

THE Magazine for Today's Radio Industry

Issue number 47 March 1, 1988



THE Magazine for Today's Radio Industry

NOW RADIO

EDITOR: Howard G. L. Rose Correspondents:

Steve Merike — Chris Andrew John Lewis — Paul Easton Gavin Cooper — Barrie Johnston Steve Hamley — Rob Chapman Clive Glover — Bob Matthews Tracey Power

United States:
Graham Kennedy
Technical:
Norman J, McLeod

ISSN 0951-7901

Telephone: (0536) 51 44 37 (24 hours)

UK ORDERS: NOW RADIO, FREEPOST, KETTERING NN16 ONW

SUBSCRIPTION RATES

(Now Radio Magazine)

26 issues (12 months) £24.00 13 issues (6 months) £15.00

(Now Radio Reports)

26 issues (12 months) £20.00 13 issues (6 months) £12.00

JOINT SUBSCRIPTION

Now Radio Magazine and Reports 26 issues (12 months) £39.00

Published by:

Now Radio Communications PO Box 45, Kettering, Northants NN16 ONW Telephone (0536) 51 44 37 (24 hours)

All contents & Now Radio Communications 1988

EDITORIAL COMMENT

Issue number 47 March 1, 1988

problem increasing The by unlicensed interference caused radio stations, particularly in the London region, has caused decide to reproduce a special article which was originally carried in NOW RADIO (#34) last year. The article was written by Norman McLeod. It is our hope that in reproducing this important article the operators of all unlicensed stations in London (and elsewhere) will decide to Tidy Up Their Act, If not, some of that £400,000 extra funding for the Oti's Radio Investigation Service, could be spent removing many, many stations from the airwaves.

++++

There are a hundred and one things to decide on before you even switch on your transmitter having applied for the from licence Authority. In this issue of NOW RADIO we start a new series of articles which will take prospective broadcast station owners on a step-by-step tour of the important and often that need consuming tasks carried out in preparation for the special day when you actually start broadcasting. The estimated start-up date for many new stations) may seem a long way off - but it's time that can be used to make sure that what you want is really what you, your listeners and advertisers, get,



	Ra	di				
	CONT	ENTS				
EDITORIAL COMME CONTENTS NEWS SATELLITE RADIO PRODUCT REVIEW		20)		4	ı –	2 3 10 11
COMMUNICATIONS LOOSE ENOS MORE NEWS FAREWELL TO THE INTERNATIONAL R. TIDY UP YOUR AC	FEATURE(Not	rman McLe Merike)	od)	1 <i>6</i>		13 14 15 17 18 24
MORE NEWS GETTING ON THE OPENINGS TARGETING THE SERVICES GUIDE		G L Rose		25 27 McLeod)	-	26 28 29 30 31
»»»»»»»					* * * 1	* *
CAPITAL RADIO (London) FN operation broadcast the Australian LINTER g	has bought a 60 ing to the South roup for £130,000	of France.	IVIERA R It bough	ADIO, a com t the shar		
BATI BROADCAST MARKETING S contract for ESSEX RADI Chief Executive EDDIE ADVERTISING SERVICES.	ERVICES holds t O after pitching	he £1 millio against IRS	and SAS	ear airtim . Last year	for	mer
BLACKBURN	'STORMS	OUT'	of S	TATIC	N	
TOBY BLACKBURS pulled storming out of the stuclaiming that he could building work going on his controversial morn claiming to have reached	dio in the midd no longer stand in an adjacent ing soul show.	le of his BB i the noise studio from He returned	C RADIO and cond where h after a	LONDON proditions cause was presented to	ogram sed senti	by ing
***************************************	************	2222222	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	**********	2000	6000

RENTON ON RADIO

TIX RENTON. The Home Office Minister with special responsibility for broadcasting, addressed the RADIO ACADEMY last Thurnday night and caused a storm amongst non-ILK/prospective Few Entrant group.
Questions were raised on a number of key issues, including automatic commercial radio, the transitional arrangements for ILR and the automatic commercial radio, the transitional arrangements for ILR and the automatic commercial radio, the transitional arrangements for ILR and the automatic consisted of what some pundits believe will become standard jarges on over the next couple of years, "That will be a matter for the Radio Authority..."

There would appear to have been considerable pressure from the ILR trade body AIRC. The Minister spoke on ownership and attempted to clarify the ownership rule proposed by the Government.

TIX RENTON asid one company/organisation or individual would be listed to a controlling in terms of the comment of the company organisation or individual would be listed to a controlling in the comment of the company organisation or individual would be listed to a controlling in the comment of the comment of the company organisation or individual would be listed to a controlling in the comment of the comment of the company organisation or individual would be listed to a controlling in the comment of the company organisation or individual would be listed to a controlling interest of the new Radio Authority. Observers feel that it should be a case of GVR - will be able to operate under one licence with the case of GVR - will be able to operate under one licence with the constitutes in the comment of the comment of

GWR WIIL GO-FOR STOCK MARKET PLOATATION

The GWR Radio Group which increased profits in the year to September 30, 1987 by nearly 500% nore than the previous year is now repeating to flow the company on the Stock Karket within weeks.

GWF consists of ILR franchise operations in Viltabire, Bristol, Bath and its newest acquisition, PLIYMUH SOURD.

Fre-tax profits in the Assets operations in Viltabire, Bristol, Bath and its newest acquisition, PLIYMUH SOURD.

Fre-tax profits in the Assets operations in Viltabire, Bristol, Bath and its newest acquisition, PLIYMUH SOURD.

