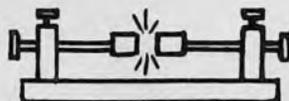


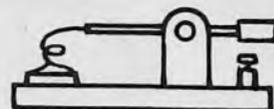
Spark-Gap Times

KEIM
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Published By

The Old Old Timers Club



NUMBER 17

CHATTANOOGA 11, TENN.

1 OCTOBER, -1963

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THE OCTOBER NUMBER OF SPARK GAP TIMES IS SOMEWHAT LARGER THAN ANY PREVIOUS NUMBERS AND IT IS HOPED WILL BE ENJOYED ACCORDINGLY. EFFORTS HAVE BEEN MADE TO KEEP THE BLUNDERS DOWN TO A MINIMUM, BUT WHERE THEY OCCUR, IT IS HOPED THAT OUR READERS WILL BE TOLERANT. THE PUBLICATION OF ANYTHING WITHOUT AID IS FRAUGHT WITH POSSIBILITY OF MISTAKES.

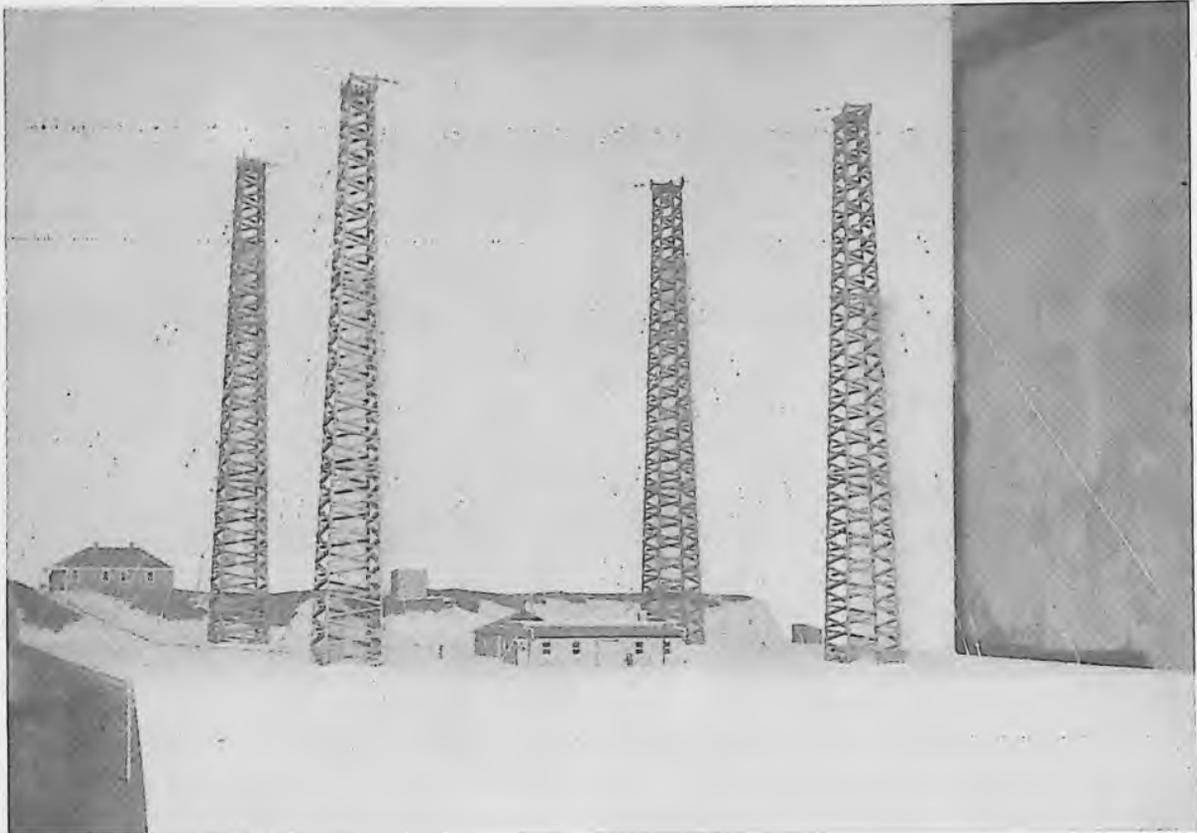
YOUR ATTENTION IS DIRECTED TO THE FINE AD THAT HAS APPEARED IN CQ FOR THE PAST TWO MONTHS THIS HAS BEEN DONE BY ARNOLD TROSSMAN, EDITOR OF CQ WITH HIS COMPLIMENTS. THIS IS INDEED MOST GENEROUS AND IS DESERVING OF ANY COOPERATION WE CAN GIVE CQ. AN ACTION OF THIS SORT IS ALL TOO SELDOM FOUND IN THIS AGE OF DOLLAR CHASING PREOCCUPATION. THANKS ARNOLD, WE HOPE THAT WE MAY SOME DAY IN SOME MEASURE, REPAY YOU FOR YOUR THOUGHTFULNESS.

THE AD TO BE FOUND IN THAT FINE LITTLE JOURNAL, ELECTRONICS JOURNAL WAS ALSO CONTRIBUTED BY THE EDITOR AND THIS HAS BEEN EFFECT FOR MANY MONTHS. DON WILLIAMSON IS MAKING A VALIANT EFFORT TO GIVE THE AMATEUR THE READING MATTER HE NEEDS AND WANTS. WITH THE HELP OF SOME OF THE BEST RADIO MINDS IN THE BUSINESS, HE HAS DONE A SPLENDID JOB, BUT LIKE ALL PUBLICATIONS HE COULD ALWAYS USE MORE SUBSCRIPTIONS AND MORE ADVERTISING.

THE TWO EXAMPLES ABOVE CERTAINLY SHOWS A GREAT SPIRIT AND IF ANY OF YOU FELLOWS ARE NOT PRESENTLY A SUBSCRIBER AND BELIEVE IN COOPERATIVE EFFORT, JUST SHOW IT BY SENDING IN YOUR SUBSCRIPTION AND ADVERTISING. THEY NOT ONLY WILL APPRECIATE IT BUT YOU WILL RECEIVE SOME MIGHTY FINE READING MATTER.

WE ARE INFORMED THAT OUR FINE BLUE BOOK EDITOR, BERT OSBORNE WILL HAVE THE BLUE BOOK SECTIONS DEVOTED TO THE FOREIGN COMPLETED AND IN YOUR HANDS ABOUT THE TIME YOU RECEIVE SPARK GAP TIMES. AFTER 15 YEARS OF PROMISES THE BLUE BOOK IS NOW A FACT- DUE TO THIS FINE MEMBERS EFFORTS. THANK YOU BERT, THANK YOU. EEC, EDITOR.

THE MARCONI SOUTH WELFLEET STATION
CAPE COD, MASS.



A SMALL IMITATION OF THE REAL THING

THE RE-CREATION OF WCC IN PINT SIZE OF MARCONI'S WIRELESS TELEGRAPH STATION AS IT WAS IN 1903 AT SOUTH WELFLEET, CAPE COD, MASS. ---BY FRED A. PARSONS, W2EXM.

WHEN IN 1902 MARCONI TRUDGED THROUGH THE SAND OF CAPE COD FROM THE LITTLE RAILROAD STATION AT SOUTH WELFLEET OUT TO THE COAST A MILE AWAY, HE HAD IMMEDIATE PROBLEMS THAN TO SPECULATE ABOUT WHAT WOULD HAPPEN THERE 61 YEARS HENCE. PROBABLY THE SELECTION OF SOUTH WELFLEET RATHER THAN ELSEWHERE ON THE CAPE AS THE SITE FOR HIS NEW TRANSATLANTIC WIRELESS STATION WAS ITS PROXIMITY TO THE RAILROAD. A ROAD MUST BE BUILT FOR THE HORSE-DRAWN TRUCKS TO MOVE MUCH PONDEROUS EQUIPMENT AND MATERIAL TO THE CHOSEN LOCATION ON THE HIGH SAND CLIFF LOOKING DOWN ON THE ATLANTIC OCEAN. THE ROAD WHEN ESTABLISHED GRADUALLY ASSUMED THE NAME 'WIRELESS' ROAD AND IS SO DESIGNATED ON CURRENT MAPS. OF LATE THERE HAS DEVELOPED A MOVEMENT TO CHANGE THE NAME TO 'MARCONI ROAD' BUT I THINK THAT IRVING VERMILYA AND I HAVE PREVAILED UPON MR. ROBERT F. GIBBS, THE SUPERINTENDENT OF THE NEW 'CAPE COD NATIONAL SEASHORE' TO RETAIN THE ORIGINAL NAME. THE CONNOTATION OF THE PRIOR NAME SEEMS MORE APPROPRIATE.

MARCONI'S FIRST ENDEAVOR WAS TO ERECT A SYSTEM OF TWENTY 200 FOOT MILITARY MASTS IN A 175 FOOT DIAMETER RING AROUND THE STATION BUILDINGS. AN INVERTED CONICAL ANTENNA OF 200 WIRES HUNG FROM A MESSENGER CABLE AROUND THE TOPS OF THE MASTS AND JOINED TOGETHER AT THE
(NEXT PAGE PLEASE)

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THE MARCONI SOUTH WELLFLEET STATION

BIG LEAD-IN INSULATOR ATOP THE TRANSMITTER HOUSE. THE RIGGERS INVOLVED IN THE CONSTRUCTION PREDICTED THAT THE WHOLE ARRAY WOULD BE ON THE GROUND COME THE FIRST NORTHEASTER AND UNFORTUNATELY THE FORECAST WAS ALL TOO ACCURATE. THIS WAS IN 1902 AND THE STATION NEVER DID GET ON THE AIR THAT YEAR. MARCONI, NOT BEING ONE TO LET THE GRASS GROW UNDER HIS FEET, IMMEDIATELY ARRANGED FOR THE ERECTION OF THE FAMOUS BIG FOUR WOODEN TOWERS AND SO FAST WAS THE CONSTRUCTION WORK THAT ON JANUARY 19, 1903, THE FIRST WIRELESS TELEGRAPH MESSAGE ACROSS THE ATLANTIC WAS FROM AMERICA. THIS MARCONIGRAM HAD BEEN SCHEDULED TO GO VIA GLACE BAY BUT THE TIMELY ACTIVATION OF SOUTH WELLFLEET PERMITTED ITS TRANSMISSION FROM THE LATTER STATION. THE MESSAGE WAS FROM THEODORE ROOSEVELT TO KING EDWARD VII OF ENGLAND.

AS 'CC' IN THE BEGINNING AND 'MCC' IN 1909 AND FINALLY 'WCC' IN 1912, CAPE COD GROUND OUT NIGHTLY PRESS COME 'HELL OR HIGH WATER' UNTIL 1917, WHEN THE U.S.A. ENTERED WWI, THE U.S. NAVY TOOK OVER THE STATION AND CLOSED IT. LATER THE TOWERS WERE CUT DOWN AND EVENTUALLY THE STATION BUILDINGS DEMOLISHED. ALL THE GEAR WENT TO THE BOSTON NAVY YARD AND IT IS SUPPOSED THAT BY NOW THE JUNKMAN HAS CLAIMED IT.

FOR FORTY YEARS OR SO THE WINDSWEEP SPOT REVERTED TO WHAT IT HAD BEEN BEFORE MARCONI EVER LAID EYES ON IT. OF COURSE THE TOWER BASES AND THE STATION CONCRETE FLOORS REMAINED WITH THE MACHINERY STUDS SLOWLY RUSTING AWAY, NOW COVERED WITH SAND AND AGAIN SWEEP CLEAN, AND THE OCEAN SLOWLY NIBBLING AWAY AT THE CLIFF. AS THE CLIFF ERODES WESTWARD AT THE RATE OF FROM TWO OR THREE FEET A YEAR THE OUTER TOWER BASES WERE THE FIRST TO SLIDE DOWN THE BANK INTO DAVEY JONES LOCKER AND ETERNAL OBLIVION. TODAY THE WESTERN FOUNDATION OF THE POWER HOUSE FOUNDATION TEETERS ON THE BRINK LEAVING THE TRANSMITTER HOUSE AND CORRIDOR FLOORS INTACT. THE WESTERLY BASES ARE STILL THERE WITH THE NORTHWEST BASE UNCOVERED BY THE NEW PARK AND THE SOUTHWEST ON STILL ANOTHER SIXTEEN FEET OF SAND.

SUDDENLY A CHANGE WAS IN THE MAKING. THE FEDERAL GOVERNMENT ESTABLISHED THE 'CAPE COD SEASHORE' AND THE SECTION OF THE CAPE COAST INCLUDING THE OLD STATION SITE WAS DESIGNATED THE 'MARCONI STATION AREA'. THROUGH ONE OF THOSE STRANGE QUIRKS OF FATE, THE NEW SUPERINTENDENT, MR. GIBBS, ACQUIRED AS HIS SECRETARY, A WOMAN WHO AS A BABE IN ARMS, IRVING VERMILYA USED TO BOUNCE ON HIS KNEES. THROUGH THE YEARS LONG AFTER IRV HAD LEFT 'WCC' THEY MAINTAINED CONTACT. SHE WAS THE GIRL WHO DUBBED HIM 'SPEEDO'. BEING SPEEDO TO THE BITTER END, IRV GRABBED THE PHONE ONE DAY AND VIA MRS. BALDWIN TOLD MR. GIBBS THAT W2EXM WAS TOYING WITH THE IDEA OF MAKING A MODEL OF THE OLD MARCONI STATION AS IT HAD BEEN IN 1903 WHEN THAT MESSAGE WAS SENT. THAT STARTED THE BALL ROLLING AND IN SHORT ORDER I RECEIVED A LETTER FROM GIBBS SOUNDING ME OUT ON THE PROPOSAL. THE UPSHOT WAS THAT I WAS COMMITTED. JUNE 30 WAS THE DEADLINE SO I HAD ABOUT FOUR MONTHS AHEAD TO COMPLETE THE TASK. TO HELP THEM PREPARE SLIDES FOR LECTURES AND TRAIN THE GUIDES I SENT THEM ALL MY OLD NEGATIVES AND A SHORT HISTORY OF THE STATION. THE EARLIEST WAS OF THE NEST OF MASTS FROM 1902 WHICH MY DAD TOOK AND IT WAS AT THAT TIME WHEN I HAD MY FIRST LOOK AT SOUTH WELLFLEET; FORTUNATELY, OVER THE YEARS I HAD COLLECTED A RAFT OF INFORMATION AND WAS WELL ARMED WITH THE NECESSARY DATA TO EXECUTE AN ACCURATE MINIATURE RENDITION OF WCC. MORE INFORMATION WILL BE ADDED LATER.

CAME THE FATEFUL DAY OF JUNE 30, WHEN WE WERE TO TRANSPORT THE MODEL TO THE CAPE. AS THE BASE IS FOUR FEET WIDE AND SIX FEET DEEP. ONLY A FORD ECONOLINE DELIVERY TRUCK HAD DOORS WIDE ENOUGH TO ACCEPT THE WIDTH. FLOATING THE MODEL ON FOUR OLD INFLATED INNER TUBES, WE WENT AND SAFELY NEGOTIATED THE TRIP, UNLOADING IT AT A TEMPORARY LOCATION. THE RIG BEING A HIRED ONE WE FOUND IT EXPEDIENT TO RETURN TO NEW YORK THE NEXT DAY. THE BIG EVENT OF DEDICATING THE "MARCONI STATION AREA" WAS TO OCCUR ON FRIDAY THE FIFTH AT 3.00 PM SO BACK TO THE CAPE I WENT, THIS TIME VIA TRAIN, ARRIVING ON THURSDAY.

(NEXT PAGE PLEASE)

THE MARCONI SOUTH WELLFLEET STATION

EARL FRIDAY I RAN OUT TO CHECK THE MODEL IN ITS FINAL RESTING PLACE AND FOUND THAT THE PARK PEOPLE HAD DONE A BANGUP JOB. IN THE CENTER OF THE SHELTER, A BRICK BASE HAD BEEN PROVIDED USING SOME THAT HAD COME FROM THE POWERHOUSE FOUNDATION. A RECESS HAD BEEN LEFT AT THE TOP INTO WHICH THE MODEL RESTED. A HEAVY GLASS CASE ABOVE THE BASE PROTECTED THE MODEL FROM WEATHER AND VISITORS. LATER AN ALUMINUM HOOD WILL BE HUNG ABOVE THE FRAMEWORK AND LOWERED AT NIGHT. RECESSES IN THE TWO LONG FACES OF THE BRICKWORK WILL HOLD CAST ALUMINUM PLATES AND ON ONE WILL BE THE FAMOUS MESSAGE IN CONTINENTAL CODE (TRANSLATED BY IRVING VERMILYA) AND THE OTHER THE SAME MESSAGE IN PLAIN ENGLISH. THE MODEL IS ORIENTED TO FACE EXACTLY IN THE DIRECTION OF THE ORIGINAL STATION.

THREE PM AND ALL WAS SET. WITH A GOODLY CROWD OUT FRONT, MR. WALTER CAMPBELL, SON OF SAM, WHO WAS MARCONI'S CHIEF MECHANICAL ENGINEER BUT RECENTLY DECEASED, WAS THE MASTER OF CEREMONIES. MR. GIBBS, PARK SUPERINTENDENT CAME UP FIRST AND OUTLINED THE AIMS OF THE NEW PARK AND WHAT WAS TO TAKE PLACE AT THIS GATHERING. NEXT A MINISTER GAVE BLESSINGS AND FOLLOWING HIM MR. CARL TAYLOR DELIVERED REMINISCENCES ON HIS CONNECTION WITH THE SATATION FROM 1902 ON. HE CAME OVER WITH MARCONI IN THAT YEAR TO GET THE STATION ON THE AIR. HALE AND HEARTY AT 88, MR. TAYLOR DID A FINE JOB. I WILL CONFESS THAT I DID MISS A BITHERE AND THERE FOR I COULD SEE BY THE BATTING ORDER THAT I WAS NEXT TO THE MIKE. I FORTHWITH PRESENTED THE MODEL TO THE PARK AND GAVE A BIT OF INFORMATION REGARDING ITS HISTORY. SO MANY FOLKS HAD ASKED HOW LONG IT TOOK TO BUILD THAT AS A MATTER OF GENERAL INFORMATION I SAID, "FIFTY YEARS." A BIT OF QUALIFICATION WAS IN ORDER OF COURSE. IT TOOK ABOUT FIFTY YEARS TO AMASS ALL THE DATA AND ABOUT FIVE MONTHS ACTUAL WORK ON THE MODEL. AT THE FINISH, MR. GIBBS PRESENTED ME WITH A CERTIFICATE OF APPRECIATION FROM THE DEPARTMENT OF THE INTERIOR.

NEXT ON THE AGENDA WAS WHAT WAS CALLED THE REDEDICATION OF A SMALL MONUMENT WITH BRONZE PLACQUE WHICH COMMORATED THE TRANSMISSION OF THE NOW FAMOUS MESSAGE. WHEN FIRST SET UP AND DEDICATED IN 1950 IT WAS NECESSARY TO PLACE THE STONE SOME DISTANCE FROM THE ACTUAL SITE OF THE SATATION. THE NAVY STILL CONTROLLED THE SPOT AND BEING THE NAVY WOULD NOT PERMIT PROPER PLACEMENT. IT IS NOW IN ITS RIGHTFUL PLACE AND THE SAME MINISTER AND MR. TAYLOR WHO HAD ORIGINALLY OFFICIATED DID THEIR STUFF A SECOND TIME.

THE SHELTER IS A STURDY STRUCTURE ATOP THE SAND DUNES AND ONE CAN LOOK DOWN IN THREE DIRECTIONS OVER THE SITE OF WCC. IT STANDS JUST ABOUT WHERE A SMALL BRICK BUILDING, THE OLD OIL STORAGE HOUSE, CAN BE SEEN IN THE MODEL. IT IS TO THE REAR OF AND BETWEEN THE TWO REAR TOWERS. THE PRIMARY REASON FOR A MODEL IS TO GIVE VISITORS A CLEAR IDEA AS TO JUST WHAT A 1912 WIRELESS STATION LOOKED LIKE AND OF COURSE SPECIFICALLY MARCONI'S BID FOR TRANSATLANTIC SUPREMACY. AFTER THE GUIDE HAS EXPLAINED THE STATION FEATURES FROM THE MODEL HE TAKES THEM AROUND TO VIEW THE FEW REMAINS EXTANT.

A FEW SPECS ON THE MODEL MIGHT BE OF INTEREST. THE SCALE IS 1/8 INCH TO THE FOOT. TOWERS ARE 27 INCHES HIGH. THERE ARE 256 DEADEYES IN THE 40 GUYS. MARCONI USED DEADEYES IN PAIRS CONNECTED BY MANILA ROPE ROVE THROUGH THREE HOLES IN THE EYES GIVING SIX PARTS OF LINE BETWEEN THE ONE INCH STEEL GUY SECTIONS. THIS CONSTITUTED A GUY WIRE STRAIN INSULATOR VINTAGE 1902. MOST DEADEYES WERE SIX INCHES OUTSIDE DIAMETER WHICH CALLED FOR 1/16 INCH IN THE MODEL AND EACH WITH THREE HOLES THEREIN. THE THREE OUTER GUYS FOR THE TOWERS ARE TERMINATED AT THOLE PINS ON THE PLATFORM TOP AS THEY TAKE THE STRAIN OF THE ANTENNA. ALL OTHERS RUN THROUGH THE SURFACE AND TIE TO HELICAL SPRINGS WHICH KEEP LIGHT TENSION ON THEM INSURING A NEATER JOB. THE 48 #32 COPPER ANTENNA WIRES, EACH HAVING A SMALL WEIGHT ON IT UNDER THE TRANSMITTER HOUSE FLOOR, FORM AN INVERTED PYRAMID. THE WEIGHTS ON THE WIRES SIMPLIFIED THE PROBLEM OF UNIFORM TENSION AND PRESERVED THE SHAPE OF THE ARC OF THE MESSENGER CABLES AROUND THE TOWER TOPS.

(PLEASE TURN TO NEXT PAGE)

THE MARCONI SOUTH WELLFLEET STATION

MARCONI USED A RATHER NOVEL FORM OF ANTENNA INSULATOR AT WCC, AT LEAST IN THE EARLY DAYS. TWO THICK WALLED HARD RUBBER TUBES 20 INCHES LONG WERE SLIPPED OVER A HEAVY MANILA LINE WITH A SEPARATION OF ABOUT FOUR INCHES BETWEEN THE TUBES AT THE CENTER. THE OUTER ENDS OF THE LINE WERE SPLICED AROUND HEAVY THIMBLES. THE ENDS OF THE TUBES WERE SEALED WITH HOT SULPHUR INSURING A DRY LINE INSIDE THE TUBES. THESE, IN MINIATURE, MAY BE SEEN IN THE PHOTO AT THE TOPS OF THE TOWERS.

THE ACTUAL TOWERS HAD LEGS 12 X 12 INCHES MADE UP OF FOUR 3 X 12 PLANKS WITH THE BUTTS STAGGERED. THE LATTICE OR DIAGONAL MEMBERS WERE 3 X 12 WITH A PLANK ON THE INSIDE AS WELL AS OUTSIDE THE LEGS. THERE IS A BOARDWALK RUNNING FROM THE CREW QUARTERS, LEFT REAR, TO THE STATION. 400 SMALL 1/32 INCH THICK BY 1/16 WIDE MAKE UP THIS WALK. BETWEEN THE LEFT TOWER AND THE STATION A FIGURE, PRESUMABLY IRV VERMILYA, CAN BE SEEN TRODING ALONG THE PLANKS. PERHAPS THAT IS MARCONI STANDING TO THE RIGHT OF THE POWERHOUSE FRONT DOOR.

