





**ZERO BEAT PUBLICATION.  
HEADQUARTERS MARINE CORPS  
HENDERSON HALL,  
ARLINGTON, VIRGINIA. 22214**

**EDITORIAL**

**EDITOR & NCOIC : GySgt WESLEY L WILSON**  
**MANAGING EDITOR: Sgt ROBERT J. MATTSON**  
**PHOTO REPRODUCTION: Mr JOHN MOLNAR HQMC**  
**ASSOCIATE EDITOR: Sgt BENNETH C SETTER**  
**ART DIRECTORS: Sgt JOSEPH A. DUGAN**  
**“ PATRICK J. NOLAN**



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□□□CWO JOSEPH A. VAN BROCKLIN USMC□□□



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# NOASB - ASST. CHIEF NAVY MARINE CORPS MARS MARINE/LIAISON

At this writing, I know that many of you are involved in preparations for the celebration of the 193rd birthday of our beloved Corps. Some of our stations will be closed over the birthday and Veterans Day weekend to give everyone possible an opportunity to observe these two most important days. Others will be filling in with double schedules to take up the slack, for which we thank you. This is as it should be\* I do not attempt here to expound upon the eloquent birthday message of our Commandant, General Leonard F. Chapman. I do, however, wish to convey my personal greetings and best wishes to you all. In addition to being a time for celebration, it is a time for serious reflection. Reflection on the dedication, sacrifice, and deeds of those who went before us, on our more recent accomplishment, and our future. We in the MARS program are a most recent additions to the greatest team in the history of the world... The Navy-Marine Corps Team. Still in our infancy, and beset with growing pains, we have already carved our niche in the history and tradition of the Corps. More than one Collins S-Line bears the scars of battle, while its Marine MARS operator proudly wears the purple heart as evidence of his heroic and dedicated devotion to duty and the Corps. All of you have known the fatigue of sixteen hour days and long weekends, in competition with QRM and propagation, to keep the phone patches and morale traffic flowing. The service you perform daily for your comrades-in-arms on the battlefields of Vietnam is in keeping with the highest traditions of the Marine Corps and the Naval Service. I ask you to share my pride in your accomplishments and to continue in your efforts to build a better MARS program. From me, and from all of those whom you have served, a hearty thank you and a job well done. HAPPY BIRTHDAY

JOE

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The Marine Corps Institute's Course number 25.3b. BASIC RADIO AND VISUAL COMMUNICATIONS PROCEDURES should prove to be helpful to those who are new in the MARS game; especially those who work at the stations handling large amounts of message traffic.

The course covers the following subjects: communications fundamentals, radiotelephone procedure, radiotelegraph procedure, visual communication procedure and communication security and radio jamming. Those persons on active duty or are of active reserve status who desire to take this course should contact their local education office for further details. BOB JAMES NOLQA WA4KBJ

# NEWS&VIEWS



NORTW- W6ZJB  
MCSC, BARSTOW, CALIFORNIA.

Still waiting for our new FREDERICK FSK DEMODULATOR. Was hoping it would get here before we went home, but it doesn't look like it. We have about 25 days left at RTW before going on extended vacation in S. E. Asia. I've been here a little over two years and have had a lot of fun and met a lot of fine people on the air in that time. So will be talking to you from EF land. 73, JIM WB6VTS-NOIKA

NOFAA-W4LEV  
MCB CAMP LEJUENE, NORTH CAROLINA.

Things are going well down here, except we lost our big Collins HF antenna. We hope to have it operational again very shortly. Sgt Varney from NOEFT has made it to the station along with Cpl Hollie from NOETG. Bill Biggs

NOEFD  
1st. MARINE DIVISION, DA NANG,  
REPUBLIC of VIETNAM

Have finally gotten my orders and going to recruiters school. I have to say I immensely enjoyed working with the MARS program and shortly after returning to CONUS I will take the old exam and become a Ham and MARS member. We picked up a new operator who is new in the Corps but not new to radio, his name is Dave WA8ICF.

I'll pass my 73's along and say I enjoyed working with all of you and am looking forward to joining your ranks with a Ham and Navy Marine Corps MARS ticket. I might add that my crew is the best and working 24 hrs of each and every day. 73's MAC

NOETG- KR6GF  
CAMP MCTUREOU5, OKINAWA.

Due to an emergency at home SSgt Lasko was sent home for 30 days. This put a big load on SSgt Kay who was getting ready to rotate. Unforseen to the system SSgt Kay was sent home early with no replacement. This left L/Cpl Ross by himself with only capabilities of handling MARS traffic. Within 24 hours the coordinator had two men at the station to help with traffic handling. At the present time we are in full working order, two complete rigs and capabilities of sending and receiving 60wpm TTY on both rigs. A 100 wpm setup is in the process of being installed at the present time. 73's NOETG

NOFJM . KG4AM  
MARINE BARRACKS,  
GUANTANAMO BAY, CUBA.

5NOV68

Hello everyone from beautiful downtown Gltmo. Just arrived last Monday, and didn't get much of a chance to talk to Stan who by the way is the guy I'm relieving. He was getting on the plane as I was getting off.

Everyone here has been really great getting me set up, and making the family welcome. Will let you hear more later. 73 Chop BILL

1st MARINE AIRCRAFT WING.  
DA NANG,  
REPUBLIC of VIETNAM

"Dave" Littleton has joined us from Okinawa and will be a big asset to this station. We are in the process of installing multiplex RTTY equipment (we hope). This station is now working with duplex operation with NOAEB for a straight RTTY shot to CONUS.