Fre-tax profits in the Assets operations in Viltabire to CWR Group was forzed offer the partnership between VILTSHER RADIO and RADIO VEST, master-sinded by BBC Chairman DUK HUSSEY when he was chairman of RADIO VEST. In the three years to 1985 that station loot around 41,000,000. management on October lat, 1985 the management of October lat, 1985 the management of October lat, 1985 the management of October lat, 1985 that station incut around 41,000,000. management of October lat, 1985 that station incut around 41,000,000. management of October lat, 1985 that station incut around 41,000,000. management of October lat, 1985 that station broad and Viltabire took control and within sonthe ratings were up in Bristol by 50%.

In Nay last year the company launched CWR RADIO BATH, followed by the summertine takeover of PROUTIONED.

In Nay last year the company launched CWR RADIO BATH, followed by the summertine takeover of PROUTIONED.

GVR LAKES LEV CHAIRMAL

The GWR Radio Group has named HERRY MEAKIN as its new Chairman. He is Chairman of the highly successful USF quoted Assertine Meaking with an enthusiation and supportive team. RADIO Based in the country and I are looking forward to working with an enthusiation and supportive team. RADIO Based in the country and I are looking forward to working with an enthusiation and supportive team. RADIO Based in the country and I are looking forward to working with an enthusiation and supportive team. RADIO Workers

CASEY KASEM TO QUIT AMERICAN TOP 40 ??

ABC VATERMARK has announced that it is "seeking a replacement" for CASEY KASEM, host of AMERICAN TOP 40, following a breakdown in contract negotiations.

AMERICAN TOP 40 is the highest-billing, most-widely listened-to longform susic programse in the USA, where it is aired on 475 stations world-disk ASEM become stations world-disk ASEM become stations world-disk ASEM becomes the station world-disk ASEM becomes the state in payer run.

Although CASEY KASEM'S contract does not officially expire until January 1939, it is not uncommon, in the States, for contract renewal negotiations to begin a year in advance for someone of KASEM's stature. According to ABC VATERMARK Vice President (Shertrainment Programming) TOX CUDDY, negotiations stated in July, but broke down over money. However, ABC's announcesment that it is seeding a replacement that it is seeding a replacemen

ANOTHER RADIO
MERGER UNDER WAY?

PADIO FORTH, which took over financially-troubled RADIO TAY in 1996, has started tails with ANDID FORTH is proposing, a perger of the two companies with the aim to strengthen the operations ahead of deregulation under the new RADIO AUTHORITY.

If the two op's decided to merge they would need to receive IBA approval.

The IBA still has to decide whether it will agree to two other mergers currently being proposed craighand of the proposed content of t

CLYDR-FM READIRS
FOR PPI.

NENDLETJMH
AGREEMENT

JIMMY GORDON, speaking to NOW
RADIO, said he did not want to present the decrease of plants of the programming for times in a proper sent the decrease of the programming.

CAPITAL RADIO GOES SATELLITE

Recently an agreement was resthed with PRS for the use of copyright material. This was outlined in NOV
RADIO (761) and NOV RADIO REPORTS
(711).

JIMMY GORDOS explained that whilst the February 29 start-up date for CLYDE-FM had past, the was brigged of CLYDE-FM had past, the CLYDR-FM READIES
FOR PPL.
NERDLETIME
AGREHMENT

JIMY GORDON, speaking to NOV
RADIO, caid he did not want to preenpt the outcome of talks at PPL
over Needletine arrangeaents for
his company's planned to the converse of th

HARDY

NHADIES ULSTEN'S

NBWEST MUSIC

LEADER POR LAUNCH
THIS WEHKEND

Former CHILTERN RADIO Read of Music TOM HARDY IS putting the final touches to plans to launch a new Border Blaster comsercial radio station in Ireland.
The station, RIS-FR, will launch that will be an a powerful stere o FR wisgoal into Northern Ireland, including Belifsts and a population of more than 1.5 million.
Station Nanager TOM HARDY told NOV RADIO: "we will be "man powerful stere o FR signal into Northern Ireland, including Belifsts and a population of more than 1.5 million.
Station Nanager TOM HARDY told NOV RADIO: "we will be "man been conducted by the bottom but interpolices to music firm hits, best album chase the bottom but, around the clock."
The format will be targeted at the 18-35 year old, especially those at the upper-end of the socio-cononic demographic.
Five records each week will be selected as KISS FOVER CUIS and the puper-end of the socio-cononic demographic.
Five records each week will be selected as KISS FOVER CUIS and the station will broadcast on 103.7 PN and 1000 kEE AN. The address is KISS-FR, But Two, The Mail, Old Cross Square, Monaghan, Eire.
Telephone: (010) 353 47 64028.
The station has been conducting high-power test transmissions for the last few weeks and reception is reported as being of a very good of the stations has been conducting high-power test transmissions for the last few weeks and reception is reported as being of a very good of the station has been conducting high-power test transmissions for the last few weeks and reception is reported as being of a very good of the station shaded to the station and the conducted a survey which managing director STEVANT FRANCIS described to NOW RADIO as one "with what, to the station as of the last few weeks and reception is reported as being of a very good of the station and the conducted a survey which managing director STEVANT FRANCIS described to NOW RADIO as one "with what, to the station is currently before making any decision on what to offer listeners.

PAYOLA SCANDAL.

SET TO ROCK U.S.

