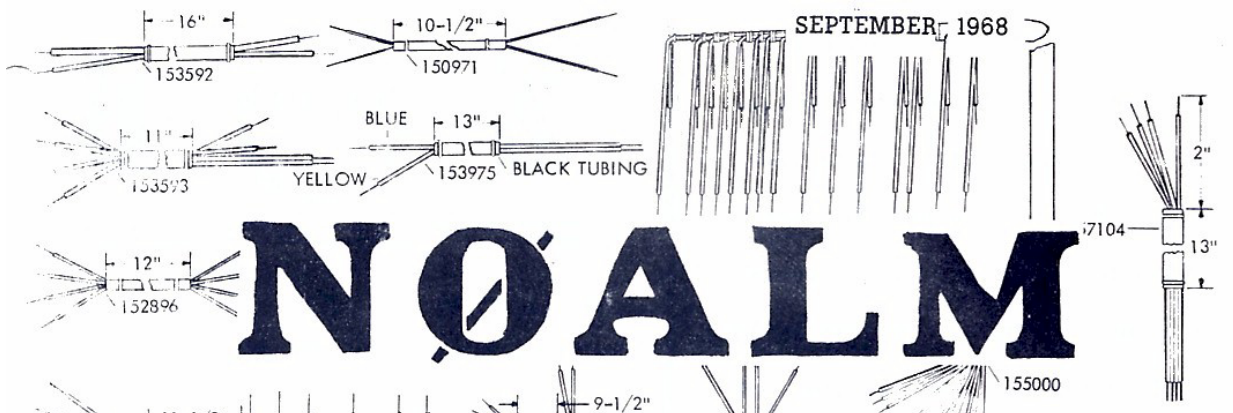
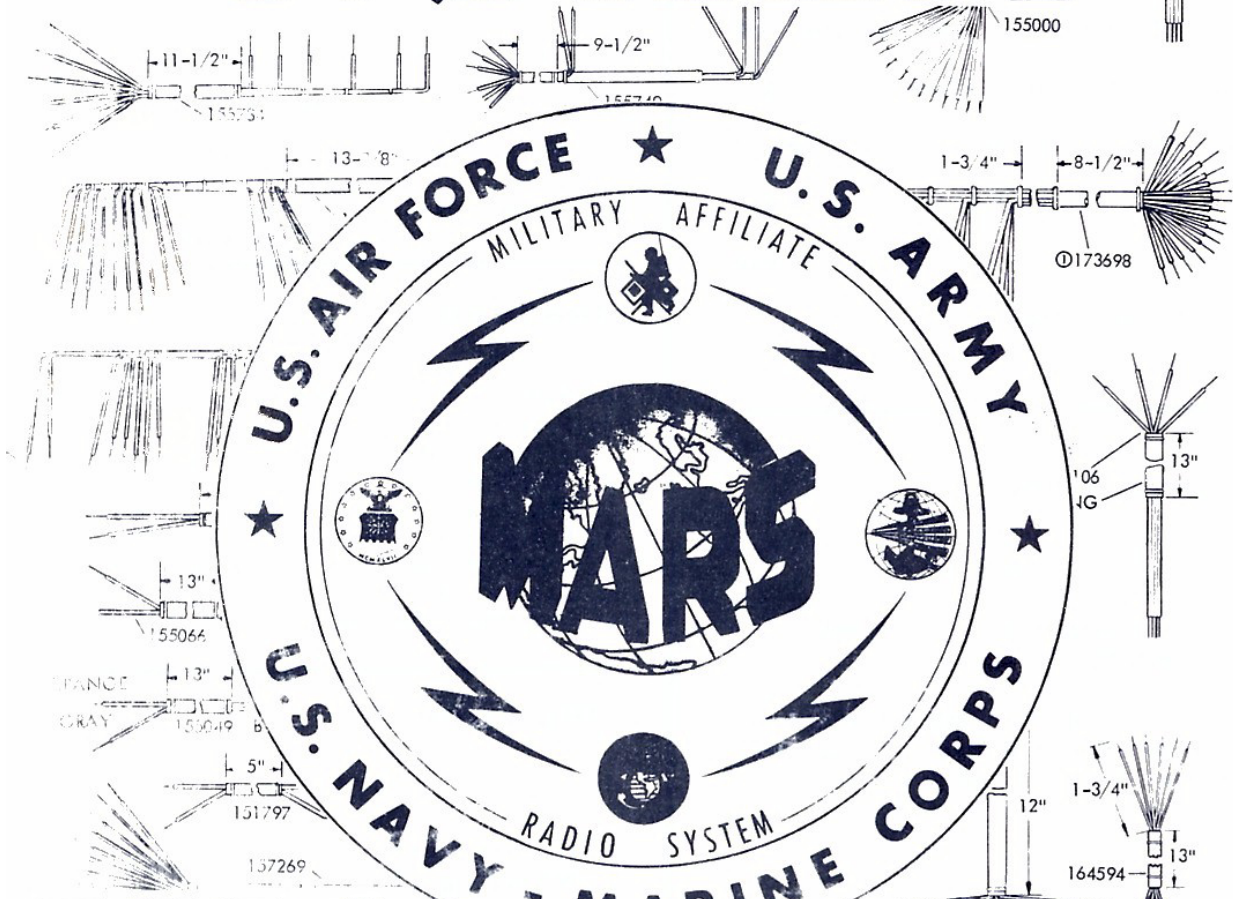