Chop BOB CONNELLY



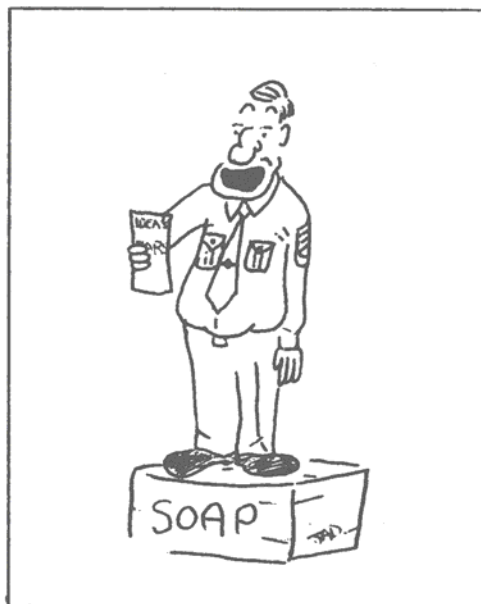
# IF I WERE CHIEF NAVY-MARINE CORPS MARS

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



IF I WERE CHIEF NAVY-MARINE CORPS MARS I WOULD, appoint a QTC coordinator for RVN, similar to the Phonepatch Coord.

NOEFB sends

Chief Navy-Marine Corps MARS has assigned such circuit coordinators for the RTTY system, and is in the process of promulgating instructions and duties to these posts.

A recognized and exceptionally good suggestion was the response from the top. Keep up the good work. ZB Staff

Attn. Mike Hagen NOXF0, I will be discharged from active service 6 March 69 and returning to New York. Would you be in the need of an amateur journalist. Please contact the Managing Editor-Zero Beat Publication.

73 BOB NOKGG WB2AMI & NAV2





# ORDERS

# 8981

VIA CWO JOSEPH A. VAN BROCKLIN N0ASB

Asst. Chief, Navy-Marine Corps MARS/  
Marine Liaison. 5827 Columbia Pike  
Bailey Crossroads, Virginia. 22041

GySgt Wayne Justis Fr SDiego (Scol) to Nav2 dur Nov

# WORLD WIDE MARINE CORPS

# TRAFFIC NET?

**2<sup>nd</sup> month printed**

Wanted: A neoteric author, who will report monthly to ZERO BEAT on W.W.M.C.T.N. activities,

REQUIREMENTS: Able to read and write (somewhat) and fill 1 to ½ of a page with "OUR" Net\*s activities.



## 193<sup>rd</sup> BIRTHDAY MESSAGE FROM THE COMMANDANT OF THE MARINE CORPS

This 10th of November 1968 marks the 193<sup>rd</sup> anniversary of the founding of the Corps. Conceived in a period of crisis, Marines ever since have stood ready to defend the republic. We do so today.

Our success derives from the sweat and blood of the Marines who have preceded us. We see the value of this heritage reflected in the combat record of our forces in Vietnam.

To those past Marines who have made the Corps what it is -- the finest fighting force the world has ever seen -- we pay our everlasting respect. To those wearing the uniform today, I say, "Well done, continue the march."

Our Corps lives in the hearts and minds of Marines, regular, reserve, retired, throughout the world. To them, and to their families on this very special day, I send my personal greetings and best wishes.

LEONARD F. CHAPMAN JR.  
General, USMC

---

For da longest tim I hav bin trlng to tech mi telatipe machene to spel corectly, tut to no avail.

I relize dat telatipes don't git da formel edicasian we git, but I st 1 expeck it to spel corectly.

I paed a lot of nony for dls telatipe, so shudn't it spel rite? My frind has a telatipe dat was tpelink good frum the monant he bot it!

It wuunn't be so bad if mi telatipe was naturly dum, but it isn't! I kno dls becuze it kan pukuete corectly!!

So hier I am dai after dai tying to tech mi telatipe machene to spel!

BY: NOWRC

# ★ OKINAWA ★

## AMATEUR RADIO-MARS COORDINATOR



GYSGT Wiles B. Danson Jr.

Well the weather is turning to the cool side now and about the 21st of October 1968 we had a typhoon pass east of the Island. We recieved winds from her for about four days.

The rotation for the month of October is that SSGT Jim Kay from KR6GF left us on the 11 of October. Jim's home call WA9YJY. SSGT Littleton left for RVN on the 25th of October. His home call is K3UCY.

SSGT Bob Laszko went home on Emergency Leave. Bob works at KR6GF. Bob should be returning about the 3rd of November.

Camp Schwab KR6MB is now closed. No operator and if we do not recieve some operators soon I will have to close Camp Mctureous KR6DI and move to Camp Hansen KR6MH. At this time we have CPL Cowfer, who has taken over KR6GF, and myself. I am operating KR6DI. We have a PFC Gwaltney on loan from Casual Company at the Camp Hansen Station KR6MH, with PFC Parks handling the MARS Traffic. Parks has a Techician Class License. CPL Hury past his Conditional Class and is waiting for his License he is also on the job training at Camp Hansen. CPL T.J. Mclein past his test and is waiting for his License. He is working at Camp Foster KR6GF. These men are TAD from 9th MAB. We have on loan from Reg. Comm. H&S Co., H&S Bn. 3rd FSR one L/CPL R.C. Ross who is TAD and is working the MARS Nets at Camp Foster.

CPL Cowfer now has worked and operated KH6DI, KB6MH, KR6MB and when SSGt Laszko went on Emergency Leave I had to send Paul to KR6GF at Camp Foster. Paul has done an outstanding job.



ON IKE ROCK (OKINAWA) con't

No word to add about the Camp Hauge Station KR6MB but we are still hoping and the Camp Courtney Station KR6CP is still closed. We have all the gear to start to put Camp Hauge back on the air as a RTTY Center and run Phone Patches with a FRT-15A transmitter, a 16 Channer AN/UEC-3 and S-Line and 2K. The Antenna still looks good.

Our schediles with the East Coast has'nt been to good but Paul at KR6GF is still trying. He new has schedules with K4MCL and W4PFC.

The Camp Hansen Station KR6MH is now running over 250 QTCs per day. On MARS this month their traffic total was 1,159.

We sure could use a good SSB Repairman. I could set him right to work. We have some S-Lines that need a good going on and Henry 2Ks also. Anyone want the job?

Submitted a letter for Company Tours for Station NCOICs, Radio Repairmen, Mechanics, and Coordinators. I think it would help out alot if we had some of our station men with a more permanent tour of duty rather than the way it is now.