RADIO

SEASM REMEENT

for MON ADIO

Details of alleged cash payoffs —
psycha - to personnel of commercial
record pronoters bired by
a Californian record pronotions fire
are set to root the industry.
Indie promotions men and vomen are
nowadays being paid large fees for
getting singles added to radio
station playlists.
A two year long investigation into
Payola has been conducted by the
Los Angeles Strike Force of the U.S.
Department of Justice's Organised
Crime à Racketeering Division.
Recently the Strike Force
subpoenaed Programse Directors of
radio stations in Fresno and
Sacramento. At least one admitted
to receiving Payola from a keyfigure in the Force's
investigations.
Millions of bollars, it is claimed,
have been paid by major record
firms to the individual. Veekly cash
payments have been sent to
receiving Payola from a keyfigure of the common PAYOLA SCANDAL

RADIO

GRADIO

FORM SEMBLE

**FOR

STATE OF THE PROPERTY OF THE P

on 105

Annex are

Ansterdam

andlines to

ar that the

y landine to

be transmitted

to satellite MOV

y discovered that

fact goes directly

to fact goes directly

to the form of the filmest

ands of the filmest

ands of the filmest

firstly Dutch media law

ds TROS from providing news

ct, so a agreement was arrived

whereby TROS withdrew the

arrangement, seeing RADIO for

IELETETI service ripts on its

moment, however, TROS withdrew the

arrangement, seeing RADIO 10 as

potential competition.

Of the 16 deelays, two names are so

far known: FERRY MAAT, early

seventies presenter with RADIO

Of the 16 deelays, two names are so

far known: FERRY MAAT, early

seventies presenter with RADIO

Of the 16 deelays, two names are so

far known: FERRY MAAT, early

seventies presenter with RADIO

Of the 16 deelays, two names are so

and ANAN CURRY. After

preventies presenter with RADIO

ANA CURRY. After

preventies present with RADIO

ANA CURRY. After

preventies preventer with RADIO

Anaterdam be Josed RADIO VERY

that and ontil the present time with

Anaterdam be Josed RADIO VERY

that and ontil the preventer with

Anaterdam be Josed RADIO

ANA CURRY. After

preventies preventer

and an ontil the preventer with RADIO

ANA CURRY. After

preventies preventer

Anaterdam and ANA CURRY. After

preventies preventer

and an ontil the preventer

and an ontil the preventer

Anaterdam and and an ontil the preventer

Anaterdam and ANA CURRY. After

preventies preventer

ANA C

PRODUCT

This is a new section for NOW RADIO Correspondents to review new products, services and other radiorelated items, If you have something for us to review, please send it to: RADIO. REVIEW. FO BOX 45. KETTERING, NN16 ONW.

+++++

DRIFTBACK 20

The Edited Highlights

Description; Double Cassette set,

Price; £4,49p
Producer; JULIAN WELLINGS
Distribution; CM
Hertfordshire, 3 Hammond
Court, Front Street, Slip
End, Luton, LUI 4DA,
Availability; Immediate
Despatch

On Saturday August 15th, 1987, an event was held in central London to nark 20th the anniversary of the introduction of the Marine (etc) Broadcasting Offences Act. As well hundreds of present day fans of CAROLINE - and as a result of its appearance on the scene.

LASER - there were staff from the stations going right back to the earliest days.

This two-cassette set is not studio quality and has not been edited on anything but domestic equipment, never-the-less, for the emthusiast it is worth both reviewing and having in ones collection, if not only for what in my opinion was the (audio) highlight of the whole event, the entry and interview with JOHNNIE WALKER,

The interview, with a series of questions taking up a little too much time and asked by JOHN BURCH, was far reaching, honest, interesting and, like just about anything JOHNNIE WALKER ever says, well worth listening to, I for one am pleased that the JOHNNIE WALKER interview, in which he talks of CAROLINE and Radio past, present and future lasted for a good portion of the tape,

Perhaps I should be honest and claim that the sound of a few rather drunk people (mates, an' all!) on stage could have been edited out, if only to save them embarrasment — and the appeal for those leaving the event who had been drinking not to use their cars by none other than MIKE ROSS should have been given a miss.....

But this was promised to be the Edited Highlights, and along with CHARLIE WOLF telling anbyone who would listen what CHARLIE WOLF will, that's exactly what it is,

For anyone who attended and missed what went on up on stage for most of the time, this is a good second-best.

VE ALVAYS VELCOME YOUR LETTERS FOR FUBLICATION FLESSES SEND THEM TO:

VE ALVAYS VELCOME YOUR LETTERS FOR FUBLICATION, FLESSES SEND THEM TO:

VE ALVAYS VELCOME YOUR LETTERS FOR FUBLICATION, FLESSES SEND THEM TO:

VELOW RADIO WITH A COMMENT OF THE SEND THEM TO THE CAPACITY OF THE ANALYSIS OF THE CAPACITY OF THE CAPACITY OF THE ANALYSIS OF THE CAPACITY OF THE ANALYSIS OF THE CAPACITY OF THE CAPACITY OF THE CAPACITY OF THE ANALYSIS OF THE CAPACITY OF THE CAPACIT

Very good (at least in terms of duration and the number of people they interviewed) feature on ANGLIA TV's ABDUT ANGLIA evening news programme on Tuesday February 16 on the future deregulation of radio. Buturest ANDLO EXELT. CASESTE. ANGLIA EVENING FOR COCKESTER NOW IN THE PROPERTY OF COCKESTER N

INDDIE BLACKWELL
BACK IN ACTION:

EDDIE BLACKYELL, outet following a big boardroom row from ESDI Rabio in December, has stormed back into comsercial radio isst as predicted by industry pundits.