SEPTEMBER 1968



NØALM



ZERO BEAT

published by W4NTR-NØASM

ZERO BEAT is published monthly by, Navy MARS station N0ASM/NAV-2, Special Services, Headquarters Battalion, Headquarters Marine Corps, Henderson 11, Arlington, Virginia on government equipment with appropriated funds. Not directive in nature but published for the information and interest of all Marine Corps Command Navy MARS Stations (N0ALM). Opinions expressed are not necessarily those of the Marine Corps.

Z



B

editorial

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SGT JOSEPH A. DUGAN

THIS MONTH'S COVER

Layout: SGT ROBERT J. MATTSON N0KGG
@ NAV2

This months cover has a background of the wire used in a model 28. Let me say it gentlemen, it can get complicated.

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NAV-2 would like its readers to submit all ideas for a change of cover each month. Full credit will be given in this column for any submitted material that is used.

VIA JOE

CWO JOSEPH A. VAN BROCKLIN

Asst. Chief Navy-Marine Corps MARS/Marine Liaison.

Bob says that I can't skate two months in a row, so better sharpen my pencil. Not really much of interest to report, but I lie a lot, so will give it a try.

It is gratifying to see more of you taking an interest in "your" publication. We all enjoy the little blurps from the various stations and the response to "If I Were Chief, Navy MARS" has us wondering what kind of monster we have created. Please note that this month it appears as "If I Were Chief Navy/Marine Corps MARS". Bear in mind, that when you share the fame you share the blame. Don't be like I am with the XYL when I say, "There's just you and I, and I aint takin' the blame". Seriously we found many worthwhile suggestions and hope that you will see the results of some of them in the not too distant future. Surprisingly enough, there were even some that we had thought of and implemented before we received them from you. Bob will try to answer all of them even though it would be impossible to print all of them in Zero Beat. I might add that there were a couple that could not be printed and expect to stay in business. Come on you guys, fight nice.

I would like to thank NOALM for the response to my message regarding equipment (NOASB 301345Z JUL 68). I assure you that we do not have all your needs in stock and ready for issue, but more and more teletype equipment is becoming available and we will endeavor to make equitable distribution in the most expeditious manner possible. Some equipment is already in shipment to various stations. Future requirements should be sent directly to NOASB.

I must apologize for my lack of cooperation in meeting Amateur schedules that some of you requested in response to my offer in the July Zero Beat. It has been a rough summer, and not much time for hamming. With the next season, I reiterate my offer and will attempt to be there at the specific time.

Don McLaughlin, Director of the Fourth Navy Marine Corps MARS district has completed his tour as director and is going back to the fleet. Don, I can only say, and I do not say it lightly, "You are the nearest thing to Marine the Navy has come up with". My sincere regrets for not having been able to attend the farewell banquet in your honor, but understand that Wes and Griff were shining lights at the banquet table. Smooth sailing and thanks for not terminating my MARS affiliation during your tenure.

Let me leave you with this thought. Though not my own, it is none the less profound: "God grant me the strength to change the things which can be changed, the serenity to accept those things which cannot be changed, the wisdom to separate the two".

73, JOE

Editor's Notes

By GySgt Wesley L Wilson
@ NOASM/NAV2

During the last month or so we have had nothing but high praise for the ZERO BEAT publication and articles included. As some of you may know it is not an easy job to print a publication such as ZERO BEAT and all hats should be taken off to Bob, our managing editor. Through long hours, mostly on his off time, when-ever that is, Bob has again managed and had printed your ZERO BEAT. Good show Bob.

Now that autumn summer has arrived all operators may look forward to the fall season and increased DX. We here at Henderson Hall have very little time for ragchewing on the ham bands but would be glad to hear of any rare DX that our sister stations have made. Just a short note stating the station, time of day and signal report will find its way into honorable mention in future issues.

I am proud to announce that this station has aquired an additional operator. Sgt. "Bob" James, last known QTH was NOEFL. Since Bob has been here he

has been indoctrinated in the mysterys of the 28 printer and keyboard to better equip himself for teletype school in Chicago. Bob leaves 27 September for this school.