To the men that have left us this month, I'd like to say thanks for your help, and your cooperation and I hope your next duty station is to your liking.

73s "BUD" K4EIK/NOKBE



## **NOIZG-KH6BGS MCAS KANEOHE BAY, OAHU, HAWAII.**

Hi Guys.

The phone patching business here in Hawaii is looking up. We have activated another station into the system and this time, it is a Navy station. Yep, the "KID" has gotten the Navy into the act in the phone patching end of the system after trying for (1) year this month. It might take another year to get another Navy station up and active but we will keep trying. The station that has been activated into the system is the Sub Base at Pearl Harbor. Their call sign is, NOENW and they are presently working with the Vietnam stations. That gives (4) active gateway stations serving RVN now. NOEEM, NOENW, NOFEU & NOIZG. We also have NOLFG here in Hawaii serving as gateway station on our Jap/Phil schedule. Hope to have a schedule into Guam in the near future but as of this date, QRU. Our phone patching system here in Hawaii is not as elaborate as our system is on the mainland and the only reason for that is we do not have the amount of stations to work with. To date, there are no back-up gateway stations and that does cause a problem when one goes down.

NEW SUBJECT::::::::::

I would like to take a little more of your time to pass along abit of information regarding "OUR" so called (WORLD-WIDE) MARINE CORPS TRAFFIC NET. As those of you who have been very busy as I have trying to make the net go, read what I am about to put down, you might feel kind of funny inside as I do right now in writing this. Those of you who have been (TOO BUSY) with MARS commitment's, be it written traffic and/or phone patch traffic to give to "OUR" net at least (1) two hour period a week might think about it. I know, I've heard all the various reason's WHY YOU CAN'T help out either as NCS or better yet if QRU, come aboard to help clear the traffic. Think about it for just a minute gang, we are working Navy-Marine Corps circuit's 24 hours a day, 7 day's a week. Sound's great huh??????????

What District Director would not let you go for just, 2 hours 1 day each week to service the Marine Corps NET. I know that there are those of us that meet the net 5 day's each week and I can understand the reason is because we have the time. I just can't buy the

reason for not coming up at all to being busy. I can buy this though. Maybe you guy's feel as I do that it is a mess at times. Your right. You can't get much accomplished. Again, your right. The only way to correct that is for each and everyone of us to pull together. Now you know gentleman, it is very strange to me that you have a station that never meet's "OUR" net but than a new NCOIC is transferred into the station and no problem, in about a week or two, that station is checking into the net. I could go on and on as one of you might in trying to show me where you are so very, very busy that you can't come up just (2) hours out of the whole week. Oh, I might say this, if we could wait till a given station is going to have an I.G., inspection or perhaps a given station has traffic to get out, well, you might hear those stations checking in. Maybe it is convenient for the station or better yet, convenient for the individual. That is the problem gang. Alot of us could do better, MYSELF INCLUDED, to take a long look at what we are doing to "OUR" net. (A QUESTION) DOES YOUR RESPECTIVE STATION WORK AT THE CONVENIENCE OF YOUR PERSONAL NEED'S, OR THE CONVENIENCE OF THE SYSTEM AND YOUR CIRCUIT REQUIREMENT'S (?)

After all my "preaching as it might be said by some of you" I want those of you that do meet the net to know that after 29 November 68 which will be the last Friday in November and we at KH6BGS are net control on Friday, we will not, repeat, NOT be checking into the net. That is either to push our traffic or to accept it. I arrived here at KH6BGS (ONE) year ago this month and have tried to encourage both my personal friend's that are at various stations in the system and just the guy's I have worked over the year to give those of us that are trying to keep the net open, a hand. What made me decide to drop the net here at Kaneohe is the fact that there are assigned NCS stations for each day of the week and as of late, I find W6ZJB taking the net except for Friday. It might sound funny to you people that I talk it up in this open letter about trying to make a go of the net and turn around and tell you that we are pulling out. I want the people who care to realize I have tried for a year and it is the same today as it was last October. Well gang, I have tried to get cooperation from you guy's as SSgt. William BIGGS at W4LEV, and BOB at W4PFC did and granted, some did come around. Now this is not for personal satisfaction men, I am just an NCOIC at a station but the net is "OUR" net but most of

you guy's don't read it that way. Fine, that is your business because that is your station. We here at KH6BGS are not going off the air. Those of you that wish to contact us, we will be setting up amateur schedules on 21,370 KHZ and working into many area's. Our schedule will run Monday -THRU- Friday starting at 19:00 ZULU. This schedule naturally will be implemented effective 2 December 68. Until that date and time, we will be doing our very best to maintain the best service into and out of the State of Hawaii. I can't speak for Camp Smith but that station might start to cover the Marine Corps net in the very near future. For those of you who do not know it, SSgt. Russ MILLER from NORSEB El Toro has reported aboard and taken the bull by the horns and if the proper attitude is taken toward's SSgt. Miller, there at Camp Smith, thing's will improve at that station. Just want to welcome Russ to the system here and wish him good luck in every endeavor. That about covers thing's from this end of the big blue water gang. God bless you and yours and will be seeing some of you com January.

73s

Dick

NOJWW-WB6ZFB @ NOIZG



**IN THE TUBE —** Marine LCpl. G. L. Thompkins holds the bipod on a 60mm mortar as LCpl. G. E. Knapp drops an HE round down the tube. Cpl. W. P. Troy adjusts the rounds by radio on VC positions for "C" Co., 1st Bn., First Marines.



# MARS CALLING



Hello. Is this 437-5023? Good. I am calling from Albany and ....  
 Albany? Well, it's about 80 miles from Columbus where you are and ....  
 Yes, Ma'am. At the Marine Corps Supply Center. Right.  
 Well, I am calling to give you a message from your husband Earl. I just received

.... Your husband's name is not Earl, it's Carl? Oh, I see. Well, two of the letters, the "C" and "E", are the same in each name and I guess it was easy for someone to mistake Carl for Earl, heh heh.