BLACKYELL, with one of the brightest records of any person in European consercial radio sales and whit was a senior figure with top LOMON, bone created in radio sales and whit was a senior figure with top LOMON, bone for extation Rabio LOMON, bone for extention and chief Executive prior to his departure - has been hired by GVR RADIO to advise the company in its development and expansion programme.

GVR, with franchises in Viltabire, Pastol and Plymouth, is excited by RABIO to advise the company in its development and expansion programme.

GVR, with franchises in Viltabire, Pastol and Plymouth, is excited by RABIO to advise the company in its development and expansion programme.

GVR, with franchises in Viltabire, Pastol and Plymouth, is excited by RABIO to advise the company in its development and expansion programme.

ABERDEEN LONG CONTROLL CONT

FAREWELL,
TO THE
FEATURE

RAINE FROM MILLO

This will be the last contre-page feature from see for a wille. Yith Nor Rodio taking the courageous strain the next issue, I's afraid there is no way I can double sy output to produce both a feature and a comment piece in every weekly edition.

So I have decided instead to provide a comment piece every week facing the inside back cover as before, but I will only be writing longer features now and then when there's a matter that needs thrashing out I will only be writing longer features now and then when there's a matter that needs thrashing out I will only be writing longer features, particularly on technical about things I have said (or an thought to have said). Even If someone totally disagrees with me and thinks I am a complete fool, I still take it as a tribute to ay writing still that seconds has felt moved to write at all. So keep these and thinks I am a complete fool, I still take it as a tribute to ay writing still that seconds has felt moved to write at all. So keep these send thinks I am a complete fool, I still take it as a tribute to ay writing still that seconds has felt moved to write at all. So keep these send thinks I am a complete fool, I still take it as a tribute to ay writing still that seconds has felt moved to write at all. So keep these send thinks I am a complete fool, I still take it as a tribute to ay writing still that seconds has felt moved to write at all. So keep these send that they don't stirletly have to.

SPECIAL EVENT RADIO

This brings to an end the lisbo which has existed since December 31.

We've had the future stations will be able to use ascended and in want to spend any money they don't stirletly have to.

So I have not had the futil to me wast through to use able to use as the roat in the food of the keep of the food of the food of the f

THE STORIES
SO FAR

Some of you may not have seen all the centre-page features to date, so I'ven empirise a list of them below. The complete of list of the first two which are a quid.

Issue 34: TIDY UP YOUR ACT Issue 35: RADIO SANDHURST COVES OF Trequencies and keep out of trouble... Issue 35: RADIO SANDHURST COVES OF Trequencies and keep out of trouble... Issue 35: RADIO SANDHURST COVES OF TREATMEN ISSUE OF VIGHT TOWS SUBJECT OF THE TEAM OF THE

NOW SIR, IF I COULD JUST HAVE YOUR OPINION. . . .

STEVE MERIKE

What I've done to deserve it I dont know. Perhaps I'm a typical listener as designated by a growing band of international computers. Perhaps sending me a long involved form to fill in justifies the cash spent on International Broadcasting. In truth I dont know but the forms keep on coming. The lastest is from Radio Moscow World Service. (at the last 227 frequencies 1 n 13/16/19/21/25/31/41/49/60 and now in the 75 meter band as well.) The good comrades wanted to know what, when, why and for how long. I like to be helpful so for all 19 stations who have sent me a form here is my:- -

TOP TEN INTERNATIONAL RADIO STATIONS.

- 10. Radio RSA Jo'burg (21590) The station puts on a brave attempt at being partial.
- 09. WYFR USA (7355/21615) Religion at its brightest but best programme is 'Post bag' Karan is wonderful, the letters are an antidote for depression.
- 08. Radio Tirana Albania (7065) How so few albanians can do so much is an amazement. From thier figures the Youth built over 300 Kilometers of railway in 6 weeks. Imagine the product -ivity of the parents.
- 07. Radio Ulaanbaatar Mongolia (11870)A new comer with potential and verve. Listen for the Tribes men racing results and the feature 'Building the Ubsa Nor

Fower Station' in 26 electric episodes

06. VCSM USA (9495/9850) Piety and pulpits for Sunday MOR and a very good News Service Mon-Fri. Sat. is Engineers rest day.

- 05. RAE Argentina (11705) Best time for listening is 0200 with full treble. Learn the Malvinas Mystery and blow by blow accounts of the latest Military Maneuvers.Fans of Latin American Music will enjoy RAE.
- 04. Radio Beijing China (11715/ 9655) Phone Line sound quality belies good news service and entertaining comments on life in Peking. Night on the town will cost £2.50 but end at 10.
- 03. VOA USA (9760/6040) News, Music, Science and Special English make VOA still the best window on life in the US. Listen for the Goodmorning Programme. Still pitching for third world friends.
- 02 Radio Moscow World Service USSR (13790/1386 plus) If effort alone got you to the top RMVS would be No.1. On 24 hours,227 frequencies and a comprehensive news and information service. Main topics:-Peace and Polaris.
- 01. BBC World Service UK (12095/5975/648 plus) Simply the best. John Tusa has every right to be proud. 120 million Earth Citizens tune in for unbiased News and Entertaining Information.
- I hope that answers the questions.

TIDY UP
YOUR ACT:

THE PURPOSE OF THIS AFTICLE IS TO OFFER SOME APPICE TO UNILICANSED STATINGS ON GOOD TECHNICAL COMPUCT, perticularly on the tricky and little-understood subject of frequency planning. I hope also to look at some other aspects of a station's technical performance which have a bearing on the amount of annoyance caused to other users of the radio spectrum.