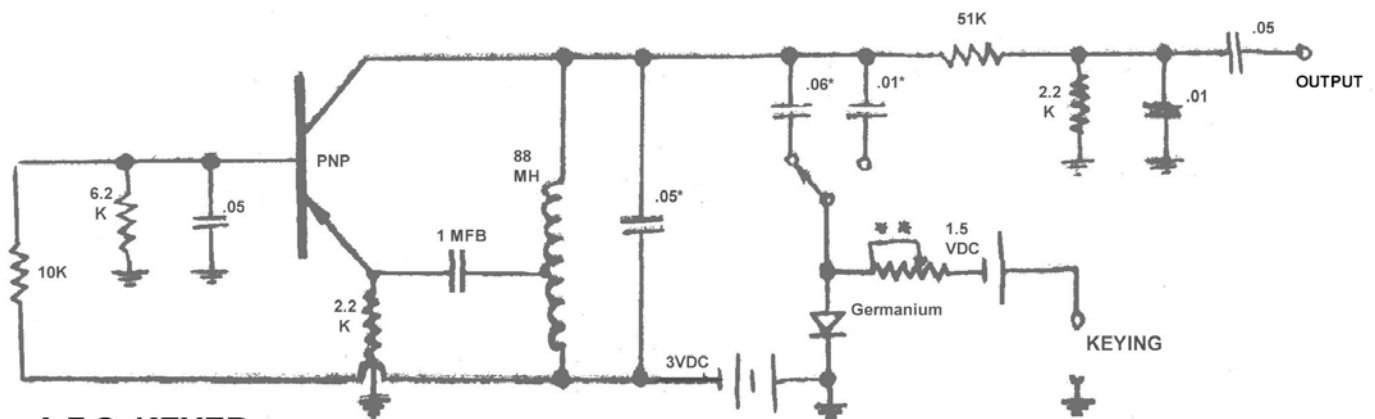
Some stations have already received their copy of the UGC/3 MUX equipment. Plans are in the mail to run four of the sixteen channels available from this equipment.

This station is waiting on manuals for this equipment, any station knowing or having manuals should contact YE OLE EDITOR poste haste.

Well, Bob, the managing editor has set a deadline, restricted my article and for all purposes stoping this article so I had better stop and let him put this issue to bed 'till next month.

Received a very welcome letter from Smitty, ex-Marine, and fellow ham, from Brea Ohio. Smitty is doing well and is now one of the gang in his new job. He sends his best to everyone and hopes to be on the air soon.

73s Wes



**A F S KEYER
by N0KAY**

*** Approximately
** Adjust for 5-10ma thru diode**



Behind the Lines

ZERO BEAT PUBLICATION., HQMC, ARLINGTON, VA

Well here it is, the second issue of ZERO BEAT under my management.... It might be a little late, but more than ever it is becoming a NOALM publication. It is a shame that there is no response from OUR stations in RVN, I'm sure the report form is not that hard to complete. If it is gentlemen I will revise it again but this time only pictures no words.

I want to thank all the contributors for this month, and hope to see a larger turn-out for the October issue.

The ZERO BEAT Staff has been working like busy little beavers, to get this issue to press before the new Month arrives and it is some Job. Each finished page has been typed and illustrated at least three times if not more before it is ready for press. It's a lot of work men, but I won't drop out if you (NOALM) won't.... 73 Bob

MANAGING EDITOR
SGT USMC

DEPENDABILITY in communications systems

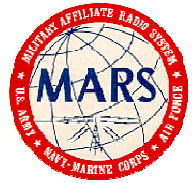


In last months ZERO BEAT the staff came across information concerning ionospheric radio predictions.

It has come to our attention that those prediction charts are no longer available and most likely will not be available in the near future.

For all interested parties, an article, will be printed in next months is-sue concerning prediction charts available by subscription from the Government Printing Office.

NEWS&VIEWS



NOENV/KA5MC
MCAS, FPO San Francisco, Calif.96664

Hear that I'm getting another guy in this station to make it a little easier for me. I ran 75 more phone patches this month (approx 600 for July) than I did last month,. Things are getting a little hectic here at times, I could use a little rest from the everyday monotony of phone patches. Kind of gets on your nerves after a while, if you know what I mean??

73 PHIL

NOETG/KR6GF
H&S CO. H&S BN. 3RD FSR FMF
FPO San Francisco, Calif. 96602

At this time, the antennas here at NOETG are down due to an approaching typhoon, and we are condition two.

I hope to be up and operational again as soon as conditions permit.

NOTEF/K6MCA
MCB Twenty Nine Palms, Calif. 92278

Received antenna for working into RVN, but no hardware to go with it. The vendor has ordered it to be shipped direct to this station, but still delay in assuming schedule.

73 BILL

** Next month Bill, how about a few more comments on other station activities. What else do you do out there? hi

BOB mgr ed

NOFJM/KG4AM

ZERO BEAT is sure looking good these days. I think Bob thought of that cartoon (Aug pg.11) when talking to me. Only 40 ;days left in this beautiful area.