Well, anyway, your husband Carl sent this message by MARS from .....

MARS? No ma'am, I can assure you it did not come from another planet. MARS is the abbreviation for Military Affiliate Radio System. Uh, well, that's where a lot of fellows throughout the world talk to each other by radio and sometimes transmit messages for people like your husband ....

No, there is no charge for sending messages by MARS.

Yes, I think it is a fine thing too.

Well, this message from your husband is from Da Nang, Vietnam and he says ....

He never was in Da Nang? It should be Nha Trang? Well, I guess the radio operator couldn't smell, heh heh, I mean spell Nha Trang and felt it wouldn't make much difference, Da Nang or Nha Trang, as long as you got your husband's message. Here it is, Mrs. Smith ....

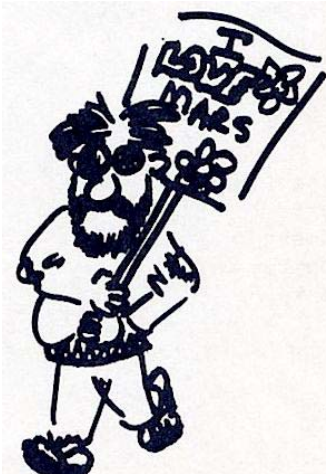
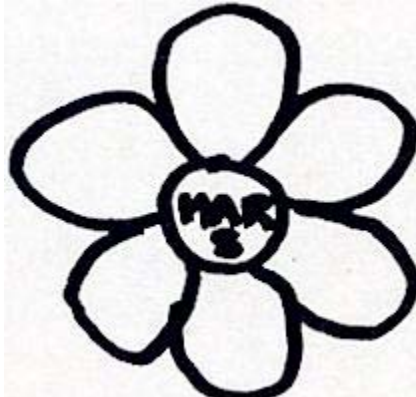
Oh, your name is SmithERS, not Smith? I guess the name Smith is so common that some radio operator must have thought that Smithers was wrong and changed it to Smith, heh, heh. Well, Mrs. Smithers, here is the message:

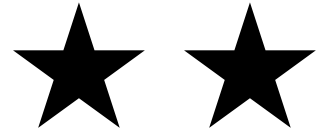
SWEETHEART I SHOULD. BE GETTING BACK TO THE STATES  
 IN TIME FOR CHRISTMAS YOUR LOVING HUSBAND EARL ..... uh  
 I mean CARL.

Uh, what was that again, Mrs. Smithers? heh heh You were laughing so hard, that I missed what you said.

Oh .... Your husband came home four days ago. Well, uh, that's nice Goodbye.

NOAMC - K4MCL





I am not sure why I ever bother to write an editorial, I doubt if this column is read by 30% of all subscribers. It real-ly bums me up when I spend many hours making up a report ton for NOALM and month after month only find a traffic report and the rest of the form virgin. If you cant at least write a small paragraph on station activities for the NEWS&VIEWS column, don't bother to submit a trafic report I will consider your station inactive. Is it really asking to much gentlemen, cutting, drawing and all the other nasties of put ting this rag together. Sure, I get a lot of nice comments from the mailing list, but that does-not make the publication fat. Maybe the subscription rates are too low, nowadays unless a I person is overcharged he thinks it is inferior work, maybe I should start charging participation. As my launderess says " NO TICKEE NO SHIRTEE "

# ZERO BEAT NEEDS YOU

Well I have said my piece and don't really expect much to come of this happening on paper. I only will be putting out three more issues before retiring maybe the next managing editor will do better. BOB NOKGG WB2AMI

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When promulgating your esoteric cogitations or articulating your sentimental superficialities and amicable, philosophical, or psychological observations, beware of platitudinous ponderosity. Let your conversational communications demonstrate a clarified conciseness a compact comprehensibility, no coalescent conglomerations of precocious garrulity, jejune bafflement or asinine affectations.....  
To paraphrase, SAY\* WHAT YOU MEAN, and don't use big words or cuss words doing it !!!!  
73's BOB NOSIZ-WB6OPA

# NOFAA-W4LEV

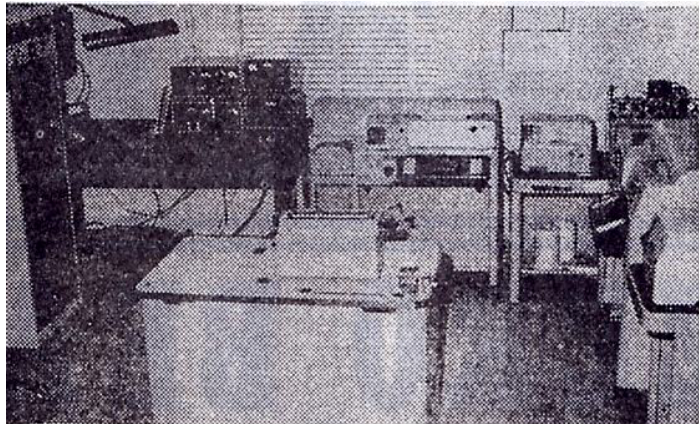
## CAMP LEJEUNE, N.C.



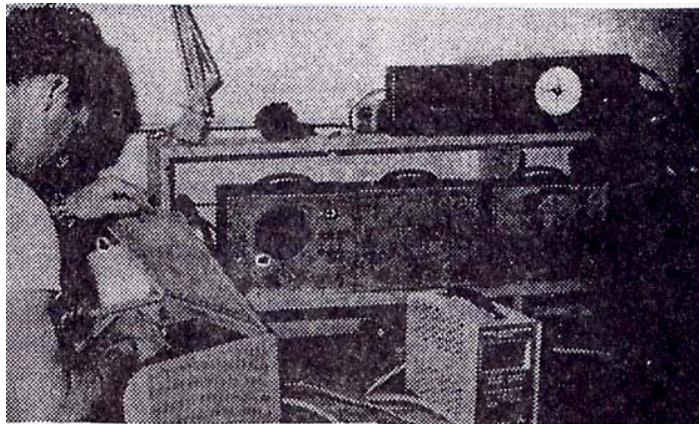
WRITTEN BY SSGT W. H. BIGGS

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At MCB Camp Lejeune's MARS Station NOFAA - W4LEV, our time is spent originating nastygrams, relaying traffic to the seven southeastern states comprising the 6th NMD, receiving nastygrams, phone-patch operations with Gitmo, deployed units from the 2nd MarDiv Vieques Island relaying nastygrams and training the one thousand members of the 6th.