To begin with, I should clear the decks by saying that in writing this advice I am not condoming, far less encouraging, heoppe who break the law. But it seems obvious to me that people will continue to establish pirate radio stations whatever I or anyone eise may have to say about it. It would therefore be as well that they are aware of some technical facts and factors which would allow them to act more responsibly towards each other and towards society as a whole.

GOOD BEHAVIOUR PAYS

Quite apart from these selfless aim, it is clearly in every unlicensed station's own interests for it to cause the minism of annoyance to others, particularly people trying to use the spectrum for lawful proposes. A station which radiates a 'dirty' signal - one which interfers with reception of other stations — must recept of or their stations— must recept of or the stations— must station which radiates a 'dirty' signal - one which interfers with reception of other stations— must should the planning criteria in choosing a frequency. The kindeet thing that can be said about this behaviour would be that they simply don't know any better.

MOW RADIO

MOW RADIO

MOW RADIO

MOR TADIO

**SECRETS & MEETINGS

**MO doubt in many cases sithough a nat or science is not taught in schools and although the BC, the Bla and the DTI have anassed considerable expertise in this satter, information is not readily headed out to any aneral with an although the political overtones in terest of who gets what, is discussed to any one and to any one and to any one and to any one any one and to any

Reither you nor I have immediate access to the incredibly complex computer routines nowadays used to plan frequency use. But by observing some basic ground rules, and using no more than our eyes and ears and some readily available information, we can have a fair stab at planning a new service successfully.

The first ground rule I would recommend concerns what would formally be called "observing sufficient frequency separation to avoid adjacent-channel interference to protected services.

Translates which listeners in your area might probledgook, this means besically goobledgook, this means besically polledgook, this means besically polledgook, this means besically polledgook, this means besically polledgook, this means services.

What you have to do first is compile a list of all the services which are likely to be used anywhere (and not necessarily everywhere) inside your primary service area. The radius of your primary service area is difficult to predict without going into elaborate discussions beyond the scope of this article, but let's say that for a VFF station it is likely to be around line-of-sight from the transsitting aerial plus a third, while for an NF station it can be taken as, say, lobs for 100 input drive into a temporary aerial of no great efficiency.

The "primary service area" is always smaller than the "impact area" by a considerable margin. The "impact area" includes all those places where the signal from the transmitter is not strong enough to provide fully dequate reception on modest receivers, but is still sufficiently strong to be a potential source of interference to outher stations.

AFPLYING RULE TVO

To apply Rule 2, you will need to extend your list to include all stations could be a stations a significant of your "lapect area".

Accurate calculation of the ispact area is beyond the scope of this current piece, but a rough guide significant between the scope of this current piece, but a rough guide suitiplied by three.

Severy station operating a service over this area is entitled not tr have your signal trampling over 'to be world the spot frequencies any stations falling into category.

In the case of Centra and the wise local stations in Baser local stations in

OTHER THINGS TO WATCH

1. Modulation Dopth

Tow must have some sort of limiter circuit to prevent the transmitter from overandulating on peaks of nusic or speech. It is not enough to rely on operator skill at watching a meter. Even the best professional will let the odd peak slip by, while a limiter/clipper circuit, if properly designed, will be able to take anything that's thrave at it without sounding notted by the professional will be able to take anything that's thrave at it without sounding notted by the profession of the transmiston.

(1) AM Transmitters

Anode-modulated AM transmitters should not be modulated in excess of 1002. Usually, this is not possible anyway, since the audio stage which provides the AF power for high-level modulators will clip if overdriven.

But it is very important not to allow the modulator driver of a high-level AM transmitter to allow the modulator driver of a high-level AM transmitter of a high-level AM transmitter of a high-level AM transmitter of a high-level AM transmiters of the squaring-off of the audio envelope, and the radiation of spurious 'splatter' up to 30 or more AHz either side of the carrier.

Daly a well-designed limiter, with a clipper to remove transments, will prevent this happening. The input audio drive to the transmitter is being driven hard by a powerful programe input signal.

An altegether sore delicate, if somewhat less five-inferious, way of generating AM is to use a lov-level belanced modulator followed by linear amplification. Vell over 1255 modulation is quite possible without distortion from this sort of device.

CHECKING FM DEVIATION

"Deviation" is a term more often used than "modulation depth" in the context of PM transmitters, since it may be a seen to the transmitter of the transmitter of the transmitter carrier.

Setting-up the deviation by ear, as described earlier, is a hopelessly inprecise technique. Vlast you need is some sort of modulation meters from various reputable manufacturers and no doubt they will serve you well if they have been regularly maintained and calibrated.

But a good second-band one could set you beak as much as £200, and that's a drop in the ocean compared to the cost of a new neter. Fortunately help is at hand in the form of two devices which are often to be found in the domestic hi-fi: an FM tuner and a comsette recorder.

The sort of cassette recorder want is moe with glowing multisegment displays of recording and playback level: the more flashing lights the better. A FU meter is no bloody use to anyone. Connect the FM tuner to the input of the cassette recorder and tune to your local, iSA commercial station.

You can bet your life they'll be deviating as such as they can get away with fairly consistently, and that the output will not have such in the way of dynamic range, this particular concept being alien to commercial radio.

Set the laps machine into record, so that the level of lapsy flashes in time to the signal from the tuner. Set the record gain control on the machine so that the lights on the display are flashing up to the point where the meter is most sensitive to small level variations.

MOW RADIO

March 1, 1988

March 1, 1988

March 1, 1988

The Managing Director of County Sound was not unreasonably somewhat upoot by this, and it is said that he may have been responsible for drawing the attention of the authorities to the existence of Radio Shervign. In Vickenhas, although John Shervign it a secret in the first place.