THE MAKING OF THE MODEL PROVIDED MANY, MANY HOURS OF VERY INTERESTING WORK AND TO KNOW THAT IT WOULD PROVE A FINE TOOL FOR THE PEOPLE AT THE PARK MADE THE EFFORT THAT MUCH MORE WORTHWHILE.

FRED A PARSONS W2EXM
2747 EDGEHILL AVE.
NEW YORK 63, N.Y.

NOTE FROM EDITOR:--OLD SOUTH WELLFLEET PROBABLY HAS BEEN THE SUBJECT OF MORE INTEREST AND DISCUSSION THAN ANY OTHER HISTORICAL PLACE DEVOTED TO "WIRELESS." THERE HAVE BEEN MANY MENTIONS OF IT IN PAST ISSUES OF SPARK GAP TIMES AND THE FOREGOING TREATMENT BY W2EXM, FRED PARSONS IS OUTSTANDING. OLD SOUTH WELLFLEET IS SO CLOSELY RELATED TO MANY OF OUR MEMBERS AND PROBABLY IRVING VERMILYA FEELS IT TO BE A PART OF HIM.

YE OLDE EDITOR WAS IN TOUCH WITH IRVING THE OTHER EVENING AND LEARNED OF THE MOST INTERESTING MANNER IN WHICH THE MODEL WAS INITIATED. IT IS A CREDIT TO FRED AND IRVING TO FIND TWO SUCH OUTSTANDING MEMBERS COOPERATING IN GETTING THIS PROJECT COMPLETED TO THE END THAT OUR CITIZENS MAY GAIN SOME KNOWLEDGE OF THE EARLIEST DAYS OF "WIRELESS." A TIP OF THE HAT TO ALL CONCERNED AND ALL CIRCUITS IN RESONANCE TO FRED AND IRVING. EEC.

FRED ELSER W6FB LOG

IN A LETTER RECEIVED FROM FRED SEVERAL MONTHS AGO, HE SUBMITTED A LIST OF STATIONS RECEIVED AND WORKED IN MARCH AND APRIL, 1923. 6AM THEN ON 1/2 KW. STATIONS WORKED IN PARA.

5ADB, 7VF, 5ZA, 6ABH, 6BFL, 6CAX, 6FY, 7TQ, 6ABU, 6BGH, 6CAY, 6TU, 6ACM, 6BHY, 6CBA, 6WN 6AO, 6BIM 6CDB, (6AOA), 6BM, 6CEC, (6AQU), (6BOS), 6AVU, 6BOU, 6AWT AND 6BPF.

APRIL, 1923, (6ANM) USING 50 WATT CW. (STATIONS WORKED IN PARENTHESES): (5CN), 7ABH, 9BJK, (5GO), 7AFN, 9CAA, 5GR, 6AAT, 6BCL, 6CAX, 6EW, 7AHW, 9CDE, 5SS, 6ABK, 6BEQ, 6CAY, 6JN, 7DH, 9DVJ, 6ACZ, 6BFF, 6CBI, 6MH, (7GE), (6AGJ), 6BFU, 6CBW, 6OV, 7HJ, 6AHU, 6BGL, 6CEC, 6TU, 7IO, (6AJF), 6BHY, 6CEE, 6VF, 7JS, (6AKT), (6BIG), 6CEJ, 6VZ, 7TQ, (6ALV), 6BKR, 6CET, 6WX, 6ALX, 6BKS, 6CIW, 6ZT, 6APH, 6BLM, 6CKC, 6ASF, 6BMX, 6CKP, 6ASJ, 6BNT, 6CKR, 6ATU, (6BNU), 6CKZ, 6AVF, 6BON, 6CUH, 6AVN, (6BOS), (6AVV), 6BPL, 6AWX, (6BPT), 6BPV, (6BRA), 6BRF, (6BSG), (6BWD), 6BLL. *** ANY OF YOU GENTLEMEN REMEMBER THESE CONTACTS. IF YOU DO I'LL BET A BUCKET OF VOLTS THAT FRED WOULD LIKE TO KNOW. HE IS NOW W6FB
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EARLY USE OF THE AUDION BY NAVY

BY

STANLEY E. HYDE W6IAH

THIS IS A TRUE STORY OF NAVY LIFE DURING THE DAYS OF THE QUENCHED GAP TRANSMITTERS AND CRYSTAL DETECTORS, WHEN A RADIO OPERATOR (THEN CALLED ELECTRICIAN, RADIO) HAD TO HAVE GOOD HEARING AND LOTS OF PATIENCE, WHEN SIGNALS WERE SO WEAK AT TIMES ONE HAD TO USE A SOFT LEAD PENCIL OR THE RESULTANT SCRATCHING WOULD COVER UP THE SIGNAL.

ON OCTOBER 11, 1915 I WAS TRANSFERRED FROM THE CRUISER SAN DIEGO TO THE TORPEDO BOAT U.S.S. STEWART, TIED UP TO THE CORONADO DOCK, IN SAN DIEGO BAY. THE RADIOMAN ON THE STEWART HAD BEEN PAID OFF OR DISCHARGED.

TORPEDO BOATS IN THOSE DAYS WERE SMALL SHIPS, LOW IN THE WATER, VERY LONG AND COULD TRAVEL AT HIGH SPEED. I SAY, "WERE" BECAUSE THEY WERE LATER REPLACED BY THE DESTROYER TYPE OF VESSEL, WHICH WERE OF GREATER TONNAGE AND STILL FASTER SPEED. THE TORPEDO BOATS GENERALLY CARRIED TWO TORPEDO TUBES ON DECK AND SEVERAL 3 INCH GUNS. THEIR PRIMARY PURPOSE WAS TO SLIP UP ON A LARGER VESSEL UNDER COVER OF DARKNESS, DISCHARGE A COUPLE OF TORPEDOES AT HER AND THEN UNDER HIGH SPEED TRY TO MAKE A GET-A-WAY. WHEN A SMALL SLIM VESSEL IS APPROACHING YOU IN THE DARKNESS WITH ALL LIGHTS "DOUSED", IT IS VERY HARD TO SEE HER EVEN WITH POWERFUL SEARCH LIGHTS TRAINED HER WAY. IT IS WHEN SHE TURNS TO "LET GO" WITH THE "FISH" THAT HER BROADSIDE IS TURNED FULL TOWARD THE LARGER VESSEL AND IT'S JUST TOO BAD IF SHE IS SPOTTED THEN, FOR IT'S MORE THAN LIKELY THAT THE LARGER SHIP HAS GUN CREWS AT THEIR STATIONS AND EVEN THO THE FLEEING SHIP TAKES A ZIG ZAG COURSE IT'S MORE THAN LIKELY THEY WILL BE HIT.

IN THOSE DAYS THE TORPEDO BOATS USUALLY HAD ONLY ONE RADIOMAN, USUALLY A 3RD OR 2ND CLASS ELECTRICIAN (RADIO), AS THEY WERE THEN CALLED. THE QUARTERS ON SO SMALL A SHIP WERE NATURALLY CROWDED AND EVERY SQUARE INCH WAS PUT TO GOOD USE.

THE RADIO SHACK ON THE STEWART WAS ABOUT MID-SHIP, ON THE PORT SIDE AND SQUARELY UNDER A 3 INCH GUN, ONLY ONE HALF INCH OF STEEL DECK PLATE BETWEEN THE GUN CARRIAGE AND THE SHACK. TORPEDO BOATS CARRIED NO ARMOR PLATE OF ANY KIND. WHEN THAT PARTICULAR GUN WAS FIRED "SOMETHING" GENERALLY HAPPENED IN THE RADIO SHACK, AS THE CONCUSSION WAS SOMETHING AWFUL. AT THESE TIMES LISTENING-IN WAS OF COURSE OUT OF THE QUESTION AND I GENERALLY PLUGGED MY EARS WITH COTTON AND KEPT AN EYE OPEN TO SEE WHAT PART OF THE EQUIPMENT WAS GOING TO BE CARRIED AWAY NEXT.

THE TRANSMITTER WAS AN OLD 1/2 KW QUENCHED SPARK SET, WHICH HAD AN AVERAGE RANGE OF ABOUT 150 MILES IN DAYTIME. THE RECEIVER WAS A MEDIUM WAVE TUNER WITH A CRYSTAL DETECTOR. TORPEDO BOATS HAVING SUCH SHORT AND LOW ANTENNAS DID NOT PICK UP MUCH WAVE ENERGY TO ACTUATE THE CRYSTAL DETECTOR, WHICH WAS A "PERIKON" TYPE; A CERTAIN GRADE OF CARBORUNDUM HELD IN A CLAMP WITH A SHARP NEEDLE JAMMED DOWN ON THE MOST SENSITIVE SPOT ONE COULD FIND. THE BIG IDEA WAS TO TRY AND FIND THE SENSITIVE SPOT. A LOCAL BATTERY OF A FEW VOLTS WAS IMPRESSED ON THE DETECTOR TO ACTUATE THE HEAD PHONES.

ALTHO THE PERIKON DETECTOR WAS NOT VERY SENSITIVE, IT WAS VERY STURDY AND HARD TO KNOCK OUT OF ADJUSTMENT ONCE YOU HAD A "FIX." HOWEVER MOST OF THE OPERATORS ON THE TORPEDO BOATS GENERALLY CARRIED ALONG A PET PIECE OF GALENA OR SILICON, TOGETHER WITH A SMALL LENGTH OF THE "E" STRING OF A MANDOLIN, WHICH WAS USED AS THE "CAT WHISKER". THIS CRYSTAL WAS SUBSTITUTED AT THE FIRST OPPORTUNITY FOR THE LESS SENSITIVE PERIKON.

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EARLY USE OF THE AUDION BY NAVY

IF ANOTHER OP¹ HAD A CRYSTAL MORE SENSITIVE THAN YOURS, THE IDEA WAS TO BREAK OFF A SMALL PIECE WHEN HE WASN'T LOOKING AND MAKE A GET-A-WAY AND PUT THE LARGER PIECE BACK INTO ITS CLAMP BEFORE HE NOTICED ANYTHING WAS WRONG.

ON DECEMBER 1ST WE HELD FINAL TARGET PRACTICE OFF THE CORONADO ISLANDS. EVERYONE WAS EXCITED ABOUT THE FLOTILLA GOING TO MEXICO, AS REPORTS WERE COMING THRU THAT THE YAQUI INDIANS WERE ROBBING RANCHES, STEALING CATTLE ETC, THE LOCAL MEXICAN AUTHORITIES BEING UNABLE TO STOP THESE OUTRAGES. OF COURSE UNCLE SAM HAD TO TAKE A HAND IN IT AS MANY BIG "GRINGO" RANCHERS WERE LOSING THEIR WEALTH IN A FOREIGN COUNTRY.

WE WERE DUE TO LEAVE SAN DIEGO ON THE 4TH OF DECEMBER 1915. BEFORE WE LEFT, THE OP ON THE USS PAUL JONES, FLAGSHIP OF THE TORPEDO FLOTILLA, ASKED ME TO COME OVER AND SEE A NEW GADGET HE WAS GOING TO TRY OUT WITH HIS RECEIVING SET. UPON ARRIVAL IN HIS RADIO SHACK I SAW ON THE OPERATING TABLE A LITTLE SQUARE BOX, ON THE FRONT OF WHICH DANFLED A SMALL ELONGATED GLASS TUBE WITH TWO RED WIRES PROTRUDING FROM THE BOTTOM AND A GREEN AND YELLOW WIRE COMING OUT FROM EACH SIDE, RESPECTIVELY.

THIS WAS ONE OF THE FIRST COMMERCIALY PRODUCED "AUDION" TUBES. MANUFACTURED BY SOME SMALL CONCERN IN SAN FRANCISCO. IT HAD NO BASE OF ANY KIND AND WAS SUSPENDED BY ITS LEADS; FILAMENT, PLATE AND GRID. THE BOTTOM LEADS WERE THE FILAMENT, STICKING OUT OF THE GLASS. MY FRIEND HAD PURCHASED, AT HIS OWN EXPENSE, (I BELIEVE IT WAS \$7.00) ONE OF THESE AUDIONS AND HAD BEEN PLAYING WITH IT UNKNOWN TO THE REST OF THE OP'S IN THE FLOTILLA.

MAJOR EDWIN ARMSTRONG HAD JUST PATENTED HIS FEED-BACK CIRCUIT, AND IT WAS THIS CIRCUIT USED WITH THE LITTLE AUDION TUBE THAT WAS ALMOST DIRECTLY THE CAUSE OF MY BEING BUSTED FROM 2ND CLASS RADIOMAN ELECTRICIAN TO 3RD CLASS, FOR "INEFFICIENCY."

OUR COMMANDING OFFICER ALWAYS WANTED HIS PRESS REPORTS (NEWS OF THE DAY) WHICH WERE BROADCAST FROM NPL AND NPG. THIS WAS EASY ENOUGH TO COPY WHEN THE TORPEDO BOATS WERE AROUND THE CALIFORNIA COAST. ON DECEMBER 4TH THE FLOTILLA LEFT SAN DIEGO IN THE MIDST OF A S.W. GALE, FOR TOPOLOBAMPO, MEXICO. THE CERW HAD TO STAND UP WHILE AT MESS FOR TWO DAYS, AND OH BOY! HOW SICK I WAS. I USED TO LIE ON THE RADIO SHACK FLOOR WITH MY FEET BRACED AGAINST A STANCHION, HEAD PHONES ON, AND WITH MY HEAD IN A BUCKET, AND IN BETWEEN "HEAVES", HEARING THE SEAS BREAK OVER THE BRIDGE. IN A BIG SEA, THE LITTLE TORPEDO BOATS TOOK ABOUT AS MUCH WATER AS A SUBMARINE WOULD, ESPECIALLY AS THEY WERE TRAVELING AND HEADING UNDER FORCED DRAUGHT INTO THE STORM. YES YOU "YOUNG SQUIRTS" THOSE ARE THE TIMES WHEN YOU THINK OF MOTHER AND HOME.

OF COURSE UNDER THESE CONDITIONS, THE SKIPPER DOES NOT EXPECT HIS PRESS REPORTS, AS HE HAS HIS HANDS FULL NAVIGATING THE SHIP AND MOST ALL HANDS WERE SEA SICK; BUT WHEN WE GOT TO TURTLE BAY ON THE PENINSULA OF LOWER CALIFORNIA, TO SEE IF ANYTHING WAS LEFT OF THE WRECK OF THE JAP CRUISER ASAMA, WHICH HAD GONE AGROUND THE PREVIOUS SPRING, HE QUITE CASUALLY MENTIONED THAT HE WOULD LIKE SOME PRESS THAT NIGHT. I TOLD HIM THAT WE WERE OUT OF RANGE OF NPL (POINT LOMA NAVY STATION), AT SAN DIEGO, BUT I WOULD TRY ANYWAY. OF COURSE I DIDN'T GET ANY PRESS, ONLY HEARD SIGNALS FROM OUR FLOTILLA AND A FEW PASSING MERCHANTMEN.

ON DECEMBER 6TH, WE PULLED INTO MAGDALENA BAY WHERE THE NAVY HAD A COALING STATION. ALL THE COMMANDING OFFICERS WENT OVER TO THE FLAGSHIP PAUL JONES FOR A CONFERENCE, BEFORE PROCEEDING FURTHER SOUTH TO OUR DESTINATION. WHEN THE CAPTAIN CAME ABOARD AGAIN HE HEADED DIRECTLY FOR THE RADIO SHACK AND I COULD SEE BY THE LOOK ON HIS FACE THAT SOMETHING WAS WRONG. WHILE HE HELD IN HIS HAND TWO TYPEWRITTEN SHEETS, HE SAID, "TAKE A LOOK AT THESE", AND DUMPED THEM DOWN ON THE DESK. I KNEW ALMOST WITHOUT LOOKING THAT THEY WERE PRESS REPORTS. "IT'S FUNNY THAT 3RD CLASS MAN ON THE PAUL JONES CAN GET PRESS AND WE CAN'T," THE SKIPPER REMARKED, BORING HOLES THRU ME WITH HIS EYES AND MY HEART BEATING FASTER ALL THE

(NEXT PAGE PLEASE)

EARLY USE OF THE AUDION BY THE NAVY

TIME. BOTH OFFICERS AND MEN WERE NOT VERY HAPPY AT SPENDING CHRISTMAS IN A LOUSY MEXICAN PORT AND EVERYBODY WAS GETTING GROUCHY. I PATIENTLY TRIED TO EXPLAIN TO THE CAPTAIN THAT THE PAUL JONES RADIO MAN HAD A NEWLY DEVELOPED, PRIVATELY OWNED "AUDION" TUBE, WHICH MADE HIS RECEIVER MANY TIMES MORE SENSITIVE THAN OUR CRYSTAL DETECTOR SETS AND THAT WAS THE REASON WHY HE COULD RECEIVE THE CONTINUOUS WAVE 500 KW ARC TRANSMITTER RECENTLY INSTALLED AT CHOLLOS HEIGHTS NEAR SAN DIEGO. ITS ANTENNA WAS INSTALLED FROM STEEL TOWERS 600 FT. HIGH. THE CAPTAIN'S PARTING REMARK AS I SALUTED AND HE TURNED ON HIS HEEL WAS. "AUDION TUBE BE DAMNED, GET ON THE JOB."

THE OP¹ ON THE PAUL JONES HAD BEEN MAKING CAPITAL OF HIS PROWESS, BY PASSING AROUND AMONG THE FLOTILLA, CARBON COPIES OF THE LATEST PRESS REPORTS, WHICH WERE EAGERLY READ BY OFFICERS AND CREW, ESPECIALLY THOSE PERTAINING TO THE 1ST WORLD WAR, WHICH HAD JUST STARTED IN EUROPE. THIS WAS THE "BEGINNING OF THE END" FOR MY CAREER IN RADIO ON THE TORPEDO BOAT STEWART.

WE SPENT A MISERABLE CHRISTMAS IN MEXICAN WATERS. TOPOLOBAMPO WAS A LITTLE HOLE CONSISTING OF ABOUT 40 SHACKS ON THE SIDE OF A HILL WITH A MINIATURE RAILROAD FOLLOWING THE WATERS EDGE. FURTHER OUT IN THE STREAM WAS ANCHORED THE FLAGSHIP SAN DIEGO WITH 500 MARINES ABOARD. THE CRUISER NEW ORLEANS WAS ALSO STANDING BY.

A FEW DAYS LATER THE STEWART AND PERRY LEFT FOR TOBARI BAY INTO WHICH THE YAQUI RIVER EMPTIES. IT WAS IN THE YAQUI VALLEY THAT THE YAQUI INDIANS MADE THEIR HOME AND WERE GOING FORTH TO RAID THE SURROUNDING COUNTRY. THE RIVER WAS ONLY NAVIGABLE TO SMALL SHIPS. WHILE THERE I HAD TO STAND WATCH, ALTERNATING AT TIMES WITH THE OP¹ ON THE PERRY. IT WAS VERY HOT AND SULTRY.

ONE NIGHT WHILE ON WATCH I MUST HAVE DOZED OF FOR AN HOUR OR SO, AND OF COURSE DURING THIS PARTICULAR HOUR, THE FLAGSHIP SAN DIEGO WAS TRYING TO CALL US, WITH ORDERS TO UP ANCHOR AND COME BACK TO TOPOLOBAMPO. I WAS PUT ON REPORT BY THE EXECUTIVE OFFICER FOR NEGLECT OF DUTY; WHILE I THOROUGHLY CURSED THE DAY I HAD EVER HEARD OF TORPEDO BOATS, WITH THEIR ONE MAN WATCH.

ON THE 28TH I WAS AGREEABLY SURPRISED TO HAVE ANOTHER OPERATOR REPORT ON BOARD FOR DUTY, FROM THE SAN DIEGO. THIS MEANT THAT THE WATCHES WOULD BE SPLIT UP AND NOT SO MUCH CHANCE OF GOING TO SLEEP ON THE JOB AGAIN, BUT THE SKIPPER HAD "IT IN FOR ME" AND I WAS JUST WAITING UNTIL WE GOT BACK TO THE GOOD OLD U.S., WHERE PERHAPS I COULD PUT IN FOR A TRANSFER TO ANOTHER SHIP; OF COURSE HE WOULD WANT TO GET RID OF ME ANYWAY. I HAD JUST MADE "2ND CLASS" BEFORE I WAS TRANSFERRED FROM THE FLAGSHIP SAN DIEGO TO THE STEWART.

TIME WENT BY AS IT ALWAYS DOES, AND I WAS BEGINNING TO THINK THAT THE SKIPPER HAD PERHAPS FORGOTTEN THE TROUBLE I HAD GOTTEN INTO, AS HE NEVER SAID A WORD ABOUT THE MATTER FINALLY WORD WENT AROUND THAT WE WERE GOING "HOME" AND BOTH OFFICERS AND MEN WERE VERY JUBILANT. I FORGOT TO MENTION THAT ABOUT A MONTH BEFORE WE DEPARTED FOR MEXICAN WATERS I HAD GOTTEN MARRIED, LEAVING MY WIFE IN LOS ANGELES WITH HER MOTHER, AFTER A ONE WEEK HONEYMOON.

AFTER TOUCHING AT SAN DIEGO, WE HEADED FOR MARE ISLAND NAVY YARD FOR AN EXTENSIVE PERIOD OF OVERHAUL. I KNEW WE WOULD BE THERE FOR SOME TIME SO I WIRED WIFEY TO COME TO VALLEJO WHERE WE COULD BE TOGETHER FOR A LITTLE WHILE.

WE FOUND A TINY TWO ROOM SUITE AND HAD JUST GOTTEN SETTLED. THE FOLLOWING DAY I WAS TOLD TO REPORT TO "MAST". MY PUNISHMENT WAS THAT OF BEING "BUSTED" FROM 2ND CLASS TO 3RD CLASS RADIO ELECTRICIAN. IT MEANT A WHOLE YEAR MUST PASS BEFORE I WOULD BE ELIGIBLE AGAIN

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EARLY USE OF THE AUDION BY NAVY

FOR THE 2ND CLASS RATING, BEING CUT FROM \$44.00 TO \$33.00 PER MONTH PAY. IN THE DAYS BEFORE WORLD WAR I, IT WAS HARD TO MAKE A RATE ON ACCOUNT OF THE NAVY BEING ECONOMY MINDED..

THE NEXT DAY I WAS GIVEN ORDERS TO PROCEED TO SAN DIEGO VIA THE COAL COLLIER, USS NANSHAN, THEN LYING IN SAN FRANCISCO BAY. WELL, ANYWAY WE HAD TWO DAYS OF HOUSEKEEPING AND BEING TOGETHER: SO I HAD TO LEAVE THE LITTLE WIFE HURRIDLY TO GET BACK TO LOS ANGELES THE BEST WAY SHE COULD, WHILE I PACKED MY DITTY BOX AND BAG AND REPORTED ON BOARD THE CRUMMY LOOKING COLLIER. IT WAS QUITE A CONTRAST FROM THE SPIC AND SPAN CRUISERS AND TORPEDO BOATS I HAD BEEN USED TO.

BUT, ORDERS ARE ORDERS AND FAMILY LIFE WAS NOT TAKEN INTO ACCOUNT IN THOSE HARD BOILED AND TOUGH DAYS OF NAVY LIFE BEFORE WORLD WAR I. I LEFT THE WIFE SATNOING IN THE DOORWAY OF THE LITTLE TWO ROOM SUITE THAT WE HAD EXPECTED TO CALL "HOME" FOR A MONTH OR SO, WITH TEARS SHE WAS TRYING TO HOLD BACK, TO GIVE ME A FAREWELL SMILE.