In order to carry out the responsibilities outlined above, and as 6th NMD primary/major relay station we find it necessary to rely heavily on our three S lines, Henry Eft's, Frederick TTY Terminal equipment, model 28's and our six antennas, which includes a Collins 673B Log (6.5-30mhz) operational since early January 1966.



Of course, the equipment does not quite make it by itself. The dedicated and somewhat bleary eyed personnel that man the Ivory Tower from 0700 to 2300 Monday thru Saturday, play an important role SSgt W.H. "Bill" Biggs, Sgt R.E. "Chris" Christman, Cpl T.E. "Terry" Hines and LCpl Don Dufoe make up the staff here on the plantation.

CONTINUED ON FOLLOWING PAGE

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Some of the changes in the southland include a new central heating plant plans ( physical & fiscal) have been approved for central air conditioning, a new roof and tile (deck and acoustical). Operationally NOFAA can boast of many firsts, such as a 100wpm hotline to Base comm gives us instant access to military communications systems in emergencies such as the recent Hurricane Gladys We are proud to be a member of the most advanced, forward looking and efficient Navy-Marine Corps District. The 6th under the guidance of RMC Earl Crawford NOASC, pioneered and put into operation the first completely auto sel-call system on 60wpm RATT. The sixth was also recently tasked with research and development of a practical sattalite communications system for the MARS program. Following the lead of NOITK, Bill Rowe, and with the help of the many extremely capable members of the 6th. the entire problem is worked out in less than a month.

73' s Bill Biggs



MODEL 28 PAGE PRINTER: anything. Don't keep all the goodies in the states gang, The NOEF Boys

NEWS&VI EWS

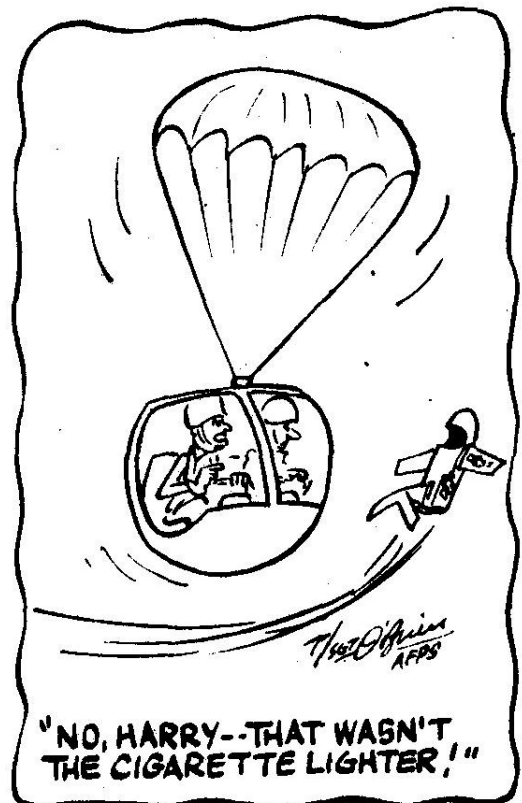
Continued from page.... 2

NOENV- KA5MC  
IWAKUNI, JAPAN.

He now have two operators here in Iwakuni as of the 3rd of Oct. They are Sgt Bill Apsey and L/Cpl Phil Liccardi. Also a "Part Time" operator takes an occasional RVN schedule in the afternoon whose handle is Kathy and rank is XYL. We are very soon to have a very unusual QTC count on the Seasons Greetings messages we had run off that offer to the originator a ARL number to circle.. Haven't had anyone improperly fill them out yet. We are also in hopes of having RTTY capabilities in the near future. 40-60-100 WPM.

Duck hunting season opened this morning and Phil really had a struggle getting both of them to the station refer. He wants to make his own feather pillows. Also working for a 24 hour station with 3 ops in December. 73's and glad to be back in the system.

Bill Apsey







# NOPPC



## RVN-CONUS PHONE PATCH COORDINATOR.

FREQ TOLERANCE IAW DNC 8 ANNEX(B) AND ALL CURRENT/SPECIAL INSTRUCTIONS PERTAINING THERETO

REQUESTS FOR ASSIGNMENTS/NOMINATIONS TO RVN/CONUS PHONE PATCH ACTIVITY CONTAINED IN NAVMARS 31/68

THIS MESSAGE MAILED TO ALL ADDEES AS CONFIRMATION AND ALL PREVIOUS RVN/CONUS PHONE PATCH ASSIGNMENTS MADE PRIOR TO 110100Z OCT 68 ARE HEREBY CANCELLED. COORDINATION WITH N0GVN EFFECTED 10OCT68

NOPPC SENDS

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### ★ASSIGNMENTS★

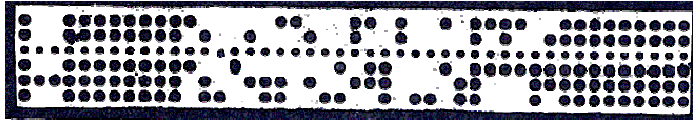
#### RVN/CONUS P/P ASSIGNMENTS (part2) (continued)

|       |     |     |       |     |       |       |      |       |       |       |       |
|-------|-----|-----|-------|-----|-------|-------|------|-------|-------|-------|-------|
| 20375 | USB | (P) | NORTW | (B) | N0KRY | N0USM | WORK | N0EFG | N0EFI | N0EFK | N0EFO |
| 20525 | USB | (P) | NAV 8 | (B) | N0JCQ | N0WTG |      | N0EFE | N0EFO | N0EFS | N0EFY |
| 20625 | USB | (P) | N0ANP | (B) | N0JUX |       |      | N0EFB | N0EFC | N0EFL | N0EFY |
| 21760 | USB | (P) | N0TEF | (B) | N0JPJ |       |      | N0EFA | N0EFD | N0EFJ | N0EFN |
| 21785 | USB | (P) | N0RTY | (B) | N0ZSJ |       |      | N0EFG | N0EFH | N0EFK | N0EFM |
| 27900 | LSB | (P) | N0JUX | (B) | N0JPJ | N0USM |      | N0EFC | N0EFL | N0EFY |       |
|       | USB | (P) | N0RTW | (B) | N0FMO |       |      | N0EFB | NOEDF | N0EFJ |       |