Stan @ GITMO

NOFAA/W4LEV
Bldg PT-5, Camp Lejeune, N.C. 28542

This station has constantly received the fullest cooperation from base communications, to illustrate, one of the latest installations from base comm is a landline (Hotline) using model 28 terminal equipment, between the main base comm and NOFAA in order that we may better fulfill our mission as an emergency military communications station. More plans are underway but at this time are classified. How about it you other stations. are you going to support your command by runner??

Rick Yazell will be leaving us for the cold civilian world 28 Sept, We wont lose him from the district however,as he and his wife plan to attend college in Charleston, S.C.

Sgt Roy Chrisman has received his conditional class license finally... Through his hard work and the school conducted at NOFAA, sponsored by base comm. and Special Services, he has made the grade.

All operators at NOFAA are now in possession of conditional or higher ... class licenses. All we have to do now is get Roy a 8981 and a NAVMARS license..He has been thinking hard about Army MARS though...it couldn't be that he is tired of NAVMARS as he only works a five day ■. week here (15 hrs a day).

73 BILL

CONTINUED NEXT PAGE

NEWS&VIEWS CONTINUED,

N0IXF/K4BUJ
MCAS Cherry Point, N.C. 28532.

As stated in our comments last month we are still awaiting our assignment as per our District Directors memo, hence little or no MARS activity.

** I see by the traffic report you sent us for AUG, that you have twice as much Ham traffic...what can I say.

BOB mgr ed

N0VTV.....Washington Area Coordinator

I am in receipt of the AUG 1, 1968 issue of ZERO BEAT and am much impressed with the quality and variety of articles and information contained therein. While area coordinator here in the Washington Area I was also charged with the responsibilities of printing our area publication " MARSCOOP " and as a Commercial Lithographer and a full time Graphic Art Instructor, I can really appreciate the problems and difficulties which you must face with each issue of ZERO BEAT. In my opinion the ZERO BEAT Publication is an outstanding addition to the other Navy-Marine Corps MARS publications, and you are to be commended for your efforts and journalistic success.

THOMAS J. VEATCH

N0EEM/KH6AJF
Camp Smith, Aiea, Oahu, Hawaii. 96701

The last months ZERO BEAT was quite an improvement.

I like the new report form, but there is no blank for the particular Nam and Navy-Marine Corps MARS callsigns for each station.

Chop-Charlie (WA0KWM)

N0ANP/W6YDK

Building 340, Marine Corps Recruit Depot
San Diego, California. 92140

The 14mhz beam Is back in operation and we hope to provide more service to RVN stations. Since 20/21mhz frequencies are opening better, general CONUS-P/P activity should pick up for all areas. S / Sgt THOMAS was promoted to his present rank during the month of AUG 68, and S/Sgt Atkinson has orders to WesPac for duty with MARS.

Does anyone have Smitty's phone nr for his home residents?

BOB Rotella

** Wes just got a letter from Smitty maybe you can get his phone nr that way Bob. Thanks again for the FB article. 6 Parkview Dr. Berea, Ohio. BOB mgr ed

N0RZT/WA4FCS....

Mr. "GUS" Ponstingel USMC RET.
14895 Cordell Avenue,
Woodbridge, Virginia. 22191

I received my August copy of BEAT, and was very pleasantly surprised by the new format. Seems that the Rob Mattson that I knew on Okinawa has come a long way from those days both in ideas and rank. Congratulations!!!

I also noticed that we are going to make greater use of the " NAVY MARINE CORPS MARS" title and that is the way it should be The Marine Corps, through its greater usage, has provided the impetus required to really put it on the map

Activity at this QTH has been rather limited, however, I am hoping to be a little more active on 7385 khz

Pleased to see that K4MCL and K4BUJ are going to be more active in the future, just sorry that Paris Island has been down for so long.. as it would be a lucrative traffic originator if nothing else

73, Gus.

•• It's nice to hear from you Gus, I couldn't resist printing your letter, especially paragraph one, it was really a shot in the arm for me hi.... BOB mgr ed

WORLD-WIDE MARINE CORPS TRAFFIC NET.....

I would like to see "ALL" Marine Corps stations take part in "OUR" WORLD-WIDE MARINE CORPS TRAFFIC NET. The respective NCOIC's "CAN" program it, if they really try.
DICK @ N0IZG-KH6BGS

P-P

Breaking the logjam

network

Because there may be some recipients that are not involved with the RVN/CONUS P/P activity, but have interest of the program it is intended that the next quarterly publication will be submitted to Zero Beat for printing at one publication.

NOGVN has indicated there will be changes to the current assignments listed. NO CONUS GATEWAY OR FREQ CHANGES, however, NOGVN IS CHANGING THE RVN STATIONS ASSIGN ED. On completion of consultation and coordination, these changes will be submitted via normal communications channels and also submitted for publication to Zero Beat for the next issue and incorporated to the next quarterly of course.