STANLEY E. HYDE.

ANOTHER SLANT ON THE NAVY IN THE OLD DAYS. THANKS STAN FOR THE INTERESTING ARTICLE. EEC

"WANTA BORROW A JACK?"

ON PAGE 109 OF THE SEPTEMBER ISSUE OF READER'S DIGEST IS AN ARTICLE WITH THE ABOVE TITLE. IT WAS SO GOOD THAT IT SEEMED A GOOD IDEA TO QUOTE AN EXCERPT: A FELLOW WAS SPEEDING DOWN A COUNTRY ROAD LATE AT NIGHT AND BANG! WENT A TIRE. HE GOT OUT AND LOOKED AND DRAT IT!-HE HAD NO JACK. THEN HE SAID TO HIMSELF, "WELL, I'LL JUST WALK TO THE NEAREST FARM HOUSE AND BORROW A JACK!" HE SAW A LIGHT IN THE DISTANCE AND SAID, 'WELL, I'M IN LUCK; THE FARMER'S UP. I'LL JUST KNOCK ON THE DOOR AND SAY I'M IN TROUBLE, WOULD YOU PLEASE LEND ME A JACK? AND HE'LL SAY, WHY SURE NEIGHBOR, HELP YOURSELF-BUT BRING IT BACK.

"HE WALKED ON A LITTLE FARTHER AND THE LIGHT WENT OUT SO HE SAID TO HIMSELF, 'NOW HE'S GONE TO BED AND HE'LL BE ANNOYED BECAUSE I'M BOTHERING HIM-SO HE'LL PROBABLY WANT SOME MONEY FOR HIS JACK. AND I'LL SAY, ALL RIGHT, IT ISN'T VERY NEIGHBORLY-BUT I'LL GIVE YOU A QUARTER. AND HE'LL SAY, DO YOU THINK YOU CAN GET ME OUT OF BED IN THE MIDDLE OF THE NIGHT AND THEN OFFER ME A QUARTER? GIVE ME A DOLLAR OR GET YOURSELF A JACK SOMEWHERE ELSE'

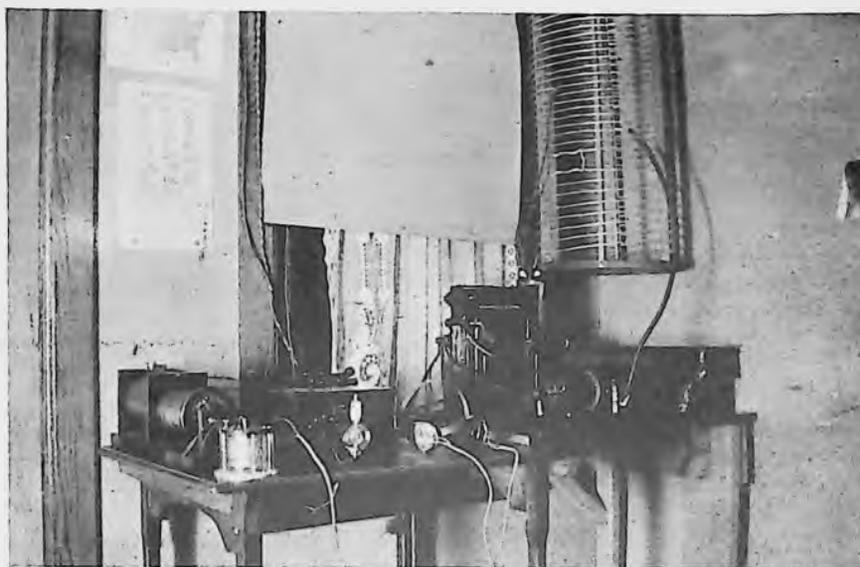
"BY THIS TIME THE FELLOW HAD WORKED HIMSELF INTO A LATHER. HE TURNED INTO THE GATE AND MUTTERED, 'A DOLLAR! ALL RIGHT, I'LL GIVE YOU A DOLLAR. BUT NOT A CENT MORE! A POOR DEVIL HAS AN ACCIDENT AND ALL HE NEEDS IS A JACK. YOU PROBABLY WON'T LET ME HAVE ONE NO MATTER WHAT I GIVE YOU. THAT'S THE KIND OF GUY YOU ARE.'

"WHICH BROUGHT HIM UP TO THE DOORAND HE KNOCKED-LOUDLY, ANGRILY. THE FARMER STUCK HIS HEAD OUT THE WINDOW ABOVE THE DOOR AND HOLLERED DOWN, "WHO'S THERE? WHAT DO YOU WANT?' THE FELLOW STOPPED POUNDING ON THE DOOR AND YELLEDUP, 'YOU AND YOUR DAMN JACK! YOU KNOW WHAT YOU CAN DO WITH IT!'

THIS DELIGHTFUL LITTLE ILLUSTRATION OF MUSH OF MANKIND WAS WRITTEN BY J. P. McEVoy FOR LITERARY DIGEST. IT SO POINTEDLY ILLUSTRATES THE USELESSNES OF CROSSING A BRIDGE UNTIL HE REACH IT IN SUCH A HUMOROUS WAY THAT COULD NOT RESIST QUOTING A PART OF IT. HOW MANY OF US ALMOST 'BORROWED A JACK?' I THINK SOME OF US AND YE OLDE COPPY BOYE IN PARTICULAR WOULD HAVE TO PLEAD GUILTY MANY TIMES.

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HAROLD J. BURHOP W8ZL/W4ZL



9RW - SHEBOYGAN, WIS.-- 1915

MY STATION 9RW IN SHEBOYGAN, WISCONSIN IN 1915, AFTER IT HAD GROWN TO 1 KW SIZE FROM THE $1\frac{1}{2}$ " SPARK COIL AND 2-SLIDE TUNER OUTFIT OF 1913. THE DESCRIPTION OF COMPONENTS IS AS FOLLOWS: THORDARSON 1 KW TRANSFORMER FROM WHICH THE ADJUSTABLE MAGNETIC YOKE WAS LATER REMOVED FOR AN INCREASE IN POWER; PLATE GLASS CONDENSER WITH SHEET COPPER CONDUCTORS; MURDOCK ROTARY SPARK GAP; HOME BORN "SQUIRREL CAGE" HELIX; HOME MADE "ARLINGTON TYPE" LOOSE COUPLER TO PULL IN NAA; MURDOCK COVERED VARIABLE CONDENSER; THE ORIGINAL DEFREST AUDION DETECTOR; BRANDES SUPERIOR 2,000 OHM HEADPHONES.

THE AUDION TUBE WAS THE SPHERICAL BULB WITH CANDELABRA SCREW BASE FOR FILAMENT, AND RED AND GREEN PLATE AND GRID LEADS AT OPPOSITE END, MOUNTED ON BOX CONTAINING 6 V. "A" BATTERY AND 45 V. "B" BATTERY, PORCELAIN RHEOSTAT TO VARY "A" BATTERY AND TAPPED SWITCHES TO VARY "B" BATTERY. THE ENTIRE UNIT HAD TO BE PURCHASED AT THAT TIME; THE TUBE ITSELF COULD ONLY BE OBTAINED WITH THE UNIT OR UPON RETURN OF THE OLD TUBE AS A REPLACEMENT.

FIRST STATION TO ANSWER A "CQ" WITH THIS RIG WAS WLD, COMMERCIAL STATION AT LUDINGTON, MICH. ACROSS LAKE MICHIGAN, WHO SIMPLY SAID, "YOU ARE ON 600 METERS." THIS RESULTED IN A QUICK CHANGE IN LOADING THE ANTENNA.

WWQ - AIR MAIL SERVICE - BELLEFONTE, PA. - 1923

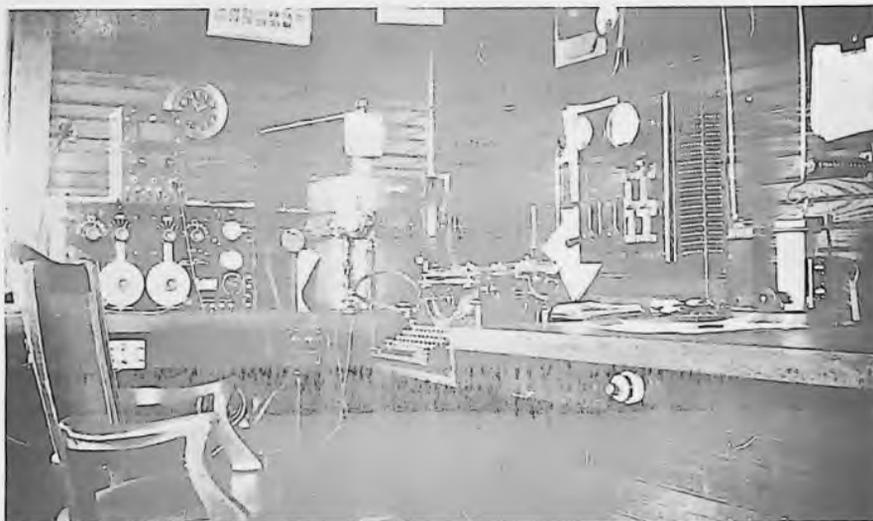
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THE AIR MAIL SERVICE WAS A BRANCH OF THE POST OFFICE DEPARTMENT AND FROM SHORTLY AFTER WWI UNTIL 1927 OPERATED ITS OWN PLANES TO CARRY MAIL, AND ITS OWN FIELDS, GROUND CREWS AND RADIO SERVICE. THE PLANES WERE MODIFIED DH'S WITH 12 CYLINDER LIBERTY ENGINES OPEN COCKPIT 2-PLACE, PILOT BEHIND, MAIL IN FRONT AND AIRSPEED 90 MPH. WHEN THIS PICTURE WAS TAKEN THE BEACON LIGHTS WERE JUST BEING INSTALLED, THERE WAS YET NO NIGHT FLYING, NO RADIO IN PLANES, NO TELETYPE OR RADIOTELEPHONE S IN THE STATIONS. PURELY C/W..

THE TRANSMITTER WAS A 5 KW FEDERAL ARC OPERATING ON "LONG WAVE" AROUND 4,000 METERS. COMPENSATING WAVE KEYING WAS UTILIZED, BY MEANS OF WHICH THE KEY WOULD SHORT OUT A FEW
(NEXT PAGE PLEASE)

HAROLD J. BURHOP W8ZL/W4ZL

TURNS OF THE ANTENNA LOADING COIL, THEREBY CHANGING THE "WAVE" OR FREQUENCY. WHEN TUNING A STATION IN IF THE "BACKWAVE" WERE CAUGHT ONE WOULD HEAR THE SIGNAL WHEN THE KEY WAS OPEN RATHER THAN "CLOSED". THE RECEIVER WAS A NAVY SE1420C REGENERATIVE RECEIVER WITH AN ADDED 2 STAGE AUDIO FREQUENCY AMPLIFIER. THERE WAS ONLY ONE AIRWAY IN 1923, NEW YORK TO SAN FRANCISCO, WITH 13 STATIONS ALMOST IDENTICAL TO THIS ONE-WASHINGTON, NEW YORK, BELLEFONTE, CLEVELAND, BRYAN, CHICAGO, IOWA CITY, OMAHA, NORTH PLATTE, CHEYENNE, ELKO, RENO AND SAN FRANCISCO. I SERVED AS RADIO OPERATOR IN CHARGE OF THE STATION FROM 1923 TO 1929..



BELLEFONTE, PA. STATION

NOTE FROM THE EDITOR:---THE ATTENTION OF YE OLDE COPPYE BOYE HAS BEEN DIRECTED TO WHAT HIS CRITICS DEEM CERTAIN MISTAKES IN THE WRITING, EDITING AND PRODUCTION OF SPARK GAP TIMES. HOW CAN THIS BE WHEN HE, IN ALL MODESTY ADMITS THAT HE HAS NEVER MADE A MISTAKE? BY WAY OF EXPLANATION, THE SEEMING MISTAKES ARE SIMPLY NEWER METHODS OF SPELLING, GRAMMER SEMANTICS AND WHAT HAVE YOU. PERHAPS YOU MAY THINK THAT YOU HAVE NEVER SEEN THIS TYPE OF USAGE BEFORE. NEITHER HAVE I BUT IN ALL FAIRNESS TO OUR CRITICS, I MUST CONFESS THAT I SHALL CONTINUE TO MAKE 'EM --BIGGER AND BIGGER.

ONE OF THE BIGGER MISTAKES TO BE FOUND IN SPARK GAP TIMES WAS PRODUCED IN THE AUGUST ISSUE. THIS WAS ON PAGE 28, THE FINE ARTICLE BY W2SVR, HUGO ESTBERG. IN SOME MANNER, THE LAST PORTION OF THIS ARTICLE WAS OMITTED. MY APOLOGY TO HUGO ESPECIALLY AND TO ALL READERS. THE REMAINING PORTION OF THIS MOST INTERESTING ARTICLE FOLLOWS:

"EFFORT TO RAISE SMITTY AS HE APPROACHED OUR BEAM AND IF SUCCESSFUL WOULD UNLOAD THE PILE OF TRAFFIC FOR RELAY. SO THRU THE NIGHT THE BOYS CALLED SMITTY AT HALF HOUR INTERVALS, AND THE NEXT MORNING WHEN I CAME ON WATCH IT WAS THE SAME OLD STORY. NO LUCK. M O'S SIGNALS WERE GETTING PRETTY LOUD AT THIS TIME AND AS THERE WAS NOTHING ELSE TO DO, I KEPT CALLING HIM AT FERQUENT INTERVALS. FINALLY WHEN I HAD GIVEN UP ALL HOPE, SMITTY ANSWERED.WATTA RELIEF.

I QUICKLY INFORMED HIM OF OUR PROBLEM AND HE READILY AGREED TO TAKE OUR TRAFFIC. SO WE QSYD TO 450 AND I LET M O HAVE THE BUNDLE. UPON COMPLETION I ASKED OF SMITTY ONE MORE
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HUGO ESTBERG W2SVR

FAVOR. WOULD HE LISTEN CAREFULLY TO OUR 600 METER TRANSMISSION AND SEE IF THERE WAS ANYTHING FUNNY ABOUT IT? AND M O CAME BACK WITH THE VERY SIMPLE AND OBVIOUS SOLUTION. EG, (MY SINE), YOU'RE NOT ON 600, YOU'RE ON 550.

HAVING FOUND THE CAUSE OF THE TROUBLE, THE SOLUTION WAS EASY AND WE WERE BACK IN BUSINESS. AND AS WE OPS. THOUGHT OVER THE SITUATION THUS FAR, (AND WONDERING WHAT WAS GONNA HAPPEN NEXT), WE FELT KIND CHAGRINED THAT IT HAD TAKEN US THREE DAYS TO FIND OUT THAT WE WERE OFF FREQUENCY. SO WE MOLLIFIED OUR FEELINGS SOMEWHAT BY CUSSING OUT THE RADIO INSPECTOR WHO ALLOWED US TO LEAVE PORT WITH A RECEIVER THAT WAS FALLING APART AND A TRANSMITTER OFF FREQUENCY. AFTER ALL, DIDN'T HE HAVE IN HIS POSSESSION THAT AWESOME INSTRUMENT OF THE DAY, THE LOGARITHMIC DECREMETER?--WOTTA WASTE OF TAXPAYERS' MONEY. HI!

HUGO L. ESTBERG W2SVR

LETTERS FROM MEMBERS

NOTHING RECEIVED IN THIS OFFICE IS FOUND MORE INTERESTING THAN MANY OF THE MOST WELCOME LETTERS. THEY ARE ARE SOURCE OF HELP AND ENCOURAGEMENT AND IN ADDITION, MANY OF THEM ARE OF SUCH NATURE AS NEEDED IN SPARK GAP TIMES. IT HAS BEEN DECIDED TO DEVOTE A SECTION OF SPARK GAP TIMES TO THIS MATERIAL. IT IS HOPED THAT YOU WILL ALL ENJOY THEM AS MUCH AS DOES YE OLDE COPPYE BOYE.

FROM

ROB-ROY W8HR No. 415

ADDRESSED TO THE SECRETARY W2EG

DEAR EARL:

RECEIVED EVERYTHING IN FINE SHAPE. LAST WAS APARK GAP TIMES. WHAT A WONDERFUL TIME I HAD READING IT. SOME OF THE OLD TIMERS I HAD QSOED WITH IN THE YEARS GONE BY, ALTHOUGH MY MEMORY IS SOMEWHAT LACKING NOWADAYS--SPG BROUGHT BACK FOND MEMORIES, LONG FORGOTTEN.

"TALES OF THE DAYS WHEN" BY W4FE - ARTHUR BENZEE SURE BROUGHT A TEAR OR TWO, WHEN HE SPOKE ABOUT THE CONVENTION AT THE OLD IRQUOISE HOTEL, BUFFALO, N.Y. I HUNTED THROUGH THE RELICS AND FOUND IT WAS IN THE YEAR 1922. I HAD A ROOM ON THE 4TH FLOOR, AND THE PEOPLE WERE SORT OF DUMB IN THOSE DAYS AT THAT; THEY THOUGHT THAT A BATH TUB WAS MADE TO PUT CHUNKS OF ICE IN, AND PILE IT FULL OF A LOT OF FUNNY LOOKING BOTTLES. SOME HAD THE PICTURE OF A WHITE HORSE ON THE LABEL, SO I FIGURED IT MUST HAVE BEEN HORSE LINIMENT.

THE ONE WITH A PICTURE OF A PARROT HOLDING A BOTTLE IN HIS CLAWS REALLY HAD ME STUMPED, I COULD THINK OF NO CONNECTION. OTHERS HAD JUST PLAIN LABELS SAYING SOMETHING ABOUT KENTUCKY. I WAS IN THE DARK ABOUT JUST ABOUT WHAT TO DO WITH ALL THIS MESS SO I COULD TAKE A BATH, UNTIL A GENTLE KNOCK ON THE DOOR PRECEDED THE ENTRANCE OF ONE OF THE WEAKER SEX, (OR RATHER I WAS TAUGHT TO BELIEVE THEY WERE OF A WEAKER SEX, UP TO THIS TIME). THE LITTLE DEAR PROCEEDED TO SHOW ME HOW TO MIX SOME OF THE FLUID FROM THE DARK GREEN BOTTLE WITH A LARGER AMOUNT FROM THE FIZZY BOTTLE. IT WAS THEN THAT I FOUND OUT WHAT THE ICE WAS FOR, YOU CHOPPED IT UP WITH A PICK OR FORK AND PUT IT IN A GLASS.

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LETTERS FROM MEMBERS

THE CHEMISTS WERE SURE MISSING A BET BACK IN THOSE DAYS; WE HAD THE SAME FEELING OUT OF THIS CONCOCTION THAT IN LATER YEARS WE GET OUT OF THE SOCALLED PEP PILLS. AS TIME WORE ON, I FORGOT WHICH PROPORTION CAME OUT OF WHICH BOTTLE - ANYWAY THE CONVENTION WAS WELL UNDER WAY WHEN I REMOVED THE LAST ICE PACK. THAT EVENING MOST OF THE BOYS - WELL AT LEAST THREE STREET CAR OR TROLLEY LOADS IF YOU WISH, TOOK OFF TO THE SOUTH EAST SECTION OF TOWN, WHERE WE UNLOADED AND WENT THROUGH A NARROW ALLEY AND UP A MUCH NARROWER STAIRWAY TO THE SECOND FLOOR.

A VERY PRIVATE PARTY WAS GOING ON, AND KEGS OF SOMETHING (THAT WHEN THEY TURNED ON THE TAP A LOT OF FOAM CAME OUT WITH THE DARK LIQUID.) IT DIDN'T TASTE AS GOOD AS THE BATH TUB STUFF DID, SO I REFUSED THE FOAMY STUFF - THAT IS). I COULD GO ON FOREVER REMINISCING ESPECIALLY ABOUT THE ONE WE HAD IN TORONTO, CANADA.

ENCLOSED IS A SMALL CONTRIBUTION TOWARD THE PRINTING OF SGT, ALSO A PICTURE AND A HALFTONE MADE FROM THE SAME. I IMAGINE THEY ARE OFFSET, BY THE LOOKS, THEREFOR I MADE THE HALFTONE AND THE PURCHASE THAT WAS QUOTED COULD BE A 11 X 14 JOB. PICTURE FOR THE BLUE BOOK.

IF IT WOULD HELP - I WOULD LIKE TO CONTRIBUTE SOMETHING ALSO FOR THE BLUE BOOK, I KNOW IT COSTS QUITE A BIT FOR HALFTONES AND A LOT ARE BEING USED, SO IF THE OFFICERS AND THE PRINTER AGREE, I WOULD LIKE TO OFFER MY SERVICES, (GRATIS OF COURSE) AND FURNISH THE BLUE BOOK WITH HALFTONES, OF ALL THE MEMBERS, THIS WOULD HELP KEEP THE EXPENSES DOWN AND THE MONIES SAVED COULD BE USED FOR OTHER PURPOSES. WELL EARL, I GUESS I HAD BETTER SAY QRU FOR NOW, AND SINCERELY,

Rob-Roy W8HR No. 415

EDITORS NOTE---MORE ABOUT THIS LATER. EEC

FROM

COL. A.R. MARCY W41D

ADDRESSED TO THE SECRETARY, W2EG:

DEAR EARL:

THANK YOU FOR THE SUPPLEMENTS AND THE BLUE BOOK. NOW THAT I HAVE SEEN IT, I RECALL HAVING SEEN THE ORIGINAL MANY YEARS AGO.

ABOUT 1911, A POPULAR HARDWARE STORE, WHOSE NAME NOW ESCAPES ME, IN MY HOME TOWN OF ON-EIDA, N.Y., PLACED ON DISPLAY IN THEIR WINDOW A COMPLETE DISPLAY OF ELECTRO IMPORTING CO. "WIRELESS" EQUIPMENT. THE RECOLLECTIONS OF THAT DISPLAY ARE VIVID IN MY MEMORY; I CAN ALMOST SEE THAT WINDOW WITH ITS ARRAY OF MYSTERIOUS "GADGETS."

THAT DISPLAY AND THE SUBSEQUENT PUBLICATION IN A MAGAZINE CALLED, "THE AMERICAN BOY", ON HOW TO BUILD A "WIRELESS" SET STARTED MY EXPERIENCE IN AMATEUR RADIO. IT WAS THE FOLLOWING YEAR THAT RM CAME ON THE AIR WITH A SIX-WIRE 60 FT. FLATTOP ANTENNA MADE OF ALUMINUM WIRE WHICH EVERYONE TOLD ME WOULDN'T WORK BECAUSE I COULDN'T SOLDER THE JOINTS. I HAD BUILT A TWO-SLIDE TUNER, PURCHASED A SILICDN CATWHISKER DETECTOR AND WAS GIVEN A 1 INCH MESCO SPARK COIL.

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THE INTEREST GENERATED IN THE LAD WITH HIS NOSE FLATTENED TO THE WINDOW OF THAT HARDWARE STORE IN 1911, HAS NEVER DIMMED. THE GREATEST REGRET I HAVE IS MY INABILITY TO DOCUMENT THESE EXPERIENCES. UNFORTUNATELY THAT'S THE WAY IT IS. THE GRIM REAPER AND THE VASTNESS OF TIME HAVE OBLITERATED ALL TRACES THAT I MIGHT FOLLOW. SO BE IT! NOTHING CAN ERASE THE MEMORIES AND I COUNT MYSELF EXTREMELY FORTUNATE TO HAVE LIVED THROUGH THE EXCITING PERIOD OF DEVELOPMENT OF THIS "MARVEL OF AGES."