Next month : RVN ?CONUS P?P FREQ'S, DISTRCT CLEARANCE WITHIN CONUS 73.....

BOB N0SUZ/WB6OPA  
NOPPC @ N0ANP

# RTTY TELETYPE CORNER



MODEL 28 — Signal Generator  
by Bob James N0LQA-WA4KBJ @ NAV2

This article will be another on the theory of operation of the Teletype Corporation Model 28 teletypewriter equipments. Previously, the path the intelligence takes from the key tops up to the signal generator was discussed. Now we will discuss how the intelligence is transferred into the signal generator mechanism and then to other parts of the machine.

When power is on the machine (the motor running) the signal generator clutch drum rotates continuously in a clockwise direction. Once the clutch is engaged the cam will also rotate.

Each of the code bars operates its own transfer lever (Figure 1). Notice there are two other transfer levers. These two transfer levers are not affected by the code bars. They are used to originate the start and stop pulses.

The lobes on the signal generator cam are numbered from 1 to 8 (rear to front) Seven of these are for signal pulses (start, stop, and 5 intelligence pulses) and the eighth for activating the locking bail.

As the cam rotates, lobe #3(start pulse) engages the start pulse transfer lever and moves it downward. At approximately the same time lobe #8 (locking bail) begins to move the locking bail upward. A blade on the locking bail engages in slots on the selected transfer levers (selected by the code bars) and locks them in position. Unselected transfer levers are locked in the left position as the blade blocks their movement. As a

result of this action by the locking bail, the transfer levers are locked into position during the first few degrees of rotation leaving the code bars free to reset.

Since there is no code bar to engage the start pulse transfer lever, it is held to the left by its spring at all times. As lobe #3 moves this lever down, the book on the upper right of the lever engages the right-hand side of the transfer bail. This trips the transfer ball to the right and pulls the contact drive link to the right (Figure 2). The resulting action of the contact toggle is such that the marking contacts open and the spacing contacts close. Under this condition there is no current in the signal circuit (spacing pulse).

Transfer levers 1, 2, 4, 5, and 6 are pulled downward one at a time by their respective cam lobes and will give a resulting mark or space depending on whether they have previously been set to the right or left. Transfer lever #7 (stop) is permanently held to the right by a stop pin. Therefore it is always marking.

The locking ball holds the transfer levers in their permutated positions until after the beginning of the fifth pulse. At this time lobe #8 pulls the bail down out of locking position and all selected transfer levers are free to return to their left position.

We can see now that the intelligence has been changed from mechanical energy (at the keyboard) into electrical energy by the signal generator mechanism. From the contacts in the signal generator contact box we can transfer this intelligence (by hard wire) to a page printer, a reperforator, or to a keyer and then to some form of carrier to a distant station.