Fitting a suitable processor, which includes a step low-pass filter in its audio output stages, will cure a splatter problem. Not only is transitent overacolulation of the transaitter prevented, but the extent of the sidebands can be effectively cutatiled so that beyond the two most adjacent channels, the amount of energy conting out of a station's serial is negligible.

Some stations forgo heavy low-pass filtering, most notably Monique, etc. from the Ross Revenge on 90% kir. It is true that on certain 'wide' receivers there is an improvement in fidelity, but the penalty in terms of adjacent-channel interference remains. A filter cutting off around 6 kHz will not seriously impair fidelity on the majority of receivers, but will clean up the splatter quite markedly. The more powerful an AM transmitter is, the more important it is that the audio bandwidth be hawilly restricted.

REMOVING HARMONICS

All transmitters radiate - as an unavoidable side-effect - some harsonic or spurious power on frequencies other than their assigned channel - the 'fundamental'. In the case of professional installations these emissions may have to be engineered skillfully to a level some 90 dB or more below the main carrier power. Obviously, the sore were only to be relative to the carrier.

LOOSE

ENDS

LOOSE

ENDS

Two new stations in the pipeline for London: PHEORII RADIO (no conflow) with PHEORII RADIO (no conflow) with PHEORII RADIO (no conflow) with PHEORII RADIO (no conflow) PHEORII RADIO (n

CRAZY
SALES LIST

Ve've gone MAD!!! Not only have we slashed our prices — but we've added one or two great new lines to our sales liet. Help us clear up the office by ordering today!

NROOO. SOUTH FLORIDA RADIO. A 90-ninute aircheck cassette of some of the most professional and entertaining radio in the world. Many stations and formats are featured in this amazing recording. Yery recently produced. Special Price only 12.00p

NROOI. RADIO CAROLIME. This 90-ninute aircheck cassette recording features highlights from the JAY JACKSOB and SIMON BARRATI cegnents of the stations 21st birthday celebrations. You'll also hear JOREY LEWIS. The Dis are playing through the Di's All Time Top 200 tracks. Also included several competitions, JAY JACKSOB's Coffee Break and memories of the station back in the sixties, including lingles, commercials and plenty of former CAROLIEE Dis.

Wornal PRICE 43-99 CRAZY PRICE only 22.00 TRACY PRICE only 22.00 Tracks. Competitions, JAY JACKSOB's Coffee Break and memories of the station back in the sixties, including lingles, commercials and plenty of former CAROLIEE Dis.

Wornal PRICE 43-99 CRAZY PRICE only 22.00 Tracks. Competitions, JAY JACKSOB's Coffee Break and memories of the station back in the sixties, including lingles, commercials and plenty of former CAROLIEE Dis.

Wornal PRICE 43-99 CRAZY PRICE only 22.00 Tracks. Competitions, JAY JACKSOB's COMPETING AND TRACE AND TRACES AND TR

CRITING
ON THE AIR

The start of a series of articles looking at all the possible issues involved in preparing for a licence application to The Radio Authority.

TIMETABLE

If all goes as planned, the new legislation to establish a Radio Authority, will be presented to Parliament as a Bill this year. November is the likely month.

By the summer we could see the Law in force and work going on on other and work going on the property of the ground Whilst there are some who believe it might take The Radio Authority months to just settle in, let alone get around to inviting applictions for a whole bunch of new radio licences, the first licences could be insued to allow the first new stations to begin broadcasting by Christmas 1989.

There are many questions yet to be answered. Whilst we was far more clear outlines of groundwork that can, and should in the circumstances, be done by prospective applicants.

There are some individuals and groups who will prefer for the first license could be in a great done by prospective applicants.

There are some individuals and groups who will prefer for the first license could be incomply the produces the count of the project of the county of the produces the county of the project of the project of the county of

If you have all these things arranged, you will need to and secure suitable premises. Now, if you are looking at a December 1989 start-up date, you don't want to be paying out rent, rates and bills for heating, light and power for the next 18-months with no income. So what do you do? Perhaps one your directors already has offices - and can allow you to use one until you are nearer your on-air deadline. This would certainly help. Especially if there was no charge for it!

is also a good looking at what kind station you are planning, including whether you'll be using AM or FM. Where do you locating transmitter and antenna? Do require Planning Permission? Are you sure that the location will cause NO interference to ANY other user of any part of the spectrum? Many stations may siting look at their studio's and offices alongside the transmitter. Is this practical? If you need planning permission, is putting worthwhile your application now, rather than waiting until the last minute? Vill you permission to change the use of the premises? Say from Residential to Commercial? You can, and should, check these things sooner rather than later.

What are your arrangements with your Bank? Do they understand exactly what you are planning? A letter outlining your plans, and probable timetable, to your

Bank Manager will be a useful thing to do. Will you need a special account for the radio station now, or perhaps you'll not do that until it is time for your application to go to The Radio Authority.

What about Insurance? You'll need to have your whole project insured. Check out the specialists in your area, and save time. Get them to quote. If you already have equipment and are planning to get it in place ahead of getting a licence, you will need to have it insured.

Although it is many months away from Licence-issue day, will want to start planning a 'shopping list'. This list will include everything from transmitter, audio processing equipment, Post Office Lines, Key and Lamp Units, Cabling, Studio Equipment, Sound Proofing, Building Renovation/Alterations, through to the Antenna all that entails. Grounding and base plates, insulators lightning conductors...right down supplies of typewriters, paper, envelopes, printing, telephones, diaries and

Quite a list! And still we've not touched on anything like programming, sales, hiring staff, employment conditions, access, salaries, national insurance and tax...