THANK YOU VERY MUCH FOR SENDING ME THESE EXCELLENT REPRINTS. I AM EXTREMELY HAPPY TO HAVE THEM. ENCLOSED YOU WILL FIND A CHECK FOR \$8, OF WHICH \$3 IS TO COVER THE COST OF THE BLUE BOOK AND THE ADDITIONAL \$5 FOR THE REPRODUCING FUND.

SINCERELY,

AL W41D

FROM

JIM BURNS W3KOU

ADDRESSED TO YE OLDE COPPY BOYE:

DEAR CLINE:

JUST A PAT ON THE BACK TO YOU AND EARL AND EVERYONE WHO HAS A HAND ON GETTING OUT SPARK GAP TIMES; IT HAS BECOME A COLLECTORS ITEM.

IN DECEMBER ISSUE OF SPARK GAP TIMES, THAT IS THE 1962 ISSUE: COL. FRED ELSER, USA RET.: W6FB WAS KIND ENOUGH TO CHECK BACK IN QST ON MY ARTICLE IN SPARK GAP TIMES. HE ALSO HAD A STORY ON THE EARLY DAYS OF HAM WIRELESS IN THE ISLANDS. HE ALSO MENTIONED THE RADIO TOWERS AT CAVITE. I HAVE JUST COME ACROSS A SIGNAL CORPS MANUAL IN MY COLLECTION I HAVE HAD SINCE WWI AND IT GIVES SOME OF THE DOPE ON THE STATIONS OF THE U.S. ARMY AT FORT MCKINLEY AND THE 8 KW AT CORREGIDOR.

THE STATIONS GOT THEIR POWER FROM GAS DRIVEN GENERATORS EXCEPT THE ONE AT CORREGIDOR WHICH I ASSUMED HAD ITS OWN POWER HOUSE. THE SETUP OF THESE STATIONS IS SOMETHING TO READ ABOUT; THIS WAS IN 1914. THE TOWERS WERE OF STRUCTURAL STEEL, 200 FEET HIGH, 20 FEET AT THE BASE AND 4 FEET AT THE TOP. THE TOWERS WERE SUPPORTED ON CONCRETE PIERS, EACH RESTING ON A CRIBWORK OF TIMBERS, 12 INCHES SQUARE, PAINTED WITH INSULATING COMPOUND FOR PRESERVATION AND INSULATION. TIMBERS WERE BOLTED TO THE PIERS AND TO EACH OTHER, THE BOLTS FROM TOWER NOT EXTENDING DOWN INTO THE CONCRETE. THE TOWERS WERE 300 FEET APART.

THE ANTENNA WAS A T-TYPE, THE FLAT TOP OF WHICH WAS COMPOSED OF 7 WIRES EACH, 280 FEET LONG AND 4 FEET APART. BOTH ENDS OF THE WIRES WERE INSULATED WITH 18 INCH ELECTROSE INSULATORS. THE VERTICAL WIRES REACHED FROM THE CENTER OF THE FLAT-TOP TO THE STATION WERE 180 FEET LONG, SEPARATED 4 FEET AND AT THE BOTTOM WERE JOINED TOGETHER AND CARRIED AS A SINGLE CABLE FOR ABOUT 10 FEET TO THE STATION.

MOST OF THE POWER WAS FROM GAS ENGINES DRIVING A 60 CYCLE, 20 HORSE POWER INDUCTION MOTOR. POWER WAS 8 KW, 500 CYCLES, 150 VOLTS. THE TRANSFORMER WAS THE CLOSED MAGNETIC CIRCUIT TYPE AND OIL IMMERSED WITH TRANSIL OIL. THE SPARE TRANSFORMER WAS THE OPEN MAGNETIC TYPE WITH DRY INSULATION.

(NEXT PAGE PLEASE)

LETTERS FROM MEMBERS

KEYING WAS DONE WITH A MORSE KEY WITH CURRENT FROM THE EXCITER TO OPERATE THE RELAY CONTACTS AND WERE SHUNTED BY A CONDENSER TO CUT DOWN SPARKING. 26 LEYDEN JARS WERE USED WITH COPPER FOIL, EACH WITH A CAPACITY OF .002 MFD. IMMERSED IN OIL TO CUT DOWN THE SPARKING. INDUCTANCE WAS THE HELIX TYPE. THE TYPE OF GAP WAS THE QUENCHED TYPE WITH PLATES OF COPPER BUT WITH A PLATE OF SILVER FOR THE SPARKING SURFACE THE SEPARATORS WERE OF MICA AND WAS COOLED BY A BLOWER.

I GUESS LOTS OF THE OLD TIMERS REMEMBER THE TONE OF THE COAST ARTILLARY STATIONS AND MINE SWEEPERS BEFORE AND DURING WWI. THIS WAS A MARCONI 1 KW 500 CYCLE JOB. ONE OF THE BEST SPARK PORTABLE SETS WE WORKED REQUIRED THREE JARHEADS (MULES) TO CARRY THE GEAR. THE POWER SUPPLY WAS HAND DRIVEN, ABOUT $\frac{1}{2}$ KW. THE HAND GENERATOR HAD TO TURN 50 RPMs FOR THE BEST RESULTS. THIS WAS DONE BY TWO SILLY VOLUNTEERS OR THE BOYS FROM THE GUARD HOUSE..

TO GEORGE (WIAE)--THIS MANUAL ALSO CARRIES AN ARTICLE ON RECEIVING BY CODING THE WAVE LENGTHS. IT WENT THIS WAY: TWO RECEIVERS WERE HOOKED TO THE SAME LONG WIRE BUT ON DIFFERENT WAVE LENGTHS. ONE OPERATOR WOULD TUNE HIS RECEIVER ON 900-1410 METERS AND LOCK HIS RECEIVER IN THIS POSITION. OPERATOR NUMBER TWO WOULD DO THE SAME BUT ON A WAVE LENGTH OF 1270-2150 METERS. OF COURSE IF ONE OPERATOR GOES NEAR THE OTHER OPERATING FREQUENCY, HE WOULD HAVETO RETUNE. IT SEEMS THAT THEY WOULD HAVE. WELL BOYS THAT IS IT.

WE WANT TO THANK JOHN, W3CJN FOR TAKING GOOD CARE OF THESE MANUALS AT HIS QTH.

73,

JIM BURNS W3KOU
5302 LOCH RAVEN BLVD. APT. E.

P.S.- HOW MANY OF THE BOYS REMEMBER THE SPARK GAP THAT HAD TWO DIFFERENT COLORED GAPS. BY REARRANGING THEM YOU COULS VARY YOUR OUTPUT. THE ONES WE USED WERE GREY AND RED. J.8.

TOM STEVENS W6KAA

ADDRESSED TO YE OLDE COPPYE BOYE

DEAR CLINE:

THANK YOU SO MUCH FOR YOUR VERY FINE LETTER OF 24 JUNE. I AM TAKING THIS DAY OFF TO GET SOME CORRESPONDENCE OFF THE DECK. SO HERE GOES NO. 1

ENCLOSED IS A COPY OF THE OLD NAVY WIRELESS CODE. I HAVE MADE A COPY OF THE CODE SO YOU MAY RETURN TO ME, AT YOUR CONVENIENCE, THE PHOTOSTATIC COPY.

IN THE COURSE OF ABOUT TWO YEARS, WAY BACK BETWEEN 1904 AND 1906, WE IN THE NAVY USED THREE TELEGRAPH CODES. FIRST WAS THE AMERICAN MORSE, LATER THE NAVY CODE AND LASTLY THE INTERNATIONAL CODE WHICH IS STILL IN USE. FORTUNATELY FOR ME, I HAD LEARNED THE NAVY CODE WHEN A RAW RECRUIT IN THE NAVY LONG BEFORE I EVER THOUGHT OF BEING A WIRELESS OPERATOR.

(OTHER SUBJECTS)

FOR ART (WISS)---DAVE HEILIG, OPERATOR-MANAGER ON JOHN WANAMAKER STORE IN PHILADELPHIA
(NEXT PAGE PLEASE)

LETTERS FROM MEMBERS

AND ALSO OUR UNITED-MARCONI PHILADELPHIA MANAGER MOVED TO LONDON SHORTLY AFTER WWI. HE BECAME SILENT KEY THERE SEVERAL YEARS AGO.

H.M. RODEBAUGH OF MERCHANTS & MINERS LINE FAME ALSO PASSED ON DURING WWI. HE WAS A SPLENDID OLD TIME OPERATOR AND A FINE PENNSYLVANIA DUTCHMAN.

JACK IRWIN OF WELLMAN'S BALLOON FAME IS AS FAR AS I KNOW, STILL ALIVE. SOME FEW YEARS AGO HE WAS RUNNING OUT OF SAN FRANCISCO AS SHIP RADIO OFFICER. HE WAS MARRIED TO A SCHOOL TEACHER AND LOOKED FINE. I THINK YOU WERE AT "BH" WITH ME WHEN THE WELLMAN BALLOON WAS WRECKED ENROUTE FROM NEW YORK TO BERMUDA.

OUR FELLOW OOTC MEMBER NORMAN E. BLACKIE, ONE OF MY FINE OLD BOSTON OPERATORS HAS COME FORTH WITH THE PROPER IDENTIFICATION OF THE YOUNGSTER IN THE OLD TIME PICTURE WE THOUGHT WAS L.S. WHITE. THE QUESTIONABLE CHARACTER WAS WALTER CHEEVER WHO SAILED ON SHIPS WITH BLACKIE. THANKS NORM.

73 & 30,

TOM W6KAA

ADDRESSED TO TOM STEVENS W6KAA

TOM, O.M.

WHEN IT CAME TIME TO ADDRESS THE FOLLOWING LITTLE SKIT TO SOMEONE, WE WERE STUCK HENCE WILL YOU (IF YOU THINK IT'S WORTH IT) SEND IT ON? THERE ARE ENCLOSED TWO POSTCARD SIZE AND ONE 8 X 10 GLOSSY PRINTS. YOU KEEP ONE OF THE SMALL ONES IF 'N YOU WISH. CONTACT WITH YOU THIS MORNING WAS USUAL THRILL, ALTHOUGH CONDITIONS LEFT MUCH TO BE DESIRED.

MINIATURE SOUNDER AND KEY

BY

FORREST PHIPPENY W6CK

DO ANY OF THE OLD OLD TIMERS HAVE IN THEIR POSSESSION DUPLICATES OF THE INSTRUMENTS PICTURED? IF SO PROBABLY HE WAS AT AN HONORARY DINNER GIVEN J.H. BUNNELL WHEN HE RETIRED AS ACTIVE HEAD OF THE J.H. BUNNELL CO. AFTER A HALF CENTURY OF ACTIVITY. THEY WERE PRESENTED AS FAVORS AT THAT DINNER. THEY ARE EXQUISITE MINIATURES OF THEIR BIG BROTHERS, FULLY OPERATIVE, AND WERE, IT IS SAID, CONNECTED AROUND THE TABLE AT EACH PLACE IN A MAIN LINE SERIES CIRCUIT.

BUT ON WITH THE STORY. THE UNDERSIGNED WAS AT THE BUNNELL COMPANY'S PLANT, LOCATED AT THAT TIME, IT SEEMS TO ME, IN A STREET UNDER THE BROOKLYN END OF THE BROOKLYN BRIDGE, ABOUT 1932, INSPECTING RADIO EQUIPMENT BEING BUILT FOR THE COAST GUARD. WHILE STANDING AT A TEST BENCH OBSERVING THE OPERATION OF A PIECE OF GEAR, A PLEASANT WHITE HAired GENTLEMAN STROLLED OVER AND ENGAGED ME IN CONVERSATION. AFTER THE USUAL GENERALITIES, HE WANTED TO KNOW IF THIS WAS MY FIRST TIME THERE AND WAS I BEING GIVEN ALL NEEDED HELP.

I ASSURED HIM IN THE AFFIRMATIVE AND ALSO TOLD HIM IT WAS A BIG THRILL TO BE THERE, THAT AS A BOY, 25 OR 30 YEARS BEFORE IT WAS A BIG THRILL TO PORE OVER THE J.H. BUNNELL CATALOGUE OF TELEGRAPH EQUIPMENT AND THAT MY FIRST PAIR OF HEADPHONES WERE SELECTED AND BOUGHT FROM THEM. MY FIRST PIECE OF GEAR HAD BEEN A BIG NICKEL PLATED MAIN LINE SOUNDER

(NEXT PAGE PLEASE)

LETTERS FROM MEMBERS

AND KEY I HAD PURCHASED IN A HOCK SHOP WITH MONEY EARNED PICKING STRAWBERRIES. (DIM MEMORY SAYS IT COST A BUCK OR SO). THREE OF US (ALL FARM BOYS) HAD A SINGLE WIRE GROUNDED RETURN LINE STRETCHING FROM TREE TO TREE, ALONG FENCE LINES AND FROM THE ENDS OF BARNs FOR ABOUT TWO MILES. DON'T BELIEVE I TOLD HIM WE SOON SHIFTED TO CONTINENTAL MORSE! HENCE, I TOLD HIM HE COULD SEE WHY IT WAS A THRILL TO ACTUALLY BE IN THE BUNNELL FACTORY AFTER ALL THOSE YEARS; THAT THE ROMANCE OF THE TELEGRAPH CIRCUIT HAD NEVER WORN OFF. HE SMILED AND WALKED AWAY. THE FLOOR FOREMAN CAME UP AFTER HE LEFT AND ASKED IF I KNEW WHO I HAD BEEN TALKING TO. ON REPLYING IN THE NEGATIVE HE SAID THAT IT WAS MR. BUNNELL.

A DAY OR TWO LATER, THE FOREMAN BROUGHT ME A NEATLY WRAPPED LITTLE PACKAGE, SAYING THAT MR. BUNNELL HAD WISHED THAT I WOULD ACCEPT IT. HE EXPLAINED THAT OCCASIONALLY, MR. BUNNELL WHO FREQUENTLY WANDERED AROUND THE PLANT WOULD TAKE A LIKING TO SOME ONE AND INFERRED SOMETHING I HAD SAID PLEASED THE OLD GENTLEMAN. HE SAID THE LITTLE MINIATURES HAD BEEN MADE UP AT CONSIDERABLE EXPENSE FOR FAVORS AT THE TIME OF MR. BUNNELL'S RETIREMENT.

THEY HAVE LAID IN A DRAWER OF CURIOS FOR THIRTY YEARS. AGAIN, WERE ANY OF YOU AT THAT DINNER, OR HAVE YOU EVER SEEN ANY OF THESE LITTLE INSTRUMENTS?

W6CK, FORREST PHIPPENY

C.J. SEDLAK, SR., K2HR

EXCERPT FROM LETTER ADDRESSED TO W2EG

SINCE SGT IS IN A REMINISCING MOOD, I THOUGHT THE FOLLOWING MIGHT BE OF INTEREST TO SOME OF THE MEMBERS. AROUND 1909 OR 1910, I AM NOT SURE OF THE EXACT DATE ANYMORE, THE PRINCE OF MONACO'S STEAM YACHT, 'HIRONDEL' WAS ANCHORED IN NEW YORK HARBOR; THIS SHIP WAS CONSTRUCTED ENTIRELY OF MONEL METAL SO THAT THE MAGNETIC FIELDS AROUND THE EARTH COULD BE STUDIED.

WHILE ANCHORED IN THE HARBOR, THE SHIP HAD ON BOARD, WHAT THE PRINCE CALLED HIS ELECTRIC PIANO ON WHICH SUCH SONGS AS 'MY COUNTRY TIS OF THEE' AND THE 'STAR SPANGLED BANNER' OVER THE 'WIRELESS.' SOME OF THE OLD TIMERS MAY RECALL THAT MODERN ELECTRICS OF THAT PERIOD CARRIED THE STORY.

SINCERELY,

CONRAD J. SEDLAK, SR. K2HR.

"NOW HEAR THIS"

THERE ARE NO DOUBT MANY MEMBERS NOT DESIRING TO WRITE A FULL SIZE ARTICLE. IF SUCH IS THE CASE WHY NOT WRITE YE OLDE COPPYE BOYE AND GIVE SOME HISTORICAL, INTERESTING OR AMUSING INCIDENT THAT HAS OCCURED TO YOU. THE FOREGOING LETTERS ARE GOOD EXAMPLES. IF THE EXAMPLES ARE INTERESTING TO YOU, YOU MAY BE SURE THAT YOUR LETTERS WILL BE TO OTHERS. IT IS SUCH MATERIAL AND SUCH COOPERATION THAT MAKES SPARK GAP TIMES. HOWS ABOUT IT? JUST SIT DOWN AND JOT IT DOWN AND SEND IT IN TO YE OLDE COPPYE BOYE. TYPEWRITTEN IF POSSIBLE BUT ANYWAY YOU SEE FIT. JUST SO IT IS LEGIBLE. PICTURES WILL HELP AND WILL BE RETURNED IF REQUESTED. MAIL DIRECT TO THIS OFFICE, 408 WEST VIEW AVE. CHATTANOOGA 11, TENN. EDITOR.

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LETTERS FROM MEMBERS

T. FRANK SMITH, W5VA

ADDRESSED TO YE OLDE COPPYE BOYE,

DEAR EARL:

READ MY FRIEND JIM CLAPP'S LETTER IN THE LAST ISSUE AND ALSO YOUR COMMENT ABOUT HIS DETECTOR. YOU ARE CERTAINLY RIGHT, IT IS ALMOST A DUPLICATE OF THE FERRON DETECTOR BUILT BY J.J. DUCK, PATENTED IN 1908 AND I AM SENDING YOU A COUPLE OF PICTURES OF ONE I HAVE IN COLLECTION. JIM'S MODEL WITH THE MOVABLE CUP WAS AN IMPROVEMENT BUT KNOWING JIM'S INGENUITY, I WOULD SAY THAT DUCK COPIED HIS DESIGN.

I ALSO HAVE A WIRELESS SPECIALTY THREE GANG DETECTOR WITH THE MIDDLE UNIT MISSING AND SO FAR HAVE BEEN UNABLE TO FIND THESE PARTS. IF YOU RUN INTO ANYBODY WITH THEM PLEASE LET ME KNOW.

SINCERELY,

FRANK

R. SCHELL, JR. KP4ZK

GENTLEMEN:

PLEASE MAKE A NOTE FOR YOUR RECORDS AND FOR FUTURE MAILING PURPOSES THAT I HAVE MOVED FROM ENSENADA, P.R. TO # 57 "C" STREET, URB. BUENA VISTA, PONCE, P.R. 00731.

I WAS PENSIONED FROM THE SOUTH PUERTO RICO SUGAR CORP. ON DECEMBER 31, 1962 AND MOVED TO PONCE ON JUNE 7, 1963. RADIO STATION WPR WAS CLOSED ON NOVEMBER 30, 1962. THEREFORE I AM BEGINNING TO LEARN HOW TO BECOME LAZY. IT TAKES TIME. WITH THE MOVING ETC. IT WAS A REAL TRANSITION PERIOD AFTER HAVING LIVED IN ENSENADA FOR 36 YEARS. HAVEN'T BEEN ABLE TO GET THE "HAM" RIG SET UP AS YET BUT THAT IS COMING NEXT.

KINDEST REGARDS TO ALL,

FRATERNALLY YOURS,

R. SCHELL, JR. KP4ZK

WELCOME TO THE LOAFERS BRIGADE DICK. HOPE YOU WILL ENJOY IT AS MUCH AS WE HAVE. EEC

WRONG ADDRESS OR NONE

OUR SECRETARY HAS AGAIN AND AGAIN URGENTLY REQUESTED THAT MEMBERS ADVISE OF CHANGE OF ADDRESS. HE CANNOT MAIL OUT LITERATURE WITHOUT THE CORRECT ADDRESS. THESE MAILINGS ARE EXPENSIVE AND CANNOT BE CONTINUED. SO FAR THIS MONTH LITERATURE HAS BEEN RETURNED FOR INCORRECT FROM THE FOLLOWING MEMBERS: OSCAR A. HISKEY, 12 SHIELD STREET, LACEY PARK, MD.--OSCAR DEHMAN, W2KU, 29 MARGINAL ST. E., BROOKLYN, N.Y.--ARMOND D. BRATTLAND, K6EA, 1135 MAGNOLIA AVENUE, LONG BEACH, CALIF.---WM. CHRISTIAN BOHN, K4BL--7811 MIDNIGHT PASS RD. SARASOTA, FLA. AND NORWOOD V. BRADSHAW W1ESP, 328 N. MAIN STREET, WATERBURY, CONN.

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UNCLASSIFIED ITEMS

PARTICULAR ATTENTION IS DIRECTED TO THE LETTER FROM W8HR, IN WHICH HE HAS VERY GENEROUSLY VOLUNTEERED HIS SERVICES IN MAKING THE SCREENED NEGATIVES TO BE USED IN FUTURE ARTICLES IN SPARK GAP TIMES AND FOR THE BLUE BOOK. THIS WILL RELIEVE MUCH OF THE EXPENSE INVOLVED IN THE PREPARATION OF BOTH SPARK GAP TIMES AND THE BLUE BOOK.

IN VOLUNTEERING HIS SERVICES AND TALENTS, BOB HAS SET AN EXAMPLE FOR ALL OF US. I AM SURE THAT THERE ARE MANY OF OUR MEMBERS WHO ARE GIFTED IN WAYS THAT COULD BE USEFUL TO THE OLD OLD TIMERS CLUB. IF ALL THESE TALENTS COULD BE PUT TO USE, THE FUTURE OF THE OLD OLD TIMERS CLUB WOULD BE BRILLIANT INDEED.

IN ADDITION TO MANY OF OUR MEMBERS BEING GIFTED IN ONE WAY OR ANOTHER, THERE ARE NO DOUBT MANY OF THEM WHO WOULD BE GLAD TO MAKE A CONTRIBUTION OF THESE SKILLS, TALENTS OR WHAT HAVE YOU. WHY NOT TAKE STOCK FELLOWS AND DETERMINE WHAT YOU COULD AND WOULD BE WILLING TO CONTRIBUTE IN THE WAY OF TRADES OR PROFESSIONAL SKILLS. CAN YOU WRITE? CAN YOU TYPE? CAN YOU RUN AN OFFSET PRESS? JUST ANY OLD THING. WHAT CAN YOU DO AND WHAT WILL YOU DO? NO MATTER WHAT IT IS PLEASE REGISTER WITH THE SECRETARY. YOU MAY BE JUST THE MAN WHO IS SORELY NEEDED.

THE FIRST OF THE YEAR THERE WILL BE A NEW ADMINISTRATION AND THESE NEW OFFICERS WILL REALLY NEED TO KNOW WHAT EVERY ONE CAN AND WILL DO IN ORDER TO MAKE PROPER APPOINTMENTS. THEY CANNOT BE EXPECTED TO MAKE INTELLIGENT AND USEFUL APPOINTMENTS UNLESS THEY KNOW WHO CAN DO WHAT. HOW ABOUT IT FELLOWS? CAN DO? WILL DO?

EARL E. CLINE SR. WAPPZ
PRESIDENT.