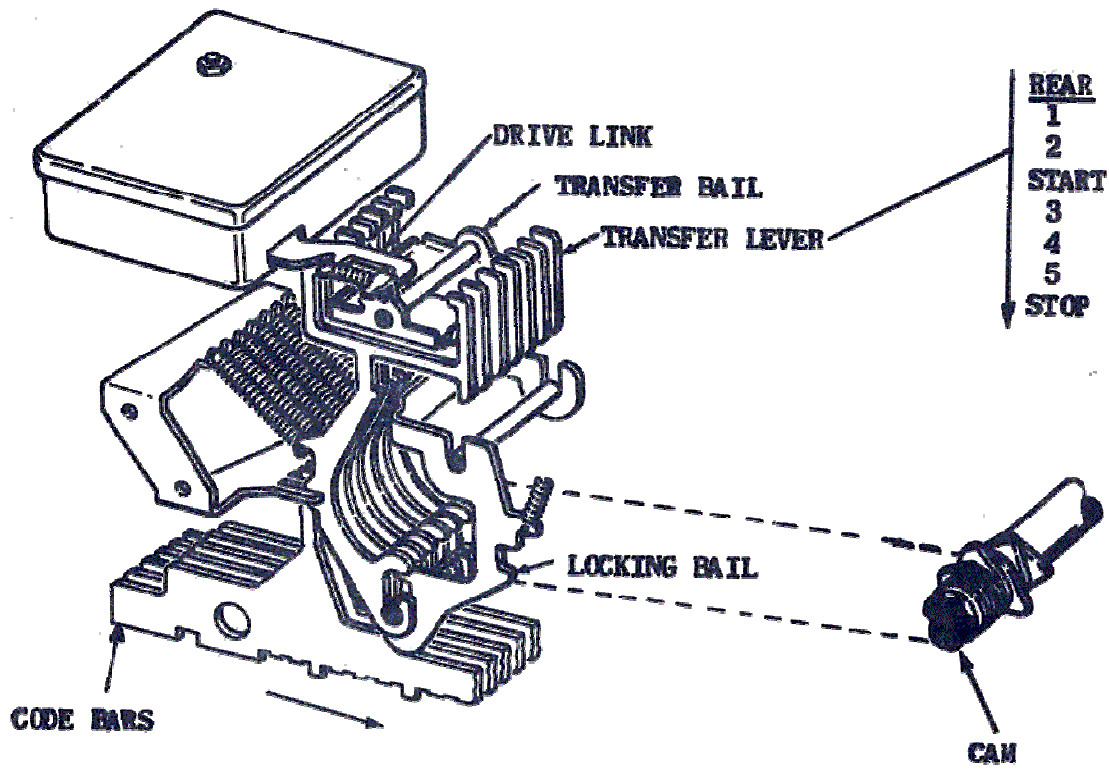


Figure 1 - Transfer Lever Mechanism

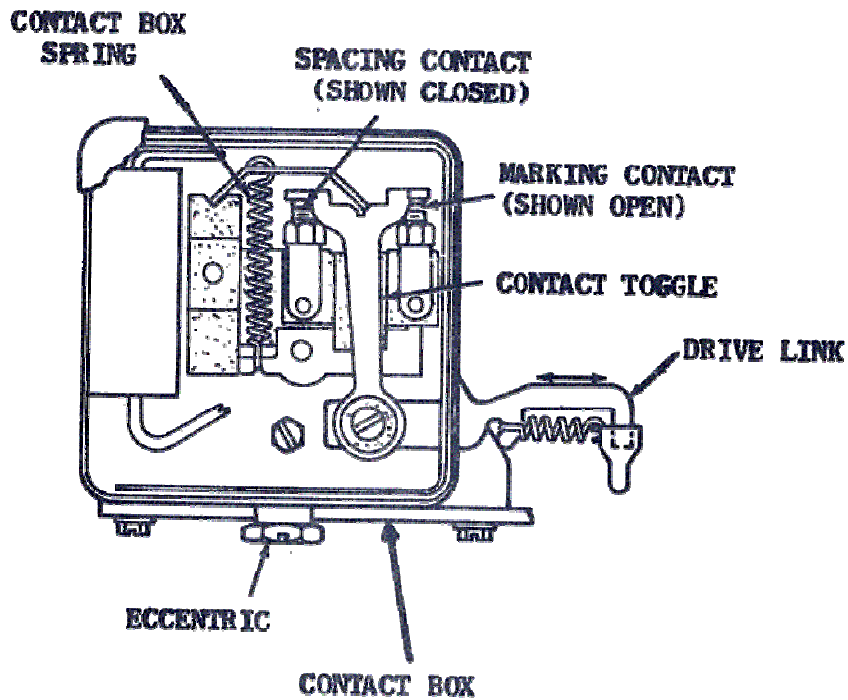


Figure 2 - Contact Box Mechanism

Traffic Report for October 1968.....for NOALM

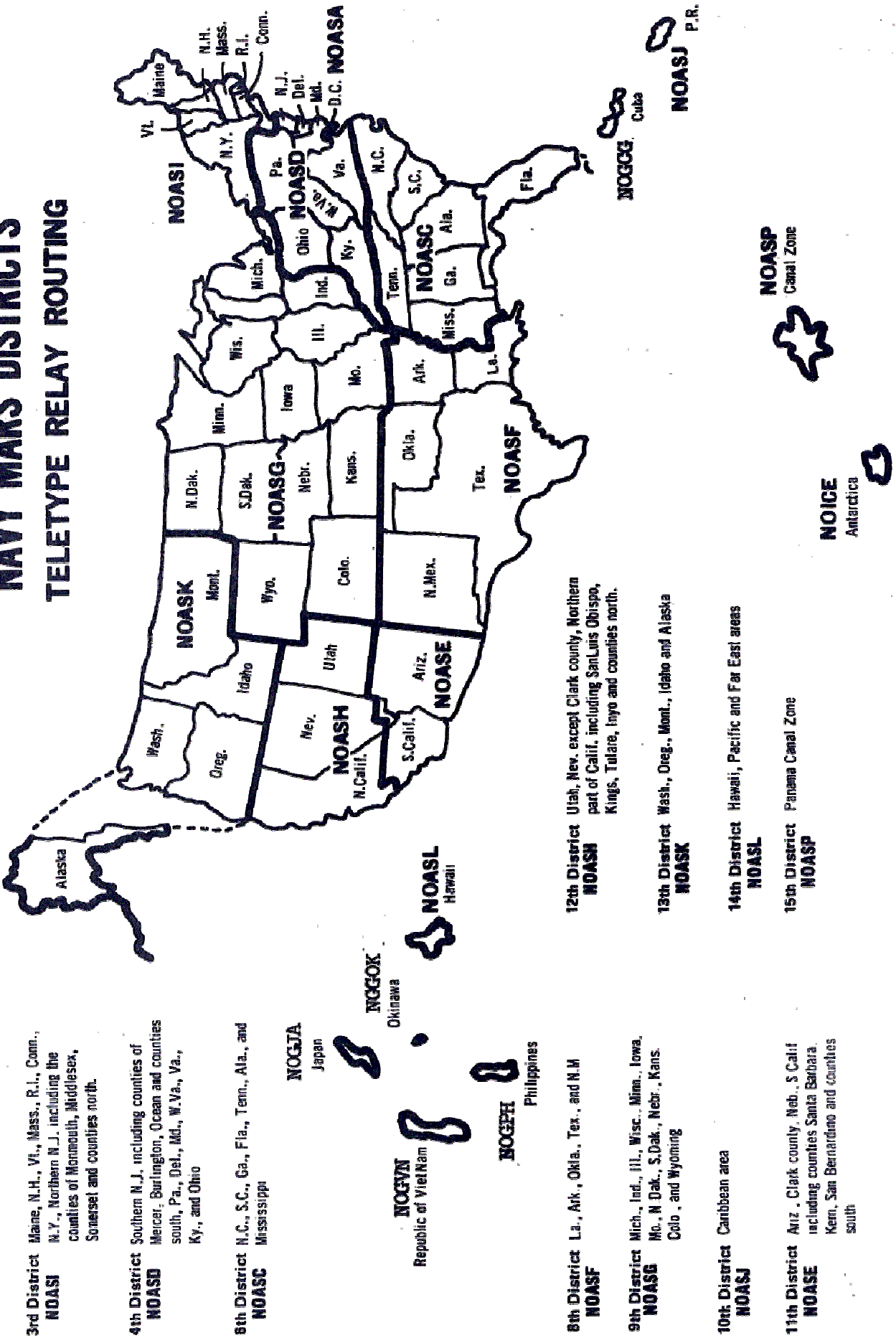
|       | ORIG                    | RCVD | RELY | DLVD | TOTAL | TOTAL P/P |
|-------|-------------------------|------|------|------|-------|-----------|
| NOAMC | 220                     | 30   | 11   | 1    | 262   | 0         |
| NOANP | 2783                    | 944  | 845  | 99   | 4671  | 839       |
| NAV 2 | 33                      | 3784 | 3815 | 2    | 7633  | 70        |
| NOEEM | -                       | 2    | -    | -    | 2     | 209       |
| NOEFA | 40                      | 94   | 25   | 0    | 159   | 763       |
| NOEFB | 555                     | 2791 | 3308 | 41   | 6695  | 772       |
| NOEFC | no report received..... |      |      |      |       |           |
| NOEFD | 147                     | 743  | 873  | 873  | 1020  | 1086      |
| NOEFJ | no report received..... |      |      |      |       |           |
| NOEFL | no report received..... |      |      |      |       |           |
| NOEFY | no report received..... |      |      |      |       |           |
| NOENV | 42                      | 63   | 108  | 36   | 249   | 903       |
| NOETG | 148                     | 15   | 9    | 8    | 172   | 137       |
| NOETH | 791                     | 538  | 1374 | 185  | 2978  | 45        |
| NOETJ | 5                       | 1    | 0    | 1    | 7     | 0         |
| NOETL | 0                       | 2    | 0    | 2    | 4     | 0         |
| NOFAA | 28                      | 1078 | 982  | 68   | 2156  | 527       |
| NOFJM | -                       | -    | -    | -    | -     | 422       |
| NOFOC | no report received..... |      |      |      |       |           |
| NOIVT | no report received..... |      |      |      |       |           |
| NOIXF | no report received..... |      |      |      |       |           |
| NOIZG | -                       | -    | -    | -    | -     | 768       |
| NORSB | 85                      | 5    | -    | 1    | 91    | 2327      |
| NORSE | no report received..... |      |      |      |       |           |
| NORTP | 112                     | 517  | 580  | 20   | 1229  | -         |
| NORTW | 6                       | 15   | 5    | 10   | 36    | 1778      |
| NOTEF | no report received..... |      |      |      |       |           |
| NOXXN | 2                       | 14   | 8    | 4    | 28    | -         |

