chamber of reduction coil largely prevents reception interference.
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Metl.Plas. - Combined metal and plastic construction - finest tolerances and long life.

- Simple universal mounting (Fixed and boot clamp mounting, roof gutter fixing - U<sup>40</sup> Unimount and magnetic foot - M<sup>40</sup> Magnamount).
- A quarter turn of the bayonet coupling detaches the K40 antenna from the foot. (important protection against theft, as well as damage in car-wash installations)

K<sup>40</sup>Antenna, 30 pivotable, continually correct vertical emission guaranteed.

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The K40 Speech Processor is quaranteed to outperform any microphone it replaces or return it for a complete and full refund within 7 days from the K40 Dealer that Installed and tuned it.

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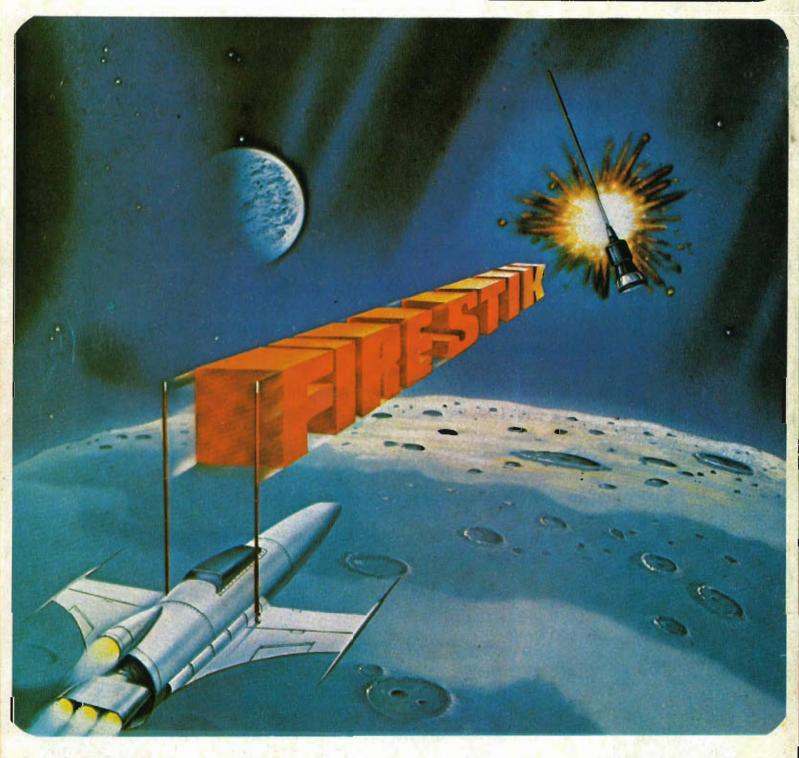
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