VE3XL ROBERT A. CAMPBELL No. 182

SILENT KEY

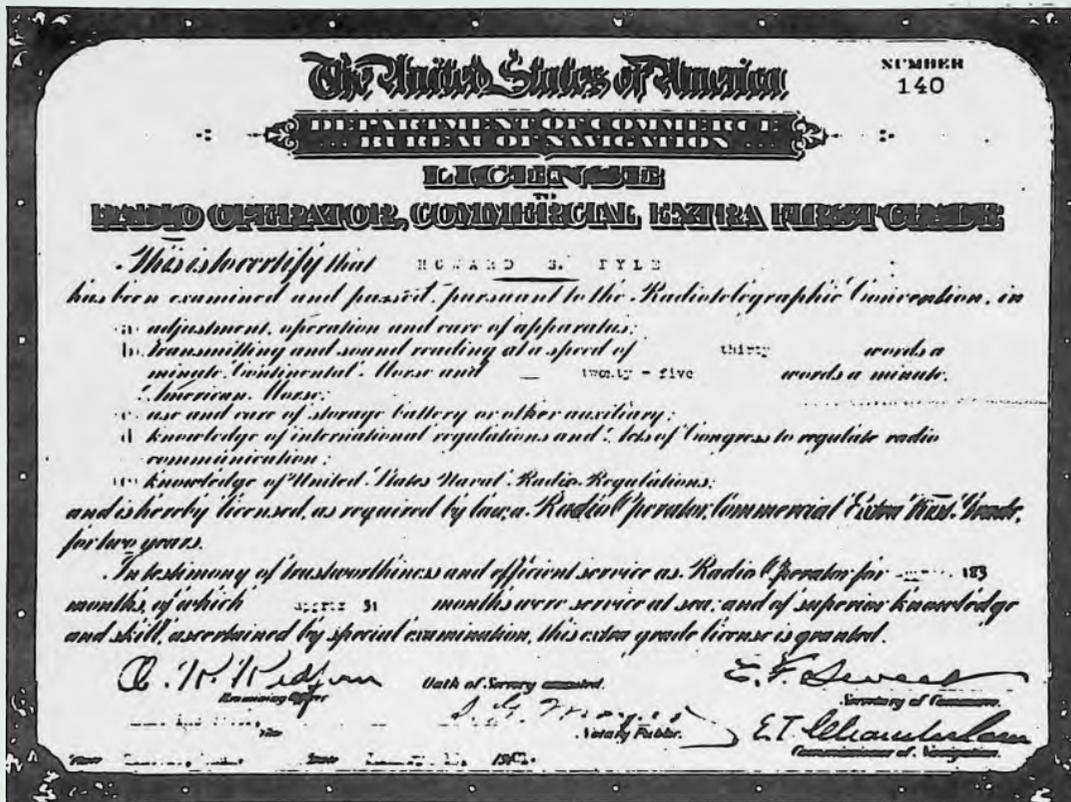
IT IS WITH WITH SORROW AND A SENSE OF GREAT LOSS THAT THE PASSING OF OUR FRIEND AND MEMBER IS ANNOUNCED. BOB PASSED AWAY ON THE 19 TH OF JULY. HE WILL BE GREATLY MISSED BY HIS MANY FRIENDS AND FELLOW MEMBERS. OUR SYMPATHY IS EXTENDED TO MRS. CAMPBELL.

ELECTION OF OFFICERS

BY THE TIME YOU HAVE RECEIVED THIS ISSUE OF SPARK GAP TIMES, YOU WILL ALSO HAVE RECEIVED YOUR BALLOT FOR THE ELECTION OF OFFICERS. IT IS EXTREMELY IMPORTANT THAT YOU MAIL IN YOUR BALLOTS EARLY SO THAT DUE CARE MAY BE TAKEN IN COUNTING AND CERTIFYING.

THE NEW OFFICERS WILL SERVE FOR A PERIOD OF TWO YEARS BEGINING 1 JANUARY, 1964. IT IS HOPED THAT ALL BALLOTS WILL BE IN PROMPTLY SO THAT THE NEWLY ELECTED OFFICERS MAY HAVE AMPLE TIME TO MAKE THEIR PLANS FOR THE NEW YEAR AND ARRANGE FOR THE NECESSARY APPOINTMENT OF THE VARIOUS APPOINTIVE OFFICES. IT IS A SMALL FAVOR TO ASK OF YOU TO ACT PROMPTLY AND NOT DELAY. THESE MEN WILL NEED EVERY BIT OF COOPERATION YOU CAN GIVE TO THEM. WHY NOT SHOW THEM BY PROMPT BALLOTING THAT WILL COMPLY WITH THEIR REQUEST FOR COOPERATION?

(NEXT PAGE PLEASE)



COMMERCIAL "EXTRA" GRADE LICENSE

YOU 'OLD OLD TIMERS RECALL THIS ONE? THE COMMERCIAL VERSION OF THE "EXTRA" GRADE OF LICENSE. THIS ONE WAS ISSUED TO THE AUTHOR IN JANUARY OF 1921 AND THE TIME HAS TAKEN ITS TOLL MAKING PHOTOGRAPHIC REPRODUCTION A BIT DIFFICULT. THE BODY OF THE TEXT MATERIAL READS AS FOLLOWS:

"THIS IS TO CERTIFY THAT ...HOWARD S. PYLE...HAS BEEN EXAMINED AND PASSED PURSUANT TO THE RADIOTELEGRAPHIC CONVENTION , IN:

- (A) ADJUSTMENT, OPERATION AND CARE OF APPARATUS.
- (B) TRANSMITTING AND SOUND READING AT A SPEED OF THIRTY WORDS A MINUTE, CONTINENTAL MORSE AND TWENTY-FIVE WORDS A MINUTE, AMERICAN MORSE.
- (C) USE AND CARE OF STORAGE BATTERY OR OTHER AUXILIARY.
- (D) KNOWLEDGE OF INTERNATIONAL REGULATIONS AND ACTS OF CONGRESS TO REGULATE RADIO COMMUNICATION.
- (E) KNOWLEDGE OF UNITED STATES NAVAL RADIO REGULATIONS, AND IS HEREBY LICENSED, AS REQUIRED BY LAW, A RADIO OPERATOR, COMMERCIAL EXTRA FIRST GRADE, FOR TWO YEARS.

IN TESTIMONY OF TRUSTWORTHINESS AND EFFICIENT SERVICE AS A RADIO OPERATOR FOR APPROXIMATELY 123 MONTHS, OF WHICH 51 MONTHS WERE SERVICE AT SEA, AND OF SUPERIOR KNOWLEDGE AND SKILL, ASCERTAINED BY SPECIAL EXAMINATION, THIS EXTRA GRADE LICENSE IS GRANTED."

THE "SPECIAL EXAMINATION" CONSISTED OF THE EQUIVALENT OF THREE REGULAR FIRST GRADE EXAMINATIONS, PLUS OF COURSE, DEMONSTRATION OF 25 AND 30 WORD PER MINUTE CODE ABILITY IN MORSE AND CONTINENTAL CODES RESPECTIVELY.

THE STRANGE PART OF THIS TYPE OF LICENSE WAS THAT IT GAVE THE RECIPIENT NO MORE PRIVILEGES THAN THE REGULAR COMMERCIAL FIRST GRADE LICENSE! PRINTED ON A DISTINCTIVE

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SALMON COLORED PAPER IT WAS MERELY A PRESTIGE CERTIFICATE. OUR CURRENT AMATEUR 'EXTRA' CLASS LICENSE IS AN EXACT PARALLEL; NO MORE PRIVILEGES; MERELY 'PRESTIGE'. THE ONLY JOBS I COULD GET COMMERCIALY ON MY 'PINK TICKET' AS THE EXTRA GRADE WAS INFORMALLY TERMED, WAS FIRST ON A BEAT-UP LITTLE SUGAR BOAT PLYING BETWEEN NORFOLK, THE DOMINICAN REPUBLIC AND NEW YORK. THIS WAS FOLLOWED BY AN OPERATING ATA MEDIOCRE LITTL BROADCAST STATION (WMH IN CINCINNATI, OHIO) AND...THAT WAS IT!

IT IS UNDERSTOOD THAT UNITED FRUIT CO., (TROPICAL WIRELESS CO.) ATTEMPTED TO INSIST ON 'EXTRA' FIRST CLASS COMMERCIAL LICENSES FOR THEIR 'GREAT WHITE FLEET' BUT SHORTLY HAD TO ABANDON THE IDEA DUE TO LACK OF SUCH AVAILABLE LICENSEES. I DON'T KNOW HOW MANY OF THESE 'PINK' TICKETS WERE EVER ISSUED; MINE WAS NO. 140 (JANUARY 1921). VERY SOON THEREAFTER, THE DEPARTMENT OF COMMERCE, BUREAU OF NAVIGATION, AN EARLY PREDECESSOR OF THE PRESENT FCC, DISCONTINUED ISSUANCE OF THIS CLASS OF TICKET. I STILL HAVE MINE AS A 'MEMENTO.

"YB" W70E

HOWARD S. PYLE.



PICTURE OF KEY AND SOUNDER REFERRED TO IN BRREST PHIPPENY LETTER, PAGE 15.

MONEY WONT BUY FRIENDS, BUT IT WILL GET YOU A HIGHER GRADE OF ENEMIES.TRUE, TRUE,TRUE!

"No, I'M AFRAID YOU CAN'T INTEREST ME IN A VACUUM CLEANER. TRY THE LADY NEXT DOOR.--I ALWAYS USE HERS AND IT'S ABSOLUTELY TERRIBLE."

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FROM ROY ARMSTRONG, W5RIH, NET MANAGER

DEAR CLINE:

WOULD APPRECIATE IT IF YOU WOULD ANNOUNCE IN THE NEXT ISSUE OF SPARK GAP TIMES THE FOLLOWING:

"LET'S TRY IT AGAIN"

WITH THE FALL AND WINTER SEASONS COMING UP, FREQUENCY CONDITIONS SHOULD BEGIN TO GET BETTER. I AM GAME IF YOU ALL ARE, TO TRY AND GET OUR SOCIAL NETS OPERATING AGAIN.

FROM EXPERIENCE I GOT LAST FALL AND WINTER, I AM GOING TO SUGGEST SOME CHANGES IN OUR PREVIOUS SCHEDULES.

AS A REMINDER, I AM LISTING THE 14.295 MC AT 1800 Z (GMT) DAILY NET THAT WE HAVE BEEN KEEPING ALL SUMMER WITH FAIRLY GOOD CONSISTANCY. THE 3940 KC THURSDAY 2400 Z (GMT) NET IS FUNCTIONING, HOWEVER I CANNOT HEAR THEM DOWN HERE IN TEXAS.

I KNOW A LOT OF YOU FELLOWS CAN BE ON AT 1800 Z AND A LOT THAT CANNOT, SO IT IS NECESSARY TO SET UP SOME TIMES AND FREQUENCIES IN THE EVENING HOURS, KEEPING IN MIND THE TIME DIFFERENCE FROM THE WEST COAST TO THE EAST COAST.

SUGGESTED SCHEDULES STARTING NOV. 1, 1963

VOICE 14.295 Mc. 0100 GMT ALL SECTIONS DAILY AND ANYONE ON FREQUENCY AT THAT TIME, START THE BALL ROLLING. FOR THE BENEFIT OF THE WEST COAST BOYS, LETS DO THE SAME AT 0300 GMT.

C W 7035 Kcs. 0200 GMT ALL SECTIONS DAILY AND ANYONE WHO IS THERE AT THE TIME, TO START THE BALL ROLLING.

FROM EXPERIENCE WE HAD LAST FALL AND WINTER, WE DIDN'T HAVE SO MANY HITTING THE SCHEDULES TO CAUSE ANY CONFUSION, AND IT WAS A HARD ROW TO HOE FOR ONE GUY TO PROMOTE THIS THING NIGHTLY. I BELIEVE THAT THE METHOD OUTLINED ABOVE WILL HELP CONSIDERABLY. IF THE PARTICIPATION GETS TO A GOODLY NUMBER OF STATIONS, THEN WE CAN ALTER THE SCHEDULES AS YOU MAY AWNT THEM. JUST LET ME KNOW AND WILL BE GLAD TO COOPERATE.

AFTER YOU GUYS READ THIS AND HAVE SUGGESTIONS, LET ME KNOW AND I WILL DO WHAT WE CAN TO IMPROVE THE SET-UP.

73,

ROY E. ARMSTRONG W5RIH
NET MANAGER
RT. 1, LEANDER, TEXAS.

NOTE FROM THE PRESIDENT: HEY GANG! HOWS ABOUT GIVING ROY THE ENCOURAGEMENT HE DESERVES AND MUST HAVE TO GET OUR NETS IN WORKING ORDER. BET YOU WILL MEET SOME OF YOUR OLD PALS OF ANOTHER DAY AND YOU WILL NOT REGRET THE EFFORT. YOU FELLOWS HAVE BEEN WONDERFUL IN CO-OPERATING IN OTHER WAYS, SO LETS GIVE ROY THE BEST WE CAN. YE OLDE COPPYE BOYE.

SORRY TO REPORT THAT OUR OLD FRIEND TOM STEVENS IS IN THE HOSPITAL UNDERGOING SOME TESTS. I KNOW THAT ALL HANDS JOIN ME IN HOPING THAT HE WILL BE WITH US AGAIN SOON.

(NEXT PAGE PLEASE)

THE LATIN AMERICAN PAGE

FEDERACION ARGENTINA DE RADIO AFICIONADOS

LA ENTIDAD QUE REUNE A LOS RADIOCLUBES ARGENTINOS CELEBRARA SU ASAMBLEA ANUAL ORDINARIA (CONSEJO FEDERAL DE FARA) EL 26 DE OCTUBRE PROXIMO PARA CONSIDERAR EL SIGUIENTE ORDEN DEL DFA: 1 COMISION DE PODERES; 2-DESIGNACION DE PRESIDENTE DE LA ASAMBLEA; 3 -INFORME DE LA COMISION DIRECTIVA PROVISORIA; 4-SOLICITUDES DE AFILIACION; 5-NOMBRAMIENTO DE LA COMISION ESCRUTADORA; 6-ELECCION DE COMISION DIRECTIVA; IDEM DE REVISORES DE CUENTAS; 7-CONSIDERACION DE PONENCIAS; 8-PLAN FOMENTO 1964; 9-SOLICITUDES DE DESAFILIACION Y 10-DESIGNACION DE DOS ASAMBLEISTAS PARA REFRENDAR EL ACTA DE LA ASAMBLEA.

LAS COMUNICACIONES RELACIONADAS CON LOS DELEGADOS Y SUS PODERES DEBERAN ENVIARSE ANTES DEL 26 DE SEPTIEMBRE DE 1963. LOS CANDIDATOS A COUPAR EN LA COMISION DIRECTIVA DEBERAN ASTAR PRESENTES EN LA ASAMBLEA DEL DFA 26 DE OCTUBRE.

FEDERACION URUGUAYA DE RADIO CLUBES

LA ENTIDAD CENTRAL EJECUTIVA DE LA FURC HA EMITADO LA MEMORIA ANUAL DEL EJERCICIO COMPRENDIDO ENTRE EL 11 AGOSTO DE 1962 Y JULIO DE 1963, EN LA QUE SE INFORMA DE LAS ACTIVIDADES DESARROLLADAS DURANTE EL MISMO, QUE SON LAS SIGUIENTES: A) EN EL ORDEN INTERNACIONAL; MANTENER RELACIONES CON INSTITUCIONES REPRESENTATIVAS DEL CONTINENTE Y EN ESPECIAL CON LA FARA. DESIGNAR DELEGADO EN CHILE AL SR. JOSE BONIFAZ; SE RECIBERON DELEGACIONES DE FARA, CENTRO DE RADIOVETERANOS ARGENTINA Y CORRESPONDENCIA DEL OLD OLD TIMERS CLUB, COMO DEL BS. ARES RADIO CLUB; SE AGRADECIO ESPECIALMENTE LA VALIOSA COLABORACION PRESTADA POR EL DELEGADO EN ARGENTINA, SR. AUGUSTO E. OSORIO, LU2AO.

B)-RELACION CON AUTORIDADES NACIONALES:

SE PRESTO COLABORACION CON REDES DE EMERGENCIA EN EL ACTO ELECCIONARIO DEL 25 NOVIEMBRE. SE ESTABLECIERON CANALES RADIOTELEFONICOS DE ENLACE VARIAS USINAS; SE COLABORA CON EL CUERPO DE BOMBEROS, DIRECCION GENERAL DE DEFENSA CIVIL, MINISTERIO DEL INTERIOR Y LA DIRECCION DE RADIOCOMUNICACIONES.

C)- RELACION CON INSTITUCIONES NO FEDERADAS: SE ENVIARON DELEGACIONES A LOS RADIO CLUBES PASO DE LOS TOROS, R.C. MALDONADO Y SE APOYARON GESTIONES DE ESTE ULTIMO SOBRE NORMAS ITV.

D)- CONCURSOS Y CERTIFICADOS: SE REALIZO EL 29 DE DICIEMBRE DE 1962 UN CONCURSO DE CONFRATERNIDAD INTERNACIONAL. SE ENTREGARON 168 CERTIFICADOS A LOS COLABORADORES DE LA RED FURC.

E)- PUBLICACIONES E INFORMATIVOS: SE EDITARON LOS NUMEROS 3 Y 4 DE LA REVISTA FURC Y SE IRRADIARON BOLETINES BISEMANALES.

IV ASAMBLEA ANUAL DE LA FURC

SE REALIZO EL DIA 20 DE JULIO DE 1963, EN LA CIUDAD DE MONTEVIDEO CON ASISTENCIA DE NUMEROSAS DELEGACIONES, MIEMBROS DEL GOBIERNO E INVITADOS ESPECIALES.

PRIMER LU EN "RTTY"

EL SR. HORACIO MARINNEZ SEEGER, LU1AA, ES EL PRIMER RADIOFICIONADO ARGENTINO QUE HA

THE LATIN AMERICAN PAGE

ESTABLECITO CONTACTO POR MEDIO DE TELEIMPRESORES EL DFA 11 DE JUNIO ULTIMO, EN 14090 Kc., CON K6QGR REDLANDS, CALIFORNIA.

A CONTINUACION COMUNICO CON W6CG TEMPLE CITY, CALIFORNIA, CARL SCHULTZ, ENCARGADO DE LA SECCION "DX" DE LA REVISTA "RTTY" QUE SE EDITA EN ARCADIA, CALIFORNIA. A ESTE INTERESANTE COMUNICADO SIGUIO OTRO CON K3GIF, EDWARD CLAMMER, DE BETHESDA, MARYLAND. POSTERIORMENTE REALIZO OTROS QSO'S CON ESTACIONES DE EUROPA: LA 11ZZG, DE MILAN, ITALIA Y DL3IR DE MUNICH, ALEMANIA. EL OM HORACIO ES RADIOVETERANO Y SERIO CANDIDATO PARA INGRESAR AL OOTC CON ESTE OBJETO YA SE LE HA HECHO LLEGAR EL FORMULARIO RESPECTIVO. ESTA NOTICIA HA REVUELTO EL SVISPERO POR SU IMPORTANCIA Y CARACTERISTICAS ESPECIALES QUE HA DETERMINADO QUE MUCHOS AFICIONADAS LU SE INTERESEN POR ESTA NUEVA TACNICA TAN INTERSANTE COMO UTIL PARA LOS AMATEURS.

LOS AFICIONADOS ARGENTINOS SIGUEN LOS PROGRESOS DE LA TECNICA Y ESTAN ALTANTO DE LAS ASSOCIACIONES EN RTTY MAS IMPORTANTES COMO LA "RTTY" SOCIETYOF SOUTHERN CALIFORNIA" ; LA BRITISH AMATEUR RADIO TELEPRINTER GROUP" ETC.

ACTIVIDADES DEL INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS CONFERENCIA DEL DR. R.W. BROWN.

CON EL SUSPICIO DEL INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS PRONUNCIÓ UNA INTERESANTE CONFERENCIA EL DR. BROWN EL DFA 22 AGOSTO SOBRE "INVESTIGACIONES SOBRE PROPAGACION RADIOELECTRICA."

EL DR. BROWN ES ACTUALMENTE AGREGADO CIENTIFICO DE LA EMBAJADA DE LOS ESTADOS UNIDOS EN BUENOS AIRES, CON LICENCIA COMO DIRECTOR DE LOS LABORATORIOS DE BOULDER DEL "NATIONAL BUREAU OF STANDARDS", CUYA DIRECCION CUMPLE DESADE LA FUNDACION DE ESTE ORGANISMO EN 1954.. LA CONFERENCIA DE ALTO NIVEL TECNICO CUBRIO LOS ASPECTOS MAS IMPORTANTES DE LA PROPAGACION DE LAS ONDAS ELECTROMAGNETICAS EN TODAS LAS GAMAS DEL ESPECTRO. FUE SEGUIDA CON SUMO INTERES POR UNA CALIFICADA CONCURRENCIA DE TECNICOS Y SCIENTIFICOS. AL FINALIZAR LA CONFERENCIA SE DISTRIBUYO A LA CONCURRENCIA UNA TABLA SINOPTICA CON DETALLES SOBRE "LOS FACTORES QUE AFECTAN LA RADIOPROPAGACION TERRESTRE", EN TODA LA GAMA DE FRECUENCIAS CON LA SIGUIENTE CLASIFICACION:"

No. 0-3 DE CCIR---	FREC. 1-3000 CPS	DESIGNACION ELF
4	3-30 Kc.	VLF
5	30-300 Kc.	LF
6	300-3,000 Kc.	MF
7	3-30 Mc.	HF
8	30-300 Mc.	VHF
9	300-3,000 Mc.	UHF
10	3- 30 kMc.	SHF

VISITA DEL DR. RONALD McFARLAN

EL DIRECTOR DE LA REGION 9 IEEE REALIZO UNA EXTENSA GIRA POR VARIOS PAISES DE LATINO AMERICA DURANTE LOS MESES DE JULIO Y AGOSTO, PARA MANTENER CONTACTO PERSONAL CON VARIAS SECCIONES DEL INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS CORRESPONDIENTES A LAS CIUDADES DE MEXICO, BOGOTA, LIMA, SANTIAGO DE CHILE, MONTIVIDEO Y BUENOS AIRES.

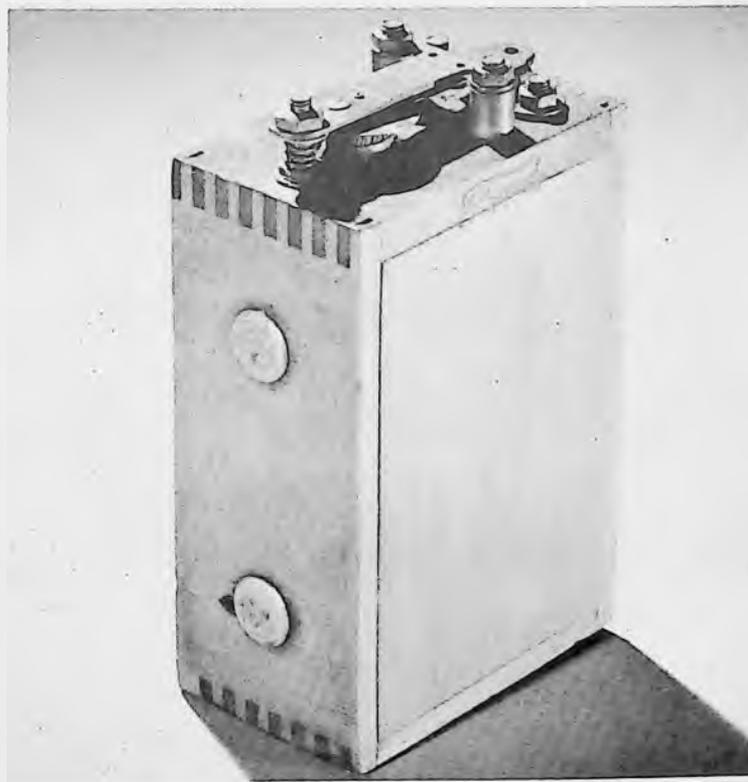
THE LATIN AMERICAN PAGE

EN LA CAPITAL ARGENTINA EL DR. RONALD MCFARLAN PRONUNCIÓ UNA CONFERENCIA SOBRE "TENDENCIAS ACTUALES DENTRO DE LA INGENIERIA ELECTRONICA EN LOS E.E.U.U." AL ILUSTRE VIAJERO SE LE TRIBUTARON NUMEROSOS AGASAJOS, ENTRE LOS SE DESTACARON VISITAS A GRANDES FABRICAS DE MATERIALES ELECTRONICOS, COMO LA ELECTRIC, FAPESA, MAURO Y ESTABLECIMIENTOS UNIVERSITARIOS ESPECIALIZADOS DE BUENO AIRES Y LA PLATA.