RVN-CONUS PHONE PATCH ASSIGNMENTS

Once again, it is about "that" time for the freq's to change slightly, and propagation checks are in progress. Twice yearly such changes occur, causing slight loss and sporadic operation to the phone patches due to freq shift: fall period Sep/Oct and Apr/May. Once by these testing periods then the freq somewhat stables itself for another few months of normal operation. It might be noted, freq's 20375khz, 20525khz, 20625khz, 21760khz, 21785khz are effective only to 1Feb69 at this time. It is hopeful useage of these freq's can and will be extended to the Navy MARS program.

Next month: QUARTERLY RVN / CONUS P/P ASSIGNMENTS effective 011500Z OCT 68

73 Bob N0PPC / @ N0ANP

RVN/CONUS P/P ASSIGNMENTS LISTINGS (PART 2)

20375 USB	(P) NORTW	(B) NOKRY	N0USM	WORK	N0EFB	N0EFC	N0EFS
20525 USB	(P) NAV 8	(B) NOWTG	N0JCQ		N0EFD	N0EFI	N0EFY
20625 USB	(P) N0ANP	(B) N0JUX			N0EFE	N0EFL	N0EFO
21760 USB	(P) N0TEF	(B) N0JPJ			N0EFA	N0EFH	N0EFJ
21785 USB	(P) N0RTY	(B) N0ZSJ			N0EFG	N0EFK	N0EFM
27900 LSB	(P) N0JUX	(B) N0USM	N0JPJ		N0EFO		
USB	(P) NORTW	(B) N0FMO			N0EFE	N0EFH	



SSGT RICHARD F. STULTZ NOJWW/WB6ZFBV/ @NOIZG



I read an article in the August issue of "OUR" Zero-Beat that kind of got to me. I noticed that you printed that one and I wish you would print mine. I would like to take a few minutes of our readers time and take issue with "THE LID". I don't know who this individual is but I notice he made a few statements like QUOTE I have considered myself an excellent operator for five years UNQUOTE. QUOTE I don't have a DNC 8 and don't plan ever to have one in the station UNQUOTE. I am not going to quote the article verbatim, I'm sure most of us did read it and got the message. I feel I must say something about it though. I have been in the communication field for about 16 years and am very, very proud to say that one of my best teachers, if not the best is a guy known to most of us as the "COTTIN PICKER" MSgt. Robert P. Rotella. In that number of years, I could not say I'm excellent. There is always room for improvement. The "LID" as he has been called by his district director does upset him and we all can see this but as you read his article and see the things that he DOES NOT DO, WILL NOT DO. ETC, ETC, ETC. All seem to be on the negative side of the system to operate in the proper manner. I

CONTINUED ON PAGE 12

FI I CATCH THE PERSNO WHO CANNOT COORDINATE HSI FINGRES ON TEH KEYBOARD, HE WILL BE WEARING A MODEL 28, THAT IS A PORMISE.

Sgt Robert J. Mattson @ NAV2



FREE INFO (ON AMATEUR T.V. Self addressed stamped envelope to: Stan Siems, NOFJM, Marine Barracks, Box 32, FPO N.I. 09593

4B32 H.V. RECTIFIER TUBES have 2 on hand will sell or swap: Bob Mattson @ NAV-TWO HQMC Henderson Hall, Arlington, Va.

NEED NEW 4CX/1000A will trade for a new 4-1000A. I need the 4CX1000A for my Collins 30S1. Contact: Phil @ NOENV/KA5MC MCAS, FPO San Francisco, Calif. 96664

FREE SCREEN DOORS from USS Nautilus, contact Bob James @ NOASM



PROPOSED RTTY CENTER



**THE AUTHOR "ROG"
AT POSITION NR 1**



**OUR TOWERS, YAGIS,
AND WIRE FARM**

NORSB

MARINE CORPS AIR STATION EL TORO SANTA ANA, CALIF. 92709

Written by: Sgt R.D. Sorenson, USMC

"THE BULL" MCAS El Toro's Amateur Radio Station W6FCS, proudly distinguishes it self throughout military communications as MARS Radio NORSB. This dedicated group of men hereabouts are: GySgt (The Gray Fox) W.P. Cooper WB6PTG, SSgt (Russ) R.L. Miller K7JBB, Sgt (Kirt) A.I. Kirchenberg, Sgt (Rog) R.D. Sorenson K0QWV, Cpl (Mike) M.F. Gilliam, W4HBO, and Cpl (Mike) R.M. Sneed.

Almost completely surrounded by mountains, NORSB sends out its almost constant bursts of radiation, twentyfour hours a day, seven days a week. During band openings we have had peaks of phone patch activity reaching over 3,500 calls a month.