There are hundreds of things to do. Make a start on some of these suggestions and we'll talk more next time.

HGLR

ANSERSIDE in Null has a long for a PROCRAME

ANSERSIDE in Null has a long for a PROCRAME

to join the station on a chooticate station of the lockout for a RADIO ESPORTER.

Apading news operations at RADIO ONVELL/SATUS RADIO means they're on the lockout for a RADIO ESPORTER.

Vite with CY: DARGHI CRUSSH, Head of Sews, SUPPCINE RADIO GROUP, Electric House, Iloyde Avenue, Ipper asservices also asserved the services and of Sews, SUPPCINE RADIO GROUP, Electric House, Iloyde Avenue, Ingo policy asservices also for a EVS PRODUCER Based Norwich, for a EVS PRODUCER. Based Norwic

TARGETTING
THE MARKET
MEN

(OMMENI ST NORMAN RICEO)

Here we go again. That's what I felt when I read about plans for a new commercial station in Ireland, a certain KISS-FM. The format will be targetted at the 18-35 year old..., said the Station Manager, Tom Blandy, the format will be targetted at the 18-35 year old..., said the Station Manager, Tom Blandy, the format will be station targetting 18-35 year olds with a mixture of old and new pop records is not what the world most desperately needs at the moment. But I wish Mr Hardy luck with his new venture, and hope he's read the new Irish redio bill carefully.

What about the weird assemption implicit in this sort of statement? Damnit, I'M an 18-35 year old, if only just. Do they seem se? Seemov I doubt it. Am I at the 'upper end of the socio-economic desographic? Not on my income, I'm not.

It's the idea that gowky teenagers, who have just drunk their first legal price, who don't remember the Schole of the socio-economic desographic? Not on my income, I'm not.

It's the idea that gowky teenagers, who have just drunk their first legal price, who don't remember the safe formation of the socio-economic desographic? Not on my income, I'm not.

It's the idea that gowky teenagers, who have just drunk their first legal price, and the socio-economic desographic? Not on my income, I'm not.

It's the idea that gowky teenagers, who have just drunk their first legal price, and the socio-economic desographic? Not on my income, I'm not.

It's the idea that gowky teenagers, who have just drunk their first legal price, and the socio-economic desographic? Not on my income, I'm not.

It's the idea that gowky teenagers, who have just drunk their first legal price, and the my one meritain the price of the my one meritain the my one meritai