BY AUGUSTO E. OSORIO LUZAO

REPRESENTANTE EN SUD AMERICA OOTC

ACOYTE 443, BUENOS AIRES, ARGENTINA



THE MOST FAMOUS TRANSFORMER OF THEM ALL

PHOTO BY W2ICE

EDITOR,S NOTE:

A BOOK--YES MANY BOOKS COULD BE WRITTEN ABOUT THE ABOVE PIONEER OF WIRELESS EQUIPMENT--BUT TO SOME OF US ANYTHING ADDED TO THE ABOVE TITLE WOULD BE JUST JUST SO MANY WASTED WORDS. CLARA BOW, I BELIEVE IT WAS HAD THE TITLE OF IT GIRL. IF EVER A TITLE OF IT, INDICATING THE ULTIMATE, WAS EVER DESERVED, THE PIECE OF EQUIPMENT ILLUSTRATED ABOVE WAS IT IN CAPITALS OF GOLD. HAIL IT.

THE RID STORY

BY

GEORGE E. STERLING WIAE

CHAPTER 2

TARGET PRACTICE

IN THE SPRING OF 1941, REPORTS REACHED HEADQUARTERS THAT THERE WERE AT LEAST TWO STATIONS ON THE AIR, THE OPERATORS OF WHICH INSTEAD OF IDENTIFYING THEIR STATIONS BY SIGNING CALL LETTERS, CHOSE TO IDENTIFY THEMSELVES BY SIGNING "FRITZ." ONE SEEMED TO BE OPERATING IN THE AMATEUR BANDS AND WAS PRONE TO COMMUNICATE AT BRIEF INTERVALS WITH OTHER LICENSED AMATEUR STATIONS WHEREAS THE OTHER CHOSE AN ENTIRELY DIFFERENT MODE OF OPERATION. A FEW HOURS OF MONITORING BROUGHT FORTH INFORMATION THAT FRITZ NUMBER TWO WAS ENDEAVORING TO CHISEL IN ON OUR OWN SECRET RADIO CIRCUIT THAT LINKED THE PRIMARY STATIONS WITH THE NET CONTROL STATION AT LAUREL THAT SERVED TO RELAY TRAFFIC TO WASHINGTON THROUGH A PRIVATE LINE TELETYPEWRITER CIRCUIT.

IT WAS OBSERVED THAT WHEN LAUREL WOULD CALL ONE OF OUR STATIONS, FRITZ WOULD IMMEDIATELY REPLY BY USING THE TACTICAL CALL OF THE STATION CALLED AND ADVISE THE OPERATOR TO GO AHEAD WITH HIS TRAFFIC. WHEN THE TRAFFIC WAS LIGHT ON OUR NET, HE WOULD ADJUST HIS FREQUENCY TO THAT OF THE ARMY AMATEUR RADIO SYSTEM AND COMMUNICATE WITH THE NET CONTROL STATION IN WASHINGTON. PLANS WERE IMMEDIATELY SET IN MOTION TO TRAP HIM. COOPERATION WAS EXTENDED BY THE SIGNAL CORPS STATION WHO KEPT UP AN EXCHANGE OF SIGNALS WITH FRITZ SO AS TO ENABLE OUR HIGH FREQUENCY DIRECTION FINDERS TO OBTAIN BEARINGS.

THE EXCHANGE OF COMMUNICATIONS BETWEEN FRITZ AND OUR OWN STATION BEGAN TO TAKE ON AN UNUSUAL CHARACTER. THE FOLLOWING EXCERPTS ARE TYPICAL OF HIS TRANSMISSIONS: "I AM A CRYPTOGRAPHER. YOU MUST GIVE ME SOME INFORMATION IN EXCHANGE FOR THIS STUFF. GIVE ME THE LOCATION OF (GAVE SEVERAL U.S. GOVERNMENT STATION CALLS). "THIS STATION IS NOW IN THE HANDS OF ENEMY. YOUR INSOLENCE WILL NOT BE TOLERATED BY GERMAN TROOPS. THIS STATION NOW IN CONTROL OF GERMAN SIGNAL CORPS." "NAME HERE IS HANS VON KEITEL. HEIL HITLER." "I WANT YOUR CODES AND CIPHERS. GIVE THEM TO ME OR ELSE WE WILL JAM THIS NET WITH THE BIG RIG." "YOU WILL BE IN CONCENTRATION CAMP. I AM CRYPTOGRAPHER FOR THIS SIGNAL UNIT IN THE GERMAN ARMY OF OCCUPATION." "I AM ON THE ADMIRAL SCHEER AND NEVER DOCK." WHEN ASKED WHERE HE WAS LOCATED, FRITZ SAID, "OFF COAST OF MADAGASCAR."

BY KEEPING FRITZ ACTIVE, BEARINGS WERE QUICKLY OBTAINED AND WHEN PROJECTED, PRODUCED A FIX CLOSE TO A MIDWESTERN CITY. IMMEDIATELY FIVE MOBILE UNITS WERE DISPATCHED INTO THE AREA, EACH ONE HAVING EXPLICIT INSTRUCTIONS AS TO WHAT ROADS AND DIRECTIONS TO PURSUE. THE UNIT SOON PICKED UP THE SIGNALS AND TOOK BEARINGS, WHICH WHEN PROJECTED ON THEIR MAPS FOR THAT LOCAL AREA INDICATED THAT FRITZ WAS LOCATED WEST OF THE ILLINOIS RIVER AND APPARENTLY IN THE CITY OF PEORIA. THE INFORMATION WAS QUICKLY VERIFIED BY OTHER UNITS PROCEEDING TOWARDS PEORIA FROM VARIOUS DIRECTIONS. SUBSEQUENT BEARINGS TAKEN FROM CAREFULLY SELECTED SITES, FREE FROM THE INFLUENCE OF OVERHEAD WIRES AND BUILDINGS, DISCLOSED THE LOCATION OF THE TRANSMITTER WITHIN TWO CITY BLOCKS. CLOSE EXAMINATION REVEALED AN ANTENNA ON A HOUSE WITHIN THE TWO BLOCKS TERMINATED IN A DELTA MATCH TRANSMISSION LINE, BUT FIELD STRENGTH READINGS DID NOT POSITIVELY CONFIRM THIS ANTENNA AS THE RADIATING STRUCTURE.

DURING THE EVENING WHEN IT WAS NECESSARY TO DO CLOSE IN WORK TO DETERMINE THE EXACT LOCATION OF THE TRANSMITTER, FRITZ CEASED TRANSMITTING SINCE HE COULD NOT WORK OUR STATION IN LAUREL OR THE ARMY AMATEUR STATION IN WASHINGTON. IT THEN BECAME NECESSARY TO RESORT TO SOME SPECIAL SPECIAL OPERATIONS. ON ONE OCCASION ON A WEEK-END WHEN WAR WAS NOT OPERATING, I AUTHORIZED ONE OF MY ENGINEERING STAFF, LOU NORTH TO COMMUNICATE WITH FRITZ FROM HIS HOME IN VIRGINIA, USING HIS HAM STATION AND SIGNING THE CALL WAR.

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THE RID STORY

CHAPTER 2

TARGET PRACTICE

TOWARD THE CLIMAX OF THE CASE I HAD SENT MR. ELLERT, OUR TECHNICAL SUPERVISOR TO PEORIA TO OFFER TECHNICAL ADVICE TO SUPERVISOR WESTON AND HIS STAFF. WESTON BELIEVED THE TRANSMITTER TO BE IN THE HOUSE ON WHICH THE DELTA MATCHED ANTENNA WAS ERECTED. ELLERT WAS UNCONVINCED AND BET WESTON A DINNER THE THE STATION WAS NOT IN THAT HOUSE BUT THE ONE NEXT DOOR. AS POINTED OUT PREVIOUSLY, IT WAS NECESSARY WHEN MAKING A COMPLAINT TO SECURE A WARRANT TO STATE EXACTLY THE HOUSE AND ROOM IN THE HOUSE IN WHICH THE TRANSMITTER IS LOCATED. TO CLINCH THE PROBLEM, ELLERT REQUESTED AUTHORITY AND IT WAS GRANTED, TO SET UP A SMALL TRANSMITTER IN THE TEMPORARY MONITORING STATION IN A DOWN TOWN HOTEL ROOM AND ADJUST IT TO THE FREQUENCY AND POWER OUTPUT EQUIVALENT TO THE SIGNAL RECEIVED IN PEORIA FROM THE LAUREL AND WASHINGTON STATIONS.

EMPLOYING THE TACTICAL CALL LETTERS OF THE LAUREL STATION, THE TRANSMITTER WENT INTO OPERATION AS THE SIGNALS FROM LAUREL STARTED TO FADE OUT WITH THE APPROACH OF DARKNESS. FRITZ TOOK THE BAIT, HOOK, LINE AND SINKER AND CONTINUED TO TRANSMIT WHILE AT THE SAME TIME ELLERT WITH THE SPECIAL EQUIPMENT MADE A POSITIVE IDENTIFICATION OF THE LOCATION OF THE LOCATION OF FRITZ'S TRANSMITTER. THE OPERATION AND THAT OF LOU NORTH'S MIGHT BE CALLED AN ENTRAPMENT IF OFFERED IN EVIDENCE IN COURT, BUT WE WERE CONFRONTED WITH A POSSIBLE CASE OF ESPIONAGE BUT WE WERE ENGAGED IN COUNTER-ESPIONAGE AND DRASTIC AND QUICK ACTION WAS NECESSITATED.

BECAUSE OF THE CHARACTER OF THE TRANSMISSIONS IT WAS NECESSARY TO NOTIFY THE FEDERAL BUREAU OF INVESTIGATION WHILE THE STATION IN THE HOTEL ROOM KEPT UP A CONTINUOUS MONITORING SURVEILLANCE. THE FIELD AGENT OF THE BUREAU REPORTED THAT A THOROUGH INVESTIGATION HAD BEEN MADE OF THE OPERATOR AND PERMISSION WAS SECURED TO OBTAIN A WARRANT AND MAKE AN ARREST CHARGING VIOLATIONS OF THE COMMUNICATIONS ACT.

WHEN AN ENTRY WAS MADE FRITZ WAS IN COMMUNICATION WITH WHAT HE SUPPOSED AS A GOVERNMENT MILITARY STATION AND NEVER WAS ADVISED THAT THE SIGNALS THAT OUR MEN HEARD COMING FROM HIS LOUD SPEAKER WERE BEING RECEIVED FROM OUR TRANSMITTING STATION IN PEORIA. THE ARREST DISCLOSED THAT FRITZ WAS A COLLEGE STUDENT MORE INTENT ON TRYING TO DETERMINE THE IDENTITY OF THE STATIONS BE HEARD EMPLOYING TACTICAL CALLS AND SPECIAL PROCEDURE. IT IS INTERESTING TO NOTE THAT ONLY SIX HOURS OF TIME ELAPSED FROM THE DATE THE STATION WAS HEARD UNTIL THE TRANSMITTER WAS LOCATED. ALSO ONLY TWO DAYS PASSED FROM THE TIME FRITZ WAS ARRESTED UNTIL HE WAS INDICTED BY A SPECIAL SESSION OF THE GRAND JURY ON TWO COUNTS INVOLVING SECTIONS 301 AND 318 OF THE COMMUNICATIONS ACT OF 1934. WESTON HAS SINCE SETTLED FOR A DINNER TO ELLERT.

WHILE OPERATIONS WERE IN PROGRESS ON FRITZ, ANOTHER SIGNAL HAD BEEN HEARD IN THE AMATEUR SEVEN MEGACYCLE BAND WHO ALSO CHOSE TO CALL HIMSELF FRITZ AND DURING ONE TRANSMISSION SAID, "NUTS TO THE FCC." "I AM ON A SHIP IN THE ATLANTIC AND THEY CAN'T CATCH ME." BEARINGS INDICATED THE LOCATION OF THE TRANSMITTER AS BEING IN WESTERN MASSACHUSETTS.

BECAUSE OF THE HILLY NATURE OF THE COUNTRY A COMPLEX DIRECTION FINDING PROBLEM DEVELOPED DUE MAINLY TO REFLECTION OF SIGNALS FROM THE HILLS. THROUGH ARRANGEMENTS MADE WITH THE CONNECTICUT AVIATION COMMISSION THE SERVICE OF AN AIRPLANE WAS SECURED AND MONITORING OFFICER C.A. VIMMERSTEDT QUICKLY DETERMINED THAT THE STATION WAS LOCATED IN THE TOWN OF HAYDENVILLE. A MOBILE UNIT OPERATING IN TOWN ALMOST SIMULTANEOUSLY MADE A QUICK DETERMINATION OF THE LOCATION OF THE TRANSMITTER. FRITZ WAS ARRESTED AND LATER INTERNED IN A STATE INSTITUTION. JOHN LAMONT, W10J, A MEMBER OF OOTC, PARTICIPATED IN THIS CASE.

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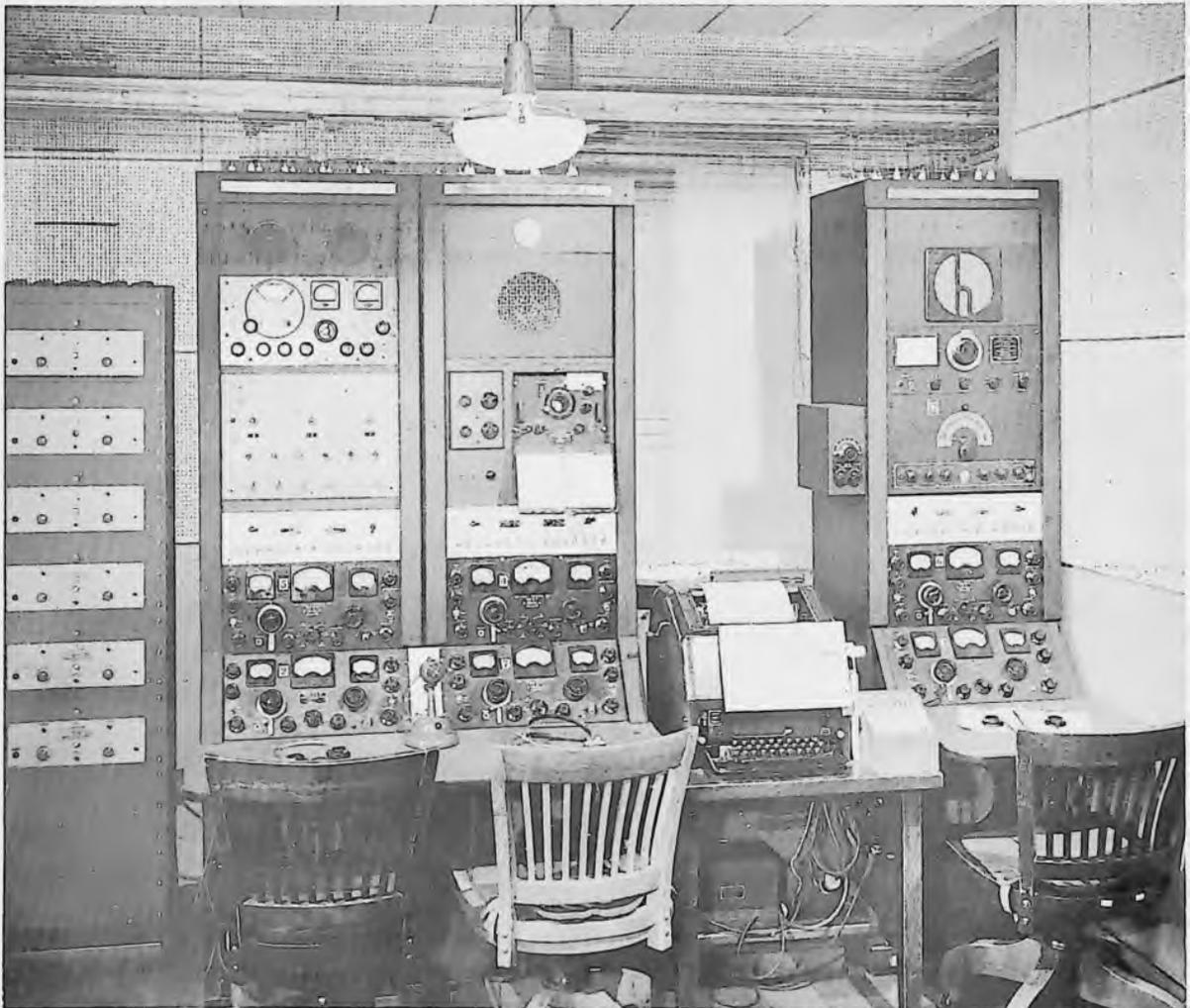
THE RID STORY

CHAPTER 2

TARGET PRACTICE

CONSIDERABLE ASSISTANCE WAS RENDERED BY LICENSED AMATEURS IN NEW YORK CITY AND VICINITY IN KEEPING FRITZ ACTIVE ON THE AIR WHILE FIELD OPERATIONS WERE IN PROGRESS, PARTICULARLY A YOUNG LADY OPERATOR WHO FRITZ SEEMED QUITE FOND OF WORKING. THIS LADY HAM WAS OUR FIRST FEMALE COUNTER-INTELLIGENCE OPERATOR; ALSO FRITZ NEVER KNEW THAT THE W2 HE SUPPOSED WAS IN THE SECOND CALL ZONE WAS ACTUALLY AT THE PRIMARY MONITORING STATION AT LAUREL AND OPERATED BY CHARLIE POTTS UNDER THE SUPERVISION OF ASSISTANT SUPERVISOR "RED" ROLLINS.

THESE TWO CASES OF SOME RADIO ACTIVITY CARRIED ON BY RACE TRACK TOUTS TRYING TO BEAT THE BOOKIES WAS PROPERLY TERMED BY OUR FELLOWS AS TARGET PRACTICE IN PREPARATION FOR BIGGER GAME AHEAD. THEY ALSO HELPED TO PROVE THE EFFICIENCY OF OUR MONITORING AND DIRECTION FINDING SYSTEM AS THESE TWO AND THE NEXT CASE WILL PROVE.



INTERCEPT POSITION--PRIMARY MONITORING STATION--ALLEGAN, MICH.---NOTE: ONE SX-28 STACKED ABOVE ANOTHER FOR CONVENIENCE OF INTERCEPT OFFICER COPYING BOTH THE SPY AND THE CONTROL STATION OPERATING ON DIFFERENT FREQUENCIES. TRANSMITTERS TO LEFT OPERATING ON DIFFERENT FREQUENCIES TO TRANSMIT ALERTS TO SECONDARY STATIONS WHEN A CASE BECAME ACTIVE, FURNISHING FREQUENCIES AND CALLS IN OUR OWN CODE.

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TYPICAL RID MANUALLY OPERATED HIGH FREQUENCY ADCOCK DIRECTION FINDER AS USED BY RID



TRANSMITTER USED BY RACE TRACK TOUTS AT LAUREL, MD. JAIL SENTENCES IMPOSED FOR INTERFERING WITH NAVY RADIO CONTROL CIRCUIT.



DIRECTION FINDER BEARING WITH TIGHT FIGURE 8 PATTERN



DIRECTION FINDER BEARING WITH "SENSE OF DIRECTION OF ARRIVING SIGNAL".



THE NOME ALASKA MONITORING STATION

BURIED DEEP IN THE SNOW DRIFT, IS THE NOME MONITORING STATION. THE JAPS WOULD HAVE HAD A HARD TIME FINDING US. IN FACT FOR SEVERAL WEEKS DURING THE TIME, NO ROAD WAS MAINTAINED TO THE STATION AND WE WHO WORKED HERE HAD TROUBLE FINDING THE PLACE ON DARK NIGHTS WITH ALL LIGHTS BLACKED OUT.

IT WAS NOT A PLEASANT EXPERIENCE TO FLOUNDER THROUGH DEEP DRIFTS ACROSS THE TUNDRA WITH COLD WIND AND SNOW CUTTING YOUR FACE. PROOF THAT THE WIND BLOWS HERE IN THE FAR NORTH IS SHOWN BY THE SMOKE. THIS BUILDING IS A QUONSET HUT: IN APPEARANCE IT RESEMBLES A TIN CAN CUT THROUGH THE MIDDLE. LOCATED ON THE SITE OF A GOLD MINE, UNTOLD WEALTH LIES BENEATH IT.

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CHAPTER III

THE RID STORY

DURING THIS TIME WE WERE FURNISHING THE ARMY AND NAVY INTERCEPTS FROM UK AND AOR AND ADDITION INTERCEPTS FROM JAPANESE WEATHER STATIONS, BRITISH ARMY, AND ROYAL AIR FORCE STATIONS.

THE FREQUENCY ON WHICH UK, WHICH WE CONCLUDED WAS MEANT TO MEAN THE UNKNOWN STATION, WAS OPERATING IN THE MIDDLE OF THE 20 METER BAND AND WAS HEARD REPEATEDLY CALLING AOR AND ALSO SIGNED RAY. DURING AUGUST OF 1940 THE FBI REQUESTED US TO FURNISH THEM INTERCEPTS WE WERE MAKING OF THE TRANSMISSIONS OF AOR AND UK WHICH WE READILY AGREED TO DO.

ON AUGUST 31, 1940, THE HONORABLE JOHN EDGAR HOOVER, DIRECTOR OF THE FEDERAL BUREAU OF INVESTIGATION, ADDRESSED A LETTER TO CHAIRMAN FLY OF THE COMMISSION EXPRESSING CONCERN OVER REPORTS APPARENTLY BASED ON MAGAZINE ARTICLES (NOTABLY THE AMERICAN MAGAZINE) TO THE EFFECT THAT FCC AGENTS WERE DAILY "RAIDING" ENEMY RADIO STATIONS IN THIS COUNTRY. MR. HOOVER STATED IN HIS LETTER THAT HE HAD RELIABLE INFORMATION LEADING HIM TO BELIEVE WE WERE COGNIZANT OF THE RADIO ACTIVITIES OF STATION "AOR." IT WAS EVIDENT THAT MR. HOOVER REFERRED TO "AOR:" IN VIEW OF THE INFORMAL CALL WHICH HAD BEEN MADE ONLY A SHORT TIME PREVIOUSLY BY ONE OF HIS REPRESENTITIVES. IN REPLY, THE COMMISSION STATED THAT WE HAD NO KNOWLEDGE OF "AOR", BUT THAT ARRANGEMENTS HAD ALREADY BEEN MADE TO FURNISH THE BUREAU WITH COPIES OF INTERCEPTS OF "AOR" AND "UK". IN OUR REPLY WE INDICATED THAT THE LATEST LOCATION OF "AOR" WHICH HAD BEEN BROUGHT TO OUR ATTENTION WAS SOMEWHERE NEAR ST. JOHN, NEW BRUNSWICK. THIS, THE THIRD REPORTED LOCATION WAS BASED UPON A LETTER FROM THE NAVY DEPARTMENT ACKNOWLEDGING RECEIPT OF INTERCEPTS OF "AOR" AND "UK" AND STATING THAT:

"BEARINGS TAKEN ON THIS STATION (AOR) INDICATE IT'S PROBABLY LOCATION IS NEAR ST. JOHN, NEW BRUNSWICK".