Three independant rigs triplicate the capabilities of this phone patch gateway. Each position is complete with a Collins 32S-3, 75S-3 and a potent HENRY 2K3, 2K2, or the old standby 2K. PAC-IFIC Telephone has supplied us with five landlines, one for incoming business calls, and four unlisted outgoing lines.

A crystal filter inserted between the receiver and antenna eliminates unwanted interference from two kilowatts located only feet apart. Even simultaneous operation on 13.927, 14.320, and 14.400 MHZ are possible without any substantial lose of service.

Our seeded lawn sprouts nine beams and a spiderweb of copper, individually cut beams include 20.580, 21.430, 19.430 and two for 14.480 MHZ. Our Amateur antennas include a tribander, monoband 40, monoband 10, and lots of copper wire for 75, 40 and 15 meter operation, a twenty-four element 2 meter beam lies on the roof without a perch.

When the heat is on, air conditioners settle the dust. Single Marines live in two spacious rooms across the hall, ready for any communications emergency, a phone at each bed. The old "Flight Tower" is a good barracks to be assigned to building six also houses the newly formed El Toro Flying Club, station NBC school and study rooms.



MARS RADIO STATION NORSB
SPECIAL SERVICES, H&HS
MCAS EL TORO, SANTA ANA
CALIFORNIA 92709

ORDERS

Each month we will try to keep our readers posted on recent and future orders



VIA MR. "JOE" VAN BROCKLIN N0ASB Asst.
Chief, Navy/Marine Corps MARS, Marine
Corps Liaison. 5827 Columbia Pike Bailey
Crossroads, Virginia. 22041

* * *

SSGT ED ATKINSON fm NOANP to WesPac for
du w/MARS
SSGT L A BERGERON fm NORTH to Home
SSGT GLEN CARTER fm NOEFY to NORSB
SSGT RUSS MILLER fm NORSB to NOEEM
SSGT BOB RIVERA fm NORTP to WesPac for
du w/MARS
SGT BILL APSEY fm NORSE to NOEVN
SGT BILL MYRICK fm NOXXN to NOFJM
CPL C. REICHERT fm NOETH to CONUS FFT
CPL STAN SEIMS fm NOFJM to NORTP
LCPL M I LINGER fm NOEFD to NOEFV (USS-
Repose)
LCPL R J LAUB, fm QUANTICO to NOEFA



Information Bulletin

CHANGE TO SECTION 97.87 OF FCC RULES AND REGULATIONS IN/OVER INTERNATIONAL WATER.

When a Amateur Station is operated outside the 10 call-sign areas prescribed in section 97.5KB) and outside the jurisdiction of a foreign government, the operator shall give the following additional Identification at the end of each single transmission, or exchange of transmissions.

TELEGRAPHY...Immediately after the call-sign, transmit the fraction-bar DN followed by the designator R1,R2,R3, to show the region in which the station is being operated. Example: W1ZZ de W4NTR/R2

TELEPHONY....Immediately after the call-sign, transmit the word "MOBILE" followed by the designator REGION 1, REGION 2, or REGION 3, to show the region in which the station is being operated. Example: WHISKEY ONE ZULU ZULU THIS IS WHISKEY FOUR NOVEMBER TANGO ROMEO MOBILE REGION TWO.

••REGIONS: Defined by the International Radio Regulations, Geneva, 1959, contained in JANAP 195(H), ARTICLE 214 Part one

via mgr ed.

_ref: CNO R261127Z AUG 68

IF I WERE

Chief Navy-Marine Corps MARS



IF I WERE CHIEF NAVY/MARINE CORPS MARS. I would have BUPERS assign an MOS to Navy personnel who possess Amateur Radio Licenses, and assign them to stations in the same manner that the Marine Corps does now.

Don NOGAN & Charlie NOEEM

STAFF NOTE: It has been submitted and is under consideration by BUPERS.

IF I WERE CHIEF NAVY/MARINE CORPS MARS, I would establish an incentive program of really worth-while awards, such as: a day aboard one of our ships; a tour of a naval base; an operator's certificate to all members who qualify to certain standards of proficiency. The Navy-Marine Corps should provide tangible recognition to the individual amateur operator for the valueable service he performs. There needs to be a positive element in the program to offset the many frustrations and misunderstandings: that lead to demoralization on the lower levels.

de NOTNS

STAFF NOTES: The District Directors Conference of Aug. 67, proposed such a program and now is on the list for "Task's to be Accomplished".

ZERO BEAT will be printing the constructive and sincere suggestions of our readers for a better NAVY-MARINE CORPS MARS program.

By consent of Chief of Navy MARS, all letters will be screened by his office and action will be initiated on those of possible merit.