		ide		STATION	L
	EQUIPME	NI	EU	R SALE	
Rise, Br (0273) Induction	ighton, BN1 671928. S	25 Ditchling 4QL. Telephone pecial Event, ission Systems Specialists.	COMMERCIAL RAI Cote d'Azur. 3 à Studios. Ve bookings. Ser call Now R (0536) 514437	transmitters. ry good adve ious Parties adio Communi	Offices ertising please ications
	IDENT	<u>s.</u>	FOL	JIPMENT	
range of radio a Ring EAF EAP, Stud	f low-cost p stations, pro on (02556)	TONS. A unique roductions for esenters, etc. 6252 or write 23, Walton Rd., CO13 OAA.	SOUND BROAM Qualified & Transmitter & Sales, install	OCASTING SE Expert Se Processing Equation and se from SB	service. S, 42
	PRINTI	NG	Please	e Menti	on
envelope		your printing, ribution! Call best quote	NOW Servic when re	RADIO ces Gui	de ; to
P	ublishers of No	ow Radio Magazine The News Source for	MMUNIC e. Now Radio Repo Today's Radio Indust	orts and Fresh . Try	Air
	ADV	DW Radio Magazine The News Source for VERTISIN Effective from MAGAZINE	e, Now Radio Repo Today's Radio Indust G RATE (January 1, 1988 / NOW RA	orts and Fresh . CARD	Air
NO	ADV w radio	DISPLAY A.	e. Now Radio Reported and Industry I. 1988 / NOW RADIO PROPERTISING	CARD DIO REPOI	Air R TS
	ADV w radio	DW Radio Magazine The News Source for VERTISIN Effective from MAGAZINE	e, Now Radio Repo Today's Radio Indust G RATE (January 1, 1988 / NOW RA	CARD DIO REPOI S (Cost per to 1175.00 1175.00 1165.00	Air R TS
NO STANDARD R FULL PAGE HALF PAGE	ADV OW RADIO ATES (Cost	DW Radio Magazine The News Source for TERTISIN Effective from MAGAZINE DISPLAY A. per insertions (7-13 insertions) (1-6 insertions) (1-6 insertions) (1-13 insertions)	e. Now Radio Reported and Property is RATE (January 1, 1988 / NOW RAD DVERTISING STANDARD RATE HALF PAGE (cont) QUARTER PAGE (CAL DATA Column length 160mm. wa ready artwork required.	CARD DIO REPOI S (Cost per to 115000 c175.00 c150.00	RTS nsertion) (14-26 insertions (1-6 insertions) (1-26 insertions) (14-26 insertions)
NO STANDARD R FULL PAGE HALF PAGE Type page size 1 Mono Colour by 6 NOW RADIO MAG	ADV ATES (Cost £370.00 £315.00 £290.00 £205.00 £195.00 95mm # 130mm, ha arrangement Spot col AZINE is published e	DW Radio Magazine The News Source for TERTISIN Effective from MAGAZINE DISPLAY A. per insertions (7-13 insertions) (1-6 insertions) (1-6 insertions) (1-13 insertions)	e. Now Radio Reported and Standard RATE (January 1, 1988 J NOW RAD DVERTISING STANDARD RATE HALF PAGE (cont) QUARTER PAGE (CAL DATA Column length 160mm, ware a ready artwork required. ON DETAILS ON DETAILS	CARD DIO REPOI S (Cost per b 1185.00 1175.00 1165.00 1150.00	RTS nsertion) (14-26 insertions; (1-6 insertions; (7-13 insertions; (14-26 insertions; of columns — two
NO STANDARD R FULL PAGE HALF PAGE Type page size 1 Mono Colour by 3 NOW RADIO MAG COPIES £1 50 each	ADV TW RADIO ATES (Cost	DW Radio Magazine The News Source for VERTISIN Discribing Magazine MAGAZINE DISPLAY A. per insertion) (1-6 insertions) (7-13 insertions) (1-6 insertions) (1-6 insertions) (1-6 insertions) (1-10 insertions) MECHANI Il page 975 mm r 130mm our by arrangement. Camer PUBLICATT very two weeks. Subscriptin details available on reque MAGAZINE	e. Now Radio Reported and Standard RATE (January 1, 1988 J NOW RADIO FRANCE (CAL DATA Column length 160mm, we a ready artwork required. ON DETAILS ON DETAILS ON DETAILS IN THE CONTROL OF TAILS ON DETAILS ON	CARD DIO REPOI S (Cost per to 1185 00 c175.00 c165.00 c150 00	RTS nsertion) (14-26 insertions (1-6 insertions (7-13 insertions) (14-26 insertions) of columns — two (max A4) nths £15 00 Sing
NO STANDARD R FULL PAGE HALF PAGE Type page size 1 Mono Colour by 3 NOW RADIO MAG COPIES £1 50 each	ADV W RADIO ATES (Cost £370.00 £315.00 £290.00 £205.00 £195.00 £195.00 95mm = 130mm, ha arrangement Spot col AZINE is published e Multiple subscription W RADIO	DW Radio Magazine The News Source for VERTISIN Discribing Magazine MAGAZINE DISPLAY A. per insertion) (1-6 insertions) (7-13 insertions) (1-6 insertions) (1-6 insertions) (1-6 insertions) (1-10 insertions) MECHANI Il page 975 mm r 130mm our by arrangement. Camer PUBLICATT very two weeks. Subscriptin details available on reque MAGAZINE	e. Now Radio Reported and Standard RATE (January 1, 1988 / NOW RADIOVERTISING STANDARD RATE HALF PAGE (cont) QUARTER PAGE CCAL DATA Column length 160mm, was ready artwork required. ON DETAILS on raies 26 issues/1 year ist. / NOW RADIOUDE ENTRIES	CARD DIO REPOI S (Cost per is 118500 c165.00 c15000 c15000 c165.00 c15000 c165.00 c15000 c165.00 c15000 c165.00 c165.	RTS nsertion) (14-26 insertions; (1-6 insertions; (7-13 insertions; (14-26 insertions; (14-26 insertions; of columns — two fromax A4) inths £15 00 Sing RTS OST PER INSERT
NO STANDARD R FULL PAGE HALF PAGE Type page size 1 Mono Colour by 3 NOW RADIO MAG copies £1 50 each	ADV W RADIO ATES (Cost £370.00 £315.00 £290.00 £205.00 £195.00 £195.00 95mm = 130mm, ha arrangement Spot col AZINE is published e Multiple subscription W RADIO	PRACTIONS The News Source for TERTISING PRETISING MAGAZINE DISPLAY A. per insertions) (1-6 insertions) (7-13 insertions) (1-6 insertions) (7-13 insertions) (1-6 insertions) (1-13 insertions) (1-13 insertions) MECHANI Brigage 97 5mm * 130mm. Our by arrangement. Camer PUBLICAMET PUBLICAMET	e. Now Radio Reportoday's Radio Indust GRATE (January 1, 1988 / NOW RAI DVERTISING STANDARD RATE HALF PAGE (cont) QUARTER PAGE COLUMN length 160mm, was ready artwork required. ON DETAILS on rates 26 issues/1 year ist. / NOW RAI UIDE ENTRIES	CARD DIO REPOI S (Cost per is 1185 00 c165.00 c150 00 rests 1500 per sheet 1524 00 13 issues/6 mo	RTS nsertion) (14-26 insertions: (1-6 insertions: (7-13 insertions: (14-26 insertions: of columns — two (max A4) inths £15 00 Sing

LINES	NO. OF INSERTIONS	COST PER INSERT	LINES	NO. OF INSERTS	COST PER INSERT
4	6 13 26	£ 9 00 £7 50 £6 00	8 · 8	6 13 26	£14 00 £12 00 £10 00

Wireless Workshop

Special Event Radio

Our mobile caravans, complete with transmitter and aerial equipment, are available for hire for Special Event stations anywhere in the UK.

Wireless Workshop are pioneers of this kind of service, and our equipment is designed to produce first class results.

Audio Processing Equipment

Without Audio Processing, signals sound weak and lacking in clarity.

We can put a punch into your signal that will make it stand out on the dial. Our fludio Processors produce professional results at an offordable price.

Inductive Loop Radio Systems

Our MF inductive loop system provides a performance that is second to none.

Ten stations already use Wireless Workshop equipment for their transmission systems. We have many years' experience of designing and installing broadcasting networks for student and hospital radio.

Contact us now for more details and a free estimate of costs for your site.

25 Ditchling Rise, Brighton BN14QL (0273) 671928