ON SEPTEMBER 17, 1940, THE NAVY ADVISED US THAT THE STATIONS AOR AND N7Z HAD BEEN TENTATIVELY LOCATED AND THAT THEIR STATIONS HAD DISCONTINUED WATCH ON THEM AND THAT THEY DESIRED NO FURTHER INFORMATION FROM US. (THE N7Z REFERRED TO WAS LATER ESTABLISHED AS BEING A BRITISH CRUISER IN U.S. WATERS.)

THUS IT WAS THAT THE INABILITY TO DISTINGUISH BETWEEN STATIONS NOT USING A STANDARD RADIO PROCEEDURE COMPARABLE TO THAT USED BY COMMERCIAL AND GOVERNMENT STATIONS CAUSED THE NAVY TO DROP A TASK THAT ONCE NAVY INITIALLY (AND SUBSEQUENTLY AS WILL BE SHOWN LATER) REGARDED AS OF PRIME IMPORTANCE. THE INFORMATION FURNISHED US BY THE NAVY WAS ALSO GIVEN TO THE WAR DEPARTMENT. WE HAD INITIATED CORRESPONDENCE TO THE WAR DEPARTMENT WITH INTERCEPTS OF THE TRANSMISSIONS OF AOR, INCLUDED WITH OTHER UNIDENTIFIED MATERIAL OUR MONITORING STATIONS HAD INTERCEPTED, BEGINNING AUGUST 19, 1940. IN FACT THE COMMISSION'S LETTER OF SEPTEMBER 19TH TO BOTH THE WAR AND NAVY DEPARTMENTS POINTED OUT THAT BY CROSSING A BEARING OF 35 DEGREES RECEIVED FROM OUR PORTLAND, OREGON MONITORING STATION WITH THE AOR BEARINGS ORIGINALLY TAKEN BY THE NAVY, AN INTERSECTION WOULD BE OBTAINED IN EUROPE. THAT IS, PORTLAND'S BEARING GAVE A WIDE-ANGLE CUT AND THIS TYPE OF INTERSECTION WAS LATER ESTABLISHED AS A STANDARD PROCEEDURE IN OBTAINING ACCURATE FIXES IN EUROPE DUE TO THE FACT THAT EAST COAST BEARINGS TENDED TO BE PARALLEL AND NOT GIVE A PRECISE DETERMINATION OF THE POINT IN EUROPE WHERE THE STATION UNDER SURVEILLANCE WAS LOCATED.

THE NAVY DEPARTMENT APPARENTLY TOOK NO COGNIZANCE OF THE BEARING FROM PORTLAND WHICH WE FURNISHED AS THE TWO LETTERS CROSSED IN THE MAIL AND THE NAVY'S LETTER OF SEPTEMBER 17 APPARENTLY CLOSED THE CASE AS FAR AS THE NAVY WAS CONCERNED.

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THE WAR DEPARTMENT RESPONDED IN A SIMILAR LETTER. IN AN ENCLOSURE FROM G-2, ALL INTERCEPTS OF UNIDENTIFIED STATIONS WHICH WE HAD FURNISHED TO THE ARMY WERE RETURNED WITH A CHART "IDENTIFYING" THEM. THE PACKAGE INCLUDED INTERCEPTS OF BOTH AOR AND UK AND THESE WERE MARKED UNIDENTIFIED. PENCIL NOTES ON THE BOTTOM OF ONE OF THESE INTERCEPTS INDICATED THAT AN ACTUAL LETTER COUNT HAD BEEN MADE OF THE TEXT OF ONE OF THE MESSAGES AND THE INTERCEPT MARKED TO SHOW THAT THE CIPHER EMPLOYED WAS TRANSPOSITION. EVEN SO, THIS TRAFFIC DID NOT INTRIGUE THE ARMY TO THE EXTENT THAT A SOLUTION OF THE CIPHER WAS ATTEMPTED.

LATER WE LEARNED THAT THE OFFICER THAT HAD MADE THE DECISION WAS EMBARRASSED NO END BECAUSE HE HAD HAD IN HIS POSSESSION ACTUAL TRAFFIC FROM STATIONS IN WHICH THE ARMY WAS KEENLY INTERESTED BUT IT WAS NOT RECOGNIZED BECAUSE IF THE DODGE THE GERMANS USED IN EMPLOYING CHANGING CALL SIGNS. THE SCIENCE OF ANALYZING CALL ROTAS, CLANDESTINE HABITS, PROCEDURES AND FISTS HAD NOT YET BEEN DEVELOPED TO THE POINT WHERE ANY CLANDESTINE MESSAGE COULD BE EASILY IDENTIFIED AS TO SOURCE, CIRCUIT LOCATION AND MESSAGE CONTENT.

THE RESPECTIVE ACTIONS OF THE ARMY AND NAVY IN "CLOSING" THIS CASE NOW LEFT ONLY THE FBI AS AN OUTLET FOR THE TRAFFIC AND SUCH OTHER INFORMATION AS WE COULD FURNISH. BY NOW OUR IDENTIFICATION OF ALL RADIO TRAFFIC HAD REACHED A HIGH DEGREE OF PERFECTION.

ON NOVEMBER 11TH, ONE OF THE MEN ON MY STAFF NOTED THAT THE SPECIAL 4 4-3-3 HEADING USED BY AOR AND UK CONTAINED IDENTICAL LETTERS IN THE FIRST GROUP AND SURMISED THAT THESE LETTERS COULD EASILY STAND FOR THE DIGITS WHICH REPRESENT NOVEMBER 11, NAMELY 11/11. WORKING ON THIS PREMISE DURING THE ENTIRE COURSE OF ONE NIGHT, THE ENTIRE SYSTEM WAS WORKED OUT AND THIRTY DIFFERENT AOR AND UK MESSAGE HEADINGS EXHIBITED WITH THEIR SOLUTIONS, THE FOLLOWING MORNING. ARMED WITH THIS, THE FIRST CLUE OF ANY KIND AS TO HOW THE MESSAGES WERE ENCIPHERED, I MADE THIS INFORMATION AVAILABLE TO THE NAVY.

THE NAVY SECURITY OFFICER IN CHARGE OF CRYPTOGRAPHY WAS ASTOUNDED THAT SUCH A SYSTEM WAS EMPLOYED BUT DID NOT RECOGNIZE IT AND COULD NOT ASSOCIATE IT WITH ANY TYPE OF TRAFFIC. NEVERTHELESS THIS CLUE CAUSED THE NAVY TO REOPEN THE CASE AND THIS TIME MUCH BETTER RESULTS WERE OBTAINED WITH THE BEARINGS BECAUSE OUR ANALYSIS STAFF WAS ABLE TO "LINE-UP" THE DESIRED SCHEDULES, FREQUENCIES AND OPERATIONS FOR THE NAVY IN A MANNER SIMILAR TO THAT NOW BEING EMPLOYED FOR OUR OWN STATIONS. THAT IS, WE HAD LEARNED THAT WE MUST GIVE OUR MONITORING STATIONS ALL INFORMATION POSSIBLE WHICH WILL ASSIST THEM IN INTERCEPTING AND TAKING BEARINGS ON THE DESIRED STATIONS.

IT WAS NECESSARY TO DESCRIBE THE CHARACTERISTICS OF OPERATORS OF STATIONS UNDER SURVEILLANCE AND TO ACCURATELY LIST THE SIGNAL TYPE STYLES AND SPEEDS OF SENDING OF EACH STATION UPON WHICH WE DESIRED BEARINGS. WITH THESE ASSISTS THE NAVY WAS ABLE TO OBTAIN "SYNCHRONIZED" BEARINGS, THAT IS, BEARINGS THAT COULD BE POSITIVELY ESTABLISHED AS HAVING BEEN OBTAINED ON ONE OR THE OTHER OF THE STATIONS AOR OR UK. MATCHING THEIR BEARINGS WITH THOSE WE STILL CONTINUED TO OBTAIN EXCELLENT SMALL TRIANGLE OR "FIX" ON THE NORTHERN END OF LONG ISLAND.

THERE WAS BEGINNING TO DEVELOPE SOMETHING MORE THAN A MERE PURSUAL OF THE INTERCEPTS WE CONTINUED TO MONITOR BOTH AOR AND UK AND TO FURNISH THE FBY WITH COPIES OF ALL MESSAGE-INTERCEPTED. I WAS FULLY CONVINCED THAT UK WAS IN THE UNITED STATES AND TOOK STEPS TO CONTACT THE NAVY DEPARTMENT, OUR ORIGINAL INFORMANT, AS TO THE NATURE OF THE TRAFFIC DESPITE THE NAVY LETTER "CLOSING" THE CASE.

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RID GIRL TAKING A HIGH FREQUENCY BEARING WITH ADCOCK D.F. AND PLOTTING BEARING.



SECONDARY MONITORING STATION SOUTH MIAMI, FLA. OPERATOR, MISS DOROTHY ASHLEY



Pocket Radio (Sniffer) for tracking and illegal operations also general location is shown

THE RID SNIFFTER

THE RID "SNIFFTER" WAS USED TO CASE HOTELS AND APARTMENTS.

THE OPERATOR USES AN ANTENNA INSIDE OF PANT LEG, EQUIPMENT CONCEALED UNDER THE COAT WITH THE METER WIRED DOWN HIS SLEEVE.

BY HOT AND COLD PROCEDURE FROM METER READINGS, HE LOCATES THE ROOM IN WHICH TRANSMITTER IS OPERATING.

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THE RID STORY

CHAPTER III

SPY AND COUNER-SPY

WITH OVER A HUNDRED MONITORING STATIONS IN OPERATION, IT BECAME NECESSARY TO INAUGERATE A SYSTEM TO PROCESS INTELLIGENTLY THE INTERCEPTED MATERIAL THAT BEGAN TO FLOW INTO WASHINGTON, WHICH COULD NOT BE IDENTIFIED FROM THE AIDS AVAILABLE AT THE STATIONS. IT SHOULD BE REALIZED THAT THE USE OF RADIO CHANNELS FOR COMMERCIAL, MILITARY AND DIPLOMATIC PURPOSES, INCREASED DIRECTLY IN PROPORTION TO THE TEMPO OF THE INTERNATIONAL SITUATION. NEW CALL LETTERS AND NEW PROCEEDURES APPEARED CONSTANTLY IN THE INTERCEPTED MATERIAL. NEW STATIONS APPEARED ON CHANNELS ASSIGNED TO REGULAR COMMERCIAL AND GOVERNMENT STATIONS AND THEIR IDENTITY COULD NOT BE FOUND IN THE OFFICIAL INTERNATIONAL LISTINGS OF STATIONS. IN LOOKING OVER THE QUALIFICATIONS OF THOSE WHO BECAUSE OF THEIR PREVIOUS SERVICE AND AFFILIATIONS MIGHT PROVIDE THE NUCLEUS OF A SPECIALIZED STAFF OF RADIO TRAFFIC ANALYSTS, MY ATTENTION WAS FOCUSED PARTICULARLY ON THOSE INDIVIDUALS IN STATIONS WHO MADE COMMENTS ON THEIR INTERCEPTED MATERIAL TO AID IN IT'S EVALUATION.

ONE INDIVIDUAL IN PARTICULAR, A RADIO OPERATOR ON THE STAFF OF THE PRIMARY STATION LOCATED THEN AT SAN PEDRO, CALIFORNIA, CONTINUALLY FURNISHED COMMENTS WHICH GAVE EVIDENCE THAT HE APPRECIATED THE TASK WE HAD UNDERTAKEN IN WASHINGTON.

IT SHOULD BE BORNE IN MIND THAT WE WERE LOOKING FOR ENEMY EGENTS WITH TRANSMITTERS AND HAD NO INKLING OF THE RADIO PROCEEDURE THEY MIGHT USE. I HAD ORDERED THIS CHAP FROM SAN PEDRO INTO WASHINGTON ON A DETAIL AND WHILE BUSILY ENGAGED ONE AFTERNOON, MY SECRETARY ANNOUNCED THAT A GENTLEMAN WAS OUTSIDE WITH NO BAGGAGE BUT TWO HATS, ONE ON HIS HEAD AND THE OTHER IN A HAT BOX.

THUS DID ALBERT MCINTOSH OF SAN PEDRO AND FORMERLY AMERICAN AIRLINES JOIN THE STAFF AND PROVED TO BE ONE OF MY GREATEST FINDS. OTHERS HAVING SIMILAR APTITUDE WERE LOCATED AND SOON UNDER MCINTOSH'S SUPERVISION AN ORDERLY METHOD OF PROCESSING INTERCEPTED MATERIAL WAS IN OPERATION. TO AID OUR MONITORING STAFF THROUGHOUT THE NATION, I HAD ALSO ASSIGNED MCINTOSH WITH SOME OF HIS ASSISTANTS TO PREPARE AN IDENTIFICATION MANUAL SHOWING THE OCCUPANCY OF THE SPECTRUM BY CALL LETTERS, FREQUENCY, TYPE OF EMISSION WITH SAMPLES OF TRAFFIC AND OTHER CHARACTERISTICS. THESE MANUALS WERE TO ASSIST IN MAKING QUICK IDENTIFICATION OF AUTHORIZED STATIONS THROUGHOUT THE WORLD AT EACH MONITORING STATION AND THUS AVOID HAVING SCADS OF INTERCEPTED MATERIAL PROCESSED AT HEADQUARTERS. THE NECESSAITY OF HAVING OUR MONITORING STAFF BECOME FAMILIAR WITH EACH TYPE OF EMISSION AND PROCEEDURE WAS NECESSARY SINCE THE MAJORITY HAD KNOWN ONLY AMATEUR PROCEEDURE OR MARINE TRAFFIC. MOREOVER, THE ARMY AND NAVY WERE CONSTANTLY REPORTING STATIONS WHICH THEY COULD NOT IDENTIFY. THIS WAS UNDERSTANDABLE SINCE THEY HAD MANY NEW OPERATORS AND OFFICERS UNFAMILIAR WITH TRAFFIC OTHER THAN MILITARY.

THESE MANUALS BECAME SO POPULAR THAT THEY WERE REQUESTED BY THE NAVY AND ARMY AND OTHER AGENCIES OF GOVERNMENT INCLUDING OSS. I SHOULD LIKE TO ADD THAT I ALSO HAD ENCOURAGED THREE OF MY MEN TO STUDY CRYPTOGRAPHY, A FAIR KNOWLEGE OF WHIC I HAD ACQUIRED IN WWI.

DURING THE SUMMER OF 1940, RID EXCHANGED INFORMATION WITH BOTH ARMY AND NAVY ABOUT THE SUSPICIOUS OPERATION OF TWO STATIONS OPERATING IN THE 14 MEGACYCLE BAND. OUR STATION SIGNED UK AND WORKED A STATION SIGNING AOR. THE NAVY WITH SCANT NUMBER OF BEARINGS REPORTED THE FAVORABLE LOCATION OF AOR NEAR ST. JOHN, NEW BRUNSWICK AND THAT WHILE SATISFACTORY BEARINGS HAD NOT BEEN OBTAINED, BELIEVED THAT UK WAS LOCATED SOMEWHERE IN WESTERN CENTRAL NEW ENGLAND OR NEW YORK STATE.

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THE ONLY THING THAT REMAINED WAS TO POSITIVELY DETERMINE WHAT STATION WAS SENDING AND IT'S PRECISE LOCATION. TO THIS END THE OFFICER IN CHARGE OF THE NAVAL COMMUNICATIONS SECURITY OFFICE REQUESTED ME TO DETAIL ALBERT McINTOSH TO HIS OFFICE TO ASSIST IN THE SOLUTION OF THE UK CIPHER. McINTOSH WAS THE SAME ONE WHO HAD "BROKEN" THE PREAMBLE KEY. HE WAS ONE OF THE THREE I HAD URGED TO STUDY CRYPTOGRAPHY. HIS ANALYSIS HAD SHOWN THAT THE TEXTS PROPER OF THE TRAFFIC WERE MOST LIKELY IN A GERMAN TRANSPOSITION CIPHER INTERSPERSED WITH FREQUENT NULL LETTERS. THE OFFICIAL NAVY CRYPTOGRAPHERS TRIED DESPERATELY TO SOLVE THE CIPHER BUT TO NO AVAIL. NEITHER HAD THE FBI GIVEN US ANY INDICATION THAT THEY HAD BROKEN THE CODE.

I THEREFORE, FELT THAT FURTHER TIME SHOULD NOT BE TAKEN TO WAIT FOR THE READING OF THE MESSAGES AND CALLED THE MONITORING OFFICERS IN CHARGE OF THE THREE NEAREST SECONDARY MONITORING STATIONS TO THE SCENE OF THE "FIX" ON UK; NAMELY, REDFERN, CRESSY AND ROSS OF NEW YORK CITY, BAYSHOE, L.I. AND PORTLAND, CONNECTICUT, TO MY OFFICE AND ISSUED DETAILED AND EXPLICIT INSTRUCTIONS IN REGARD TO WHAT PROCEEDURE WAS TO BE FOLLOWED IN DETERMINING THE EXACT LOCATION OF THE UK TRANSMITTER. BY WORKING INDEPENDANTLY (BUT EXCHANGING THE RESULTS OF THEIR OBSERVATIONS DAILY IN ACCORDANCE WITH MY INSTRUCTIONS) THEY WERE ABLE TO LOCATE THE EXACT HOUSE IN WHICH UK WAS LOCATED INSIDE OF HTRREE DAYS. THIS DETERMINATION WAS BASED UPON THE PROJECTIONS OF GROUNDWORK BEARINGS TAKEN BY TWO MOBILE UNITS ON LONG ISLAND AND ONE ON THE CONNECTICUT SHORE.

ON SATURDAY, DECEMBER 7, 1940, FOR THE SECOND CONSECUTIVE DAY, MR. ROSS, MONITORING OFFICER IN CHARGE OF OUR BAYSHORE, LONG ISLAND STATION DROVE BY THE SAME HOUSE IN CENTERPORT, LONG ISLAND, AND EACH TIME OBTAINED THE SAME RESULT, OBSERVING THAT THE S-29 RECEIVER ON THE FLOORBOARD "BLOCKED" EVEN WITH THE COLLAPSIBLE ANTENNA ALL THE WAY WITH THE CAP ON THE ANTENNA SOCKET. IN ADDITION, MR. ROSS OBSERVED THAT THIS HOUSE IN CENTERPORT WAS THE ONE IN THIS VILLAGE OF APPROXIMATE 300 PERSONS THAT HAD AN ANTENNA VISABLE, WHICH COULD CONCEIVABLY BE RADIATING SIGNALS THAT WOULD REACH GERMANY AND AOR OR THE 14 Mc. BAND.

IT WAS NOW OBSERVED THAT THE LOCATION OF THE STATION ROSS HAD FOUND WAS IN THE SAME VILLAGE, CENTERPORT, AS THE ONE LISTED AS BEING THE LOCATION OF A SECRET AMATEUR RADIO STATION LICENSED TO THE FBI IN THE SPRING OF 1940; THIS STATION HAD BEEN GIVEN THE CALL W2NCK FOR A CONFIDENTIAL PURPOSE AND IT WAS, THEREFORE, BELIEVED THERE MIGHT BE SOME CONNECTION BETWEEN THE CONFIDENTIAL LICENSE ISSUED TO THE FBI AND THE OPERATION OF UK. THE LETTER FROM THE BREAU IN RESPONSE TO ONE FROM THE COMMISSION ATTEMPTING TO DETERMINE THIS INFORMATION LED ONE TO BELIEVE OTHERWISE HOWEVER.

AFTER CONSULTING WITH MR. JETT, WHO WAS CHIEF ENGINEER OF THE FCC, MY IMMEDIATE SUPERIOR, HE ADVISED ME TO NOTIFY THE FBI THAT WE HAD LOCATED THIS STATION AND THE ARMY AND NAVY COULD NOT IDENTIFY IT AND UNLESS THEY HAD SOME INTEREST IN IT WE WERE GOING TO TAKE ACTION TO ARREST THE OPERATORS. I MADE THIS INFORMATION KNOWN TO MR. CARSON, A SUPERVISOR OF THE FBI, MONDAY MORNING, DECEMBER 9, 1940, AND HE ADVISED ME THAT HE WOULD MAKE INQUIRIES AND LET ME KNOW IF THE BUREAU HAD ANY INTEREST IN THE CASE. HE DID REQUEST ME TO AWAIT FURTHER WORD FROM HIM BEFORE TAKING ANY ACTION TO ENTER THE STATION.

SOON AFTER MY RETURN FROM THE BUREAU, I WAS CALLED INTO MR. JETT'S OFFICE AND WAS

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SURPRISED TO FIND MR. CARSON WAITING TO SEE HIM. MR. CARSON STATED THAT HE HAD TRIED TO SEE CHAIRMAN FLY BUT IN HIS ABSENCE HAD BEEN DIRECTED TO SEE MR. JETT. IN MR. JETT'S OFFICE, HE STATED THAT THE STATION WE HAD LOCATED ON LONG ISLAND WAS INVOLVED IN AN OPERATION WHICH WAS OF EXTREME IMPORTANCE TO THE FBI AND FURNISHED SUFFICIENT INFORMATION TO IMPLY WITHOUT DOUBT IT WAS ENGAGED IN A COUNTER-ESPIONAGE ACTIVITY. HE REQUESTED THAT WE TAKE NO ACTION TO MOVE IN ON THE OPERATORS.

THIS OPERATION REACHED A CLIMAX ON JUNE 28TH, 1941, WHEN THE FEDERAL BUREAU OF INVESTIGATION ANNOUNCED THE ARREST OF THIRTY THREE SPIES, INCLUDING THREE WOMEN, AND CHARGED THEM WITH VIOLATING THE ESPIONAGE ACT OF 1917. DURING THE PROGRESS OF THIS CASE IN THE FEDERAL COURT IN BROOKLYN, N.Y. THE BUREAU ANNOUNCED THAT THEY WERE OPERATORS OF THE STATION ON LONG ISLAND. THE DISCLOSURE CAME ON SEPTEMBER 9, 1941, THROUGH THE TESTIMONY OF WILLIAM G. SEBOLD, A MACHINE GUNNER OF THE GERMAN ARMY IN WORLD WAR I.

SEBOLD RELATED HOW HE WAS TRAPPED BY THE GESTAPO WHILE ON A VISIT TO HIS HOME IN GERMANY AFTER WORKING IN THE CONSOLIDATED AIRCRAFT COMPANY PLANT IN SAN DIEGO, CALIFORNIA AND BEING FORCED UNDER THREAT OF DEATH TO HIMSELF AND PUNISHMENT OF HIS MOTHER, BROTHERS AND SISTER, JOINED THE NAZI ESPIONAGE RING. LITTLE DID THE CHIEF OF THE GESTAPO, ADOLPH FRITZ ROTTER, REALIZE THAT IT WAS SEBOLD'S FIRM INTENTION TO TURN ALL OF THE INFORMATION HE RECEIVED OVER TO THE GOVERNMENT OF THE UNITED STATES. AFTER COMPLETING A COURSE IN THE SPY SCHOOL WHICH INCLUDED RADIO TELEGRAPHY, MICRO-PHOTOGRAPHY, CODES AND CIPHERS AND OTHER ESSENTIALS, SEBOLD RECEIVED INSTRUCTIONS TO RETURN TO THE UNITED STATES AND ACT AS PAY MASTER FOR THE SPY RING OPERATING IN THIS COUNTRY AND TO SET UP A RADIO TELEGRAPH STATION THROUGH WHICH THE INFORMATION GATHERED BY THE SPIES WOULD BE TRANSMITTED TO GERMANY.