If you were Chief Navy MARS, what would you do to better the Program? Write your suggestions, in 300 words or less, to:

ZERO BEAT
c/o Navy MARS Station NAV2
HQBN, HQMC
Henderson Hall
Arlington, Virginia
22214

IF I WERE CHIEF NAVY-MARINE CORPS MARS, I would urge all Navy-Marine Corps bases to put their surplus equipment into the Navy-Marine Corps MARS program. Too much valueable equipment is going into the commercial surplus market, and too much Navy-Marine Corps equipment is going into other MARS branches.

de NOTNS

STAFF NOTE: Contact local R&D center and request that the MARS facility be notified of available excess electronics equipment prior to listing with GSA or DLSC

IF I WERE CHIEF NAVY/MARINE CORPS MARS, I would drop the origination date off all messages. The Day Time Group is the time and day of origination, and all persons in the Marine Corps/Navy MARS system should be aware of this.

SSGT DON R. CHILCOTE NOGAN NOZGL

IF I WERE CHIEF NAVY/MARINE CORPS MARS, I would add an additional billet in all Navy MARS districts for a SNCO to serve as the assistant district director and to be assigned to his office. This

CONTINUED ON PAGE 12

IF I WERE CHIEF NAVY-MARINE CORPS MARS,

Continued from page 11

would take a large amount of work off the district director, and ensure that someone will be " watching the store " when he is on the road.

BUD @ N0IXF/K4BUJ

STAFF NOTE: This was proposed in 1966 and was temporarily disapproved by CMC.

IF I WERE CHIEF NAVY-MARINE CORPS MARS, according to par. 101 b. (3)of the DNC-8, which says we are a emergency com munciations system. I would initiate a annual drill to test this system and pro vide data for its improvement.

de NOTNS

I REQUEST THAT THIS ARTICLE BE PRINTED by SSgt Richard F. Stulz...

Continued from page 7

also notice that "TIE LID" tries to justify all this by saying QUOTE How about all you DO GOODIES getting off my back and let me enjoy the hobby which is mine UNQUOTE. I must laugh at the part where he said, WHICH IS MINE. I'm sure each and everyone of us that has called "CQ, CQ at one time or another feels like the hobby IS MINE but more than that, it's YOURS, AND YOURS, AND YOURS. What I'm trying to say "LID" is if people in general get on your back for something, nine times out of ten "YOUR" wrong not the guy's trying to work in and with a system set up by the DNC 8 which I understand you're not going to get and another monitor called the (FCC) regulations. It's understandable to me that you would get upset but to print as you did a direct statement that you are not going to follow the rules and do as you see fit just because it's your hobby. Buddy, it's my hobby and a lot of other guys', so I am not passing along advice nor telling you what to do. It is very, very evident that you are going to do as you want. We, all of us do not like being told what to do but I feel your just a little out of place in this respect. I don't know you, I would have not made a comment at all but the thing I can't understand is just why you stay in "OUR" system if by doing so, you know that you're going to cause much trouble and that is not the worse thing. You state that you're not going to change. I'll tell you this "LID" WORK WHERE YOU WILL, WORK WHERE YOU MUST BUT DON'T EVER WORK AT THE SAME STATION I AM.

SSgt Richard F. Stulz N0JWW / WB6ZFB / @ N0IZG



Space electronics

INTELSAT.....

Sponsored chiefly by the U.S., the four-year-old International Telecommuni- cations Satellite Contortion (Intelsat) has four satellites in the sky, links 62 nations around the globe, and is consid- ered a highly successful outpost of free enterprise in space. It is so successful in fact, that Russia has decided to bid for a piece of the action. It is now planning Its own global space communi- cations network, Intersputnik.

For one hours transmission of color television between New York and Paris, the service charges are from \$11,500 to \$16,625 depending on the time of day and week. Similarly, black and white television prices range from \$8,350 to \$13,100 an hour.

BOB mgr. ed. (N0KGG)



SSGT BILL BIGGS NCOIC @ NOFAA
 CAMP LEJUENE, NORTH CAROLINA

FREDERICK MDL
 1200 FSK DEMODULATOR

Before you read any further and discover it for yourself, I am tickled pink with this piece of equipment....so much so that I have ordered another and am redesigning the entire RTTY setup here around these work wavers.

The Model 1200 FSK Demodulator is designed to provide optimum detection of frequency shift keying signals with shifts between 170 and 2000 Hz, and with keying rates from 30 to 300 Baud. The Model 1200 accepts audio signals from a communication receiver, demodulates these signals and uses the resultant output for keying a standard neutral telegraph loop. The effects of frequency selective fading are minimized in the demodulator through the use of variable decision threshold techniques. This function is performed by a patented "Decision Threshold Computer" (DTC), which varies the threshold or transition point between marks and spaces in accordance with receiving conditions. This "DTC" has allowed us to print....without a hit....NORSE when his shift was barely audible. The DTC used in conjunction with the built-in Auto Mark/Hold function is unparralled in copying with a reperforator for eventual tape relay.

Additional outputs are provided on the rear panel of the model 1200 for diversity operation. No comparator is needed when two 1200's are used together as they diversify for themselves. Chassis space is also provided for an optional 130-volt internal loop supply and we are taking advantage of this option.