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

|        | ORIG   | RCVD | RELY | DLVD | TOTAL | TOTAL P/P |
|--------|--|------|------|------|-------|-----------|
| W4BHU  | 1  | 10   | 11   | 0    | 22    | 16        |
| K4BUJ  | No report received                                   |      |      |      |       |           |
| W4LEV  | 0  | 5    | 0    | 5    | 10    | 8         |
| K4MCL  | 12   | 225  | 17   | 1    | 255   | 148       |
| W4NTR  | -  | -    | -    | -    | -     | -         |
| W4PFC  | 81   | 273  | 17   | 1    | 255   | 148       |
| KG4AM  | -  | -    | -    | -    | -     | 530       |
| KP4AZJ | No report received                                   |      |      |      |       |           |
| KA5MC  | Not applicable in Japan . no third party agreements. |      |      |      |       |           |
| W6FCS  | 1  | 50   | -    | 50   | 101   | 423       |
| W6IAB  | No report received                                   |      |      |      |       |           |
| K6MCA  | No report received                                   |      |      |      |       |           |
| W6YDK  | 4284   | 37   | 12   | 25   | 4358  | 16        |
| W6ZJB  | 4  | 4    | 2    | 2    | 12    | 178       |
| KH6AJF | -  | -    | -    | -    | -     | 2         |
| KH6BGS | -  | -    | -    | -    | -     | 68        |
| KR6DI  | 10   | 0    | 10   | 0    | 20    | 542       |
| KR6GF  | 45   | 8    | 3    | 5    | 61    | 525       |
| KR6MB  | 6  | 3    | 3    | 0    | 11    | 207       |
| KR6MH  | -  | -    | -    | -    | -     | 1496      |

# NAVY MARS DISTRICTS

## TELETYPE RELAY ROUTING



3rd District  
**NOASI**  
 Maine, N.H., Vt., Mass., R.I., Conn., N.Y., Northern N.J. including the counties of Monmouth, Middlesex, Somerset and counties north.

4th District  
**NOASD**  
 Southern N.J. including counties of Mercer, Burlington, Ocean and counties south, Pa., Del., Md., W.Va., Va., Ky., and Ohio

8th District  
**NOASC**  
 N.C., S.C., Ga., Fla., Tenn., Ala., and Mississippi

**NOASK**  
 Alaska

**NOASL**  
 Okinawa

**NOASJ**  
 Republic of Viet Nam

**NOASPH**  
 Philippines

8th District  
**NOASF**  
 La., Ark., Okla., Tex., and N.M.

9th District  
**NOASG**  
 Mich., Ind., Ill., Wisc., Minn., Iowa, Mo., N. Dak., S. Dak., Nebr., Kans. Colo., and Wyoming

10th District  
**NOASB**  
 Caribbean area

11th District  
**NOASH**  
 Ariz., Clark county, Nev., S. Calif. including counties Santa Barbara, Kern, San Bernardino and counties south

12th District  
**NOASH**  
 Utah, Nev. except Clark county, Northern part of Calif. including San Luis Obispo, Kings, Tulare, Inyo and counties north.

13th District  
**NOASK**  
 Wash., Oreg., Mont., Idaho and Alaska

14th District  
**NOASL**  
 Hawaii, Pacific and Far East areas

15th District  
**NOASP**  
 Panama Canal Zone

**NOICE**  
 Antarctica

**NOASP**  
 Canal Zone

**NOASJ**  
 P.R.

**NOASB**  
 Cuba