The 1200 contains plug-in filter and detector cards, a plug-in power supply, a tuning meter and associated front panel controls and switches, all conveniently packaged for mounting in a standard 19-inch equipment rack. The required rack space is an extremely small 1 3/4 inches.

Electrical Specifications Standard MDL

MARK AND SPACE FILTERS

INPUT
 Impedance Balanced 500 ohm
 Signal 0 dbm audio: 2125
 Hz mark frequency;
 2975 Hz space fre-
 quency

200 Hz bandwidth

OUTPUT

Current.....0 to 60 ma

POWER REQUIREMENTS

Baud 45.5 Baud (60 wpm)
 or 74.2 Baud (100
 wpm)
 Freq Shift 850 Hz

115/230 vac, 50/60 Hz,
 approximately 15 watts

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FREDERICK MDL 1200 FSK
DEMODULATOR...
Continued from page 13

via SSGT BILL BIGGS



Note: Frequency shift and baud rates are determined by the pre-detection and pre-detection filters. Pre-detection filters consist of the input band-pass filter and the mark and space channel filters. The post-detection filter consists of the detector output filter. All four filters are mount-ed on a single plug-in card. This feature not only increases the versatililty of the demodulator in adapting itself to a variety of signal requirements, but also reduces in-the-field changeover to the simple and brief operation of removing one card and plugging in another.

Oh, the cost.....\$595.00 With optional internal loop power supply an extra \$55.00

I could go on and on about this equipment.....even the technical manual is a dream but I have used up enough space as it is. If anyone desires additional in-formation give me a call.

73 BILL @ NOFAA

MINIMIZING DISTORTION IN NEUTRAL SYSTEMS.... By GYSGT Wes Wilson

Continued from page 14 >

It is difficult to determine just what amount of distortion any station may have without a distortion analyzer. The operating personnel should be able to borrow one or maybe have one in the back room. In any case it should be used to make adjustments. This station has seen distortion that reaches as high as 45% and some signals have been received with less than 5%. Granted some of this distortion may be coming from other sources. but a lot of it is just poor adjustments

Normal equipment, available to MARS mem-bers, such as the URA-8 may handle large values of distortion but there is a limit so lets all try and clean up our signals. What say????



Traffic Reports for August 1968. for amateur operations N0ALM

	ORIG	RCVD	RELY	DLVD	TOTAL	TOTAL P/P
W4BHU	No report received					
K4BUJ	3	230	233	0	466	482
W4LEV	0	0	0	0	0	0
K4MCL	7	7	5	3	22	18
W4NTR	0	0	0	0	0	0
W4PFC	221	404	530	17	1172	55
KG4AM	0	2	0	2	4	525
KP4AZJ	2	0	0	2	4	736
KA5MC	Not applicable in Japan . no third party agreements.					
W6FCS	3	0	0	0	3	36
W6IAB	2	47	37	20	49	444
K6MCA	166	45	22	6	239	537
W6YDK	3786	248	130	118	4282	157
W6ZJB	2	7	1	6	16	403
KH6AJF	0	0	0	0	0	11
KH6BGS	0	2	0	2	4	72
KR6DI	4	0	4	0	8	443
KR6GF	89	10	3	7	109	465
KR6MB	9	7	15	0	31	392
KR6MH	41	10	10	0	61	1064
WA7AAJ	10	0	3	0	13	20

note: KR6CP and KR6MD are inactive. Parris Island has no station.



Traffic Report for August 1968.....for N0ALM

	ORIG	RCVD	RELY	DLVD	TOTAL	TOTAL P/P
NOAMC	10	73	55	24	162	0
NOANP	2392	436	285	151	3264	435
NAV 2	43	2335	2935	3	5875	67
NOEEM	0	1	0	0	1	512
NOEFA	no report received.....					
NOEFB	no report received.....					
NOEFC	no report received.....					
NOEFD	no report received.....					
NOEFJ	no report received.....					
NOEFL	no report received.....					
NOEFY	no report received.....					
NOENV	28	77	52	57	131	675
NOETG	23	2	0	2	27	30
NOETH	199	174	194	33	600	59
NOETJ	0	0	0	0	0	0
NOETL	0	0	0	0	0	0
NOFAA	67	1025	985	9	2086	487
NOFJM	2	12	0	12	26	310
NOFOC	3	0	21	8	41	921
NOIVT	3	6	0	17	26	144
NOIXF	3	127	70	57	257	0
NOIZG	0	1	0	1	2	889
NORSB	70	13	4	13	100	2115
NORSE	152	2892	2879	123	6049	1403
NORTP	112	530	479	13	1134	0
NORTW	8	183	169	12	372	1793
NOTEF	32	172	15	11	250	133
NOXXN	no report received.....					

Note: NOETI and NOETK are inactive. Parris Island has no station.