THE SPYMASTER FURNISHED SEBOLD WITH \$7,000 CASH WITH WHICH TO START HIS ACTIVITIES UPON ARRIVAL IN AMERICA AND HE WAS TOLD TO OPERATE UNDER THE NAME OF HARRY SAWYER. HE WAS ADVISED THAT A SPY BY THE NAME OF SIEGLER, ERWIN WILHELM SIEGLER, WOULD AID HIM IN SETTING UP THE WIRELESS STATION. HE WAS FURNISHED WITH MICROFILMS CONTAINING ALL OF HIS INSTRUCTIONS AND THE NAMES AND ADDRESSES OF THOSE TO BE HIS CONFEDERATES IN THIS COUNTRY AND THE PROPER PASS WORDS FOR IDENTIFICATION.

HE RECEIVED A PERSONAL MESSAGE FROM DR. RITTER, CHIEF OF THE GESTAPO SPIES, INSTRUCTING HIM TO TELL HERMAN LANG OF RIDGEWOOD, LONG ISLAND TO RETURN TO GERMANY BY WAY OF JAPAN AND SIBERIA. HE WAS TOLD TO APPROACH LANG WITH THE GREETING "RENTZAU, BERLIN, HAMBURG. HERMAN LANG, A NATURALIZED CITIZEN OF THIS COUNTRY AND AN EMPLOYEE OF THE NORDEN BOMBSIGHT FACTORY, VISITED GERMANY IN 1938 AND HAD REVEALED TO THE GERMAN GOVERNMENT AT THAT TIME, THE PARTICULARS OF THE DESIGN AND CONSTRUCTION OF THIS INSTRUMENT. APPARENTLY THE INFORMATION LANG HAD SUPPLIED WAS NOT SUFFICIENT AND THE SPY MASTER DESIRED HIM TO RETURN TO GERMANY. LANG WAS RELUCTANT TO RETURN TO GERMANY BUT EVEN HAD HE DESIRED HE WOULD HAVE BEEN APPREHENDED BY THE FBI WHO HAD HIM UNDER SURVEILLANCE. HE WAS LATER CONVICTED AND RECEIVED EIGHTEEN YEARS IMPRISONMENT.

SEBOLD, PRIOR TO HIS DEPARTURE FROM GERMANY HAD FURNISHED INFORMATION TO THE U. S. CONSUL AT COLOGNE REGARDING HIS PLANS AND A REPRESENTATIVE OF THE STATE DEPARTMENT MET HIM WHEN THE MANHATTAN DOCKED AT NEW YORK AND BROUGHT HIM TO THE OFFICE OF THE FBI WHERE HE TOLD HIS STORY AND TURNED OVER THE MICROFILMS AND \$910 REMAINING OF THE \$1,000 DR. RITTER HAD FURNISHED HIM. HE THEN AGREED TO ENLIST IN THE SERVICE OF THE FBI AND OPERATE UNDER THEIR DIRECTION AS A COUNTER ESPIONAGE AGENT.

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SEBOLD HIMSELF DID NOT OPERATE THE TRANSMITTER AT LONG ISLAND, INSTEAD THE FBI GAVE SPECIAL AGENT MORRIS H. PRICE THIS ASSIGNMENT SINCE HE WAS LICENSED BY THE FEDERAL COMMUNICATION COMMISSION AS A HOLDER OF CLASS A RADIO AMATEUR OPERATOR'S LICENSE AND HAD GAINED EXPERIENCE OPERATING HIS OWN STATION.

STRANGE AS IT MAY SEEM, AFTER THE ROUND UP OF THE SPIES HAD BEEN MADE AND THE TRIAL WAS IN PROGRESS THE CONTROL STATION AOR IN GERMANY CONTINUED TO COMMUNICATE WITH THE FBI STATION AND DID UP UNTIL FOUR DAYS BEFORE SPECIAL AGENT PRICE TOOK THE WITNESS STAND IN IN THE BROOKLYN FEDERAL COURT. HITLER'S ASSOCIATES IN GERMANY WERE UNAWARE OF THE ARREST OF THEIR AGENT.

SEBOLD HAD BEEN INSTRUCTED TO USE CIPHER SYSTEM WHICH LATER PROVED TO BE USED RATHER GENERALLY BY GERMAN ESPIONAGE AGENTS. WE USED IT EFFECTIVELY IN READING MESSAGES SENT BY SPIES FROM SOUTH AMERICA. THE SYSTEM REQUIRES THE USE OF A BOOK, GENERALLY A POPULAR NOVEL OF THE DAY, BUT ONE WHOSE CIRCULATION WAS RESTRICTED IN EUROPE. IN THIS INSTANCE THE NOVEL FURNISHED TO SEBOLD WAS ENTITLED, "ALL THIS AND HEAVEN TOO." EACH AGENT ASSIGNED A SPECIAL NUMBER WHICH HE USED AS A CONSTANT WHEN ENCIPHERING AND DECIPHERING MESSAGES.

IN GENERAL, AFTER CONTACT IS MADE BETWEEN THE "IN" CONTROL STATION (HAMBURG) AND THE "OUT" STATION (CENTERPORT) THE SYSTEM PROVIDED FOR EACH STATION TO CHANGE ITS CALL LETTERS DAILY UTILIZING THE NOVEL FOR THIS PURPOSE AS FOLLOWS: ASSUME SEBOLD'S NUMBER TO BE 20 AND THE PERIOD OF OPERATION MAY 20TH. TO 20 WOULD BE ADDED 5, MAY BEING THE FIFTH MONTH OF THE YEAR, AND THEN 30, THE DAY OF THE MONTH, MAKING A TOTAL OF 85. TURNING TO PAGE 85 OF THE NOVEL THE LAST THREE LETTERS OF THE LAST PAGE READ IN REVERSE WOULD BE THE CALL LETTERS USED BY THE CONTROL STATION AND THE LAST THREE LETTERS OF THE NEXT TO THE LAST WORD READ IN REVERSE THE "OUT" STATION. UNIDENTIFIED LINES ON THAT PAGE WERE USED TO FORM THE RECTANGLE UNDER WHICH THE MESSAGE WAS TO BE ENCIPHERED. ON THE FOLLOWING DAY THE NEXT PAGE WAS USED. A CYCLE OF OPERATORS USING THIS SYSTEM TOOK PLACE GENERALLY OVER PERIODS OF 30 OR 60 DAYS.

THE FIRST TRANSMISSION MADE BY THE FBI OPERATOR TOOK PLACE ON MAY 25, 1940. THE CALL LETTERS SEBOLD WAS INSTRUCTED TO USE CONSISTED OF THE COMBINATION CQ DX V W2 AND HE WAS TO CALL AOR. BY INTERNATIONAL AGREEMENT EACH STATION IS ASSIGNED CERTAIN LETTERS OF THE ALPHA BET WITH WHICH TO DERIVE CALL LETTERS PERMUTATIONS. HOWEVER, ACALLS BEGINNING WITH A HAD NOT BEEN ASSIGNED ANY NATION. IT IS BELIEVED THE GESTAPO RADIO MINDS CHOSE WITH THESE PERMUTATION FOR REASONS THAT THEY WERE LEAST APT TO ATTRACT THE ATTENTION OF OUR MONITORING SYSTEM AND THE THOUSANDS OF LICENSED AMATEURS OPERATING IN THE 14 MEGACYCLE HAM BAND. IT IS CUSTOMARY FOR AN AMATEUR WHO DESIRED TO COMMUNICATE OVER A LONG DISTANCE TO MAKE THE GENERAL CALL, CQ AND FOLLOW IT BY THE LETTERS DX MEANING LONG DISTANCE CONTACT DESIRED. IN THIS CASE THE LETTERS DE OR V FOLLOWED BY W2 THE PREFIX ASSIGNED TO AMATEURS IN THE SECOND CALL AREA WHICH EMBRACED LONG ISLAND, N.Y. THE GESTAPO FAILED TO ADD THE TWO OR THREE LETTERS THAT NORMALLY FOLLOW AFTER THE PREFIX W2. HOWEVER, AS FAR AS IT IS KNOWN ONLY ONE AMATEUR OPERATOR REPORTED THE TRANSMISSIONS FROM THE LONG ISLAND STATION AS BEING SUSPICIOUS DURING IT'S FIFTEEN MONTHS OF OPERATION. THIS SURPRISED ME SINCE IT IS OFTEN STATED THAT THE HAMS POLICE THEIR OWN BANDS.

SPECIAL AGENT PRICE MADE HIS FIRST CALL TO AOR ON THE EVENING OF MARCH 15TH AND CONTINUED CALLING EACH DAY ON SCHEDULE UNTIL FINALLY CONTACT WAS MADE ON MAY 22ND WHEN THE FIRST MESSAGE WAS RECEIVED. IT READ, "YOUR SIGNAL IS VERY WEAK. CAN YOU IMPROVE IT? I

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WILL SEND TUESDAYS AND THURSDAYS AT 1:00 AND 5:00 P.M. E.S.T.-- AFTER THAT THEY WILL LISTEN DAILY EXCEPT SATURDAY NIGHT AND SUNDAY. SATURDAY, 12:00 NOON O.K. WILL FURNISH YOU NEW FREQUENCY LATER."

AFTER AN EXCHANGE OF SEVERAL MESSAGES RELATING TO SCHEDULES THE FIRST BUSINESS MESSAGE WAS TRANSMITTED. SEBOLD HAD AMONG THE SPY GROUP, LILLY STEIN, AN ARTIST'S MODEL THE GESTAPO HAD SENT TO NEW YORK TO COLLECT SPY MATERIAL FROM OTHER MEMBERS OF THE RING. SHE ADVISED SEBOLD THAT SHE HAD NEW INFORMATION BUT NEEDED MONEY SO A MESSAGE WAS DISPATCHED TO AOR WHICH READ: "STEIN DESTITUTE, GOT NEW CONTACT BUT MUST HAVE MONEY AT ONCE."

ONE OF THE FIRST IMPORTANT MESSAGES RECEIVED FROM THE MASTER SPY READ AS FOLLOWS: "NEED URGENTLY FROM ALL FRIENDS MONTHLY PRODUCTION OF AIRPLANES, FACTORIES, EXPORTS TO OTHER COUNTRIES, ESPECIALLY ENGLAND AND FRANCE, NUMBER, TYPE, DATE OF DELIVERY BY STEAMER OR AIR; ARMATURE AND ARMAMENT; PAYMENT CASH AND CARRY; CREDIT. ROSE HAD \$200 FOR YOU, NOT FOR STEIN, GREETINGS."

LATER, MEMBERS OF THE RING FED INFORMATION TO SEBOLD IN THE BELIEF THAT IT WAS ALL BEING TRANSMITTED TO GERMANY, NOT KNOWING THAT THE FBI WAS ORIGINATING HOAX MESSAGES TO KEEP THE GESTAPO SATISFIED IN ADDITION TO OTHER MESSAGES RELATING TO PAYMENT OF FUNDS TO AGENTS.

THE TRANSMISSIONS CONTINUED UNTIL SEPTEMBER 7TH, FOUR DAYS BEFORE AGENT PRICE TOOK THE WITNESS STAND IN THE BROOKLYN FEDERAL COURT AND SEVERAL WEEKS AFTER THE ARREST OF THE SPY RING BY THE FBI. APPARENTLY MR. HOOVER'S MEN HAD CRIPPLED HITLER'S SOURCES OF INFORMATION TO THE EXTENT THAT THE GESTAPO WAS UNAWARE OF THE ARREST OF THEIR AGENTS IN THE NEW YORK AREA.

A RATHER DRAMATIC INCIDENT WAS PRECIPITATED IN THE FEDERAL COURT PRESIDED OVER BY JUDGE MORTIMER W. BYERS, WHERE SIXTEEN OF THE MEN ACCUSED OF ESPIONAGE ACTIVITIES WERE ON TRIAL. DURING CROSS EXAMINATION OF FBI AGENT PRICE WHO OPERATED THE TRANSMITTER AT COUNTER PORT, L.I., WAS ASKED BY A DEFENSE ATTORNEY IF HE HAD ANY WAY OF DETERMINING THAT AOR WAS IN GERMANY, AND HE REPLIED THAT HE DID NOT. MOREOVER HE ADMITTED THAT THE TRANSMITTER COULD HAVE BEEN OPERATED FROM THE COURT ROOM AND HE WOULD NOT HAVE BEEN AWARE OF IT FROM HIS RECEIVING STATION ON LONG ISLAND. THE DEFENSE, WITH THIS ADMISSION, THOUGHT THEY HAD SCORED A MAJOR POINT, AND U.S. ATTORNEY HAROLD KENNEDY CALLED AL MCINTOSH OF THE RID ENGINEERING DEPARTMENT, FEDERAL COMMUNICATIONS COMMISSION, TO TAKE THE STAND.

MCINTOSH GAVE EXPERT TESTIMONY TO PROVE THAT THE STATION SIGNING AOR WAS IN THE IMMEDIATE VICINITY OF HAMBURG, GERMANY AND BACKED HIS TESTIMONY BY CHARTS SHOWING THE PROJECTION OF BEARINGS TAKEN BY OUR PRIMARY STATIONS IN THE UNITED STATES AND RESULTING IN A FIX EMBRACING THE METROPOLITAN AREA OF HAMBURG. DEFENSE ATTORNEYS ENDEavored TO BREAK DOWN MCINTOSH'S TESTIMONY, PARTICULARLY WITH RESPECT TO THE ACCURACY OF THE BEARINGS AND THE METHOD OF PROJECTION. U.S. ATTORNEY HAROLD KENNEDY, A FORMER NAVAL OFFICER AND FAMILIAR WITH CHARTS AND BEARINGS FINALLY LED ONE DEFENSE ATTORNEY INTO A RIDICULOUS POSITION WHERE IT WAS OBVIOUS TO THE COURT THAT HE WAS IN TOTAL IGNORANCE OF THE SUBJECT OF HIS EXAMINATION.

THE COMPLETE STORY OF THIS SPY RING AND IT'S OPERATIONS, APPREHENSION, CONVICTION AND SENTENCE OF ALL INVOLVED, HAD BEEN COVERED IN THE PRESS AND IN PARTICULAR BY WILLIAM

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GILMAN IN A STORY, THE FIRST INSTALLMENT OF WHICH APPEARED IN THE NOVEMBER, 1942 ISSUE OF "TRUE DETECTIVE." MR. GILMAN IN HIS ARTICLE GAVE APPROPRIATE CREDIT TO THE WORK PERFORMED BY RID IN AIDING THE FBI IN THIS CASE.

THE DETAILS OF THE STORY REVEAL THE BRILLIANT OPERATIONS OF THE FBI IN MAKING MOVING PICTURES OF THE MEETINGS OF THE SPIES BY HIDDEN CAMERAS AND KEEPING EACH INDIVIDUAL UNDER CONTINUOUS SURVEILLANCE RESULTING IN THE FINAL ROUND UP OF THIRTY-THREE, MANY OF WHOM PLEADED GUILTY. OF THE SIXTEEN TRIED IN THE BROOKLYN COURT, THREE RECEIVED SENTENCES OF EIGHTEEN YEARS AND INCLUDED FIFTY-ONE YEAR OLD FREDERICK DUQUESNE AND HERMAN LANG WHO REVEALED THE DETAILS OF THE NORDEN, AND EDMUND CARL HEINE. BOTH DUQUESNE AND HEINE RECEIVED IN ADDITION, A FINE OF \$5,000. OTHERS WERE SENTENCED TO VARIOUS TERMS RANGING FROM ONE YEAR TO SIXTEEN YEARS AND WITH FINES AMOUNTING TO \$1,000 EACH. LILLY STEIN RECEIVED A TEN YEARS' SENTENCE..

ANOTHER SPY IN GERMANY WAS RECEIVING TRAINING INCLUDING RADIO AND IT WAS THE INTENTION OF THE GESTAPO TO SEND HIM TO NEW YORK TO SET UP A RADIO STATION WITH SPECIFIC INSTRUCTIONS TO SPY ON SHIPPING AND SEND REPORTS DIRECTLY TO GERMANY. HE CAME TO AMERICA BY WAY OF GENOA, ITALY AND AMERICAN STEAMER TO NEW YORK. PRIOR TO HIS DEPARTURE FROM GERMANY HE WAS INTRODUCED TO ANOTHER MEMBER OF THE CHICAGO BRANCH OF THE GERMAN-AMERICAN BUND. HE RETURNED TO GERMANY IN APRIL OF 1939 AND HAVING RUN OUT OF MONEY, SOON FOUND HIMSELF ENSNARED INTO THE GESTAPO. HE RECEIVED ORDERS TO PROCEED TO AMERICA AND WITH HIS TRAINING AS A MACHINIST TO SECURE EMPLOYMENT IN SOME AIRPLANE FACTORY AND SEND REPORTS ON PRODUCTION AND NEW PLANE SECRETS. REUPER, ONE OF THE NEW YORK SPIES LEARNED THROUGH HIS INTRODUCTION TO THE NEW MEMBER THAT HIS NAME WAS ALEX WHEELER-HILL AND THAT HE WAS RELATED TO THE HEAD OF THE GERMAN-AMERICAN BUND IN THE UNITED STATES.

UPON ALEX WHEELER-HILL'S ARRIVAL IN THE UNITED STATES HE CONTACTED REUPER WHO HAD PRECEDED HIM TO THIS COUNTRY AND COMPLETED ARRANGEMENTS FOR THE CONSTRUCTION AND INSTALLATION OF A RADIO TRANSMITTER IN THE FORMER'S APARTMENT AT 562 CAUDWELL AVE. IN THE BRONX. IN THE MEANTIME, HE ENROLLED IN A RADIO COURSE AT THE YMCA. THROUGH REUPER HE WAS INTRODUCED TO AUGUST KLEIN, A COMMERCIAL PHOTOGRAPHER WHO HAD GAINED EXPERIENCE AS A RADIO AMATEUR. WITH THE HELP OF KLEIN, WHEELER-HILL FINALLY, AFTER MUCH TROUBLE, COMPLETED HIS TRANSMITTER.

UNKNOWN TO HIM, THE FBI HAD MOVED INTO THE APARTMENT OVERHEAD AND WERE PREPARED TO INTERCEPT ANY MESSAGES HE TRANSMITTED. ALSO, OUR UNIT IN NEW YORK CITY, IN CHARGE OF MONITORING OFFICER LOUIS DE LEFLEUR WAS REQUESTED TO AID IN PROVIDING A MONITORING SURVEILLANCE OVER ALEX WHEELER-HILL'S TRANSMISSIONS. THERE HAS NEVER BEEN ANY POSITIVE PROOF THAT HE EVER TRANSMITTED A SINGLE MESSAGE THAT WAS RECEIVED IN GERMANY IN THE SHORT TIME HIS TRANSMITTER WAS COMPLETED PRIOR TO HIS APPREHENSION HE NEVER MADE TWO-WAY CONTACT WITH ANY STATION. HE DID SPEND HIS TIME PROWLING AROUND THE BROOKLYN WATER FRONT LOOKING FOR MUNITIONS GOING ABROAD AND INFORMATION SECURED WAS SENT BY AIRMAIL VIA NEUTRAL COUNTRIES AND SOMETIMES BY SHIP COURIER. BOTH WHEELER-HILL AND REUPER RECEIVED A SENTENCE OF FIFTEEN YEARS AND JOSEPH KLEIN, WHO AIDED WITH THE TRANSMITTER, FIVE YEARS.

THUS ENDED SUCCESSFULLY THE MOST SENSATIONAL COUNTER-ESPIONAGE ACTIVITIES PROBABLY EVER ENGAGED IN BY ANY NATION IN THE WORLD, THE PART THAT THE RID PLAYED IN THE TECHNICAL OPERATIONS WHICH AIDED IN THE CONVICTION OF THE ACCUSED IS JUST ONE OF THE OUTSTANDING CASES IN THE HISTORY OF THE ORGANIZATION.

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THE RID STORY



MONITORING OFFICE IN CHARGE
TOM CAVE AT SPECIAL RID INTER-
CEPT AND GONIO STATION:

SCITUATE,

R.I.

THIS STATION CARRIED A HEAVY
WORK LOAD AROUND THE CLOCK.



RID GIRLS CONVERTING TAPE RECORDINGS OF
FOREIGN AND ENEMY COMMERCIAL TRANSMISSIONS
TO TYPEWRITER COPY FOR USE OF GOVERNMENT
INTELLIGENCE AGENCIES, FBI, BUREAU OF
ECONOMIC WARFARE AND OTHERS.

CHAPTER IV AND V NEXT ISSUE

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PAGE 40 NUMBER 17

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SPARK GAP TIMES IS PUBLISHED BI-MONTHLY BY THE OLS OLD TIMERS CLUB AT NO COST TO THE MEMBERS. A LIMITED NUMBER IS AVAILABLE TO NON-MEMBERS AT A COST DONATION OF \$2.00 YEARLY. EDITORIAL OFFICE AND PRINTING PLANT--408 WEST VIEW AVENUE, CHATTANOOGA, TENN. -37411.

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SEND ALL ORDERS TO THE SECRETARY-TREASURER, MR. EARL C. WILLIAMS W2EG, 507 WAYSIDE ROAD, NEPTUNE, N.J.



TRAV MARSHALL, K9EBE, DOMENICO PETTI HV1CN AND BILL HALLIGAN W9AC ARE PICTURED IN BILL'S OFFICE IN CHICAGO AFTER DISCUSSING K9EBE'S RECENT SUCCESSFUL OPERATION OF HV1CN AND W9AC'S FORTHCOMING OPERATION OF HV1CN IN EARLY OCTOBER.

LATER IN THE DAY, DOMENICO WAS GUEST OF HONOR AT A DINNER ATTENDED BY FRITZ FRANKE, NEAL LATORRACA KL7JMN, BILL HALLIGAN W9AC, MARVIN EICHORST W9RUK, WALTER CUGA W9JJF, TRAV MARSHALL K9EBE, MAC REYNOLDS W9EVI, MIKE HEXTER W9JKC, BILL MOLONEY W9GRV, GEORGE SCHREIBER W9YIX, AND BOB JORGENSEN.

ALTHOUGH HV1CN, THE VATICAN CITY AMATEUR RADIO STATION, HAS HAD LIMITED ACTIVITY OVER THE PAST FOUR YEARS AND A GOODLY NUMBER OF AMERICAN HAMS HAVE BEEN CONTACTED, THE STATION IS STILL IN THE "RARE" CATAGORY. IMAGINE, THEREFORE, HOW SURPRISED 3,000 HAMS WERE AT THE HAMFESTERS' PICNIC IN CHICAGO IN EARLT AUGUST, TO FIND DOMENICO PETTI, HV1CN, IN THEIR MIDST! PAYING A WHIRLWING VISIT TO THE STATES FOR THE FIRST TIME, DOM MADE AN UNEXPECTED APPEARANCE AT THE PICNIC, ESCORTED BY JORDON KAPLAN, W9QKE, AND COMPLETELY CHARMED ALL THOSE PRESENT BY HIS BOYISH ENTHUSIASM AND HIS EVIDENT ENJOYMENT OF THE PROCEEDINGS, DESPITE THE LANGUAGE BARRIER.(DOM'S FAMILIARITY WITH ENGLISH AT THE MOMENT IS LIMITED.)

WHEN QUERIED ABOUT HIS HV1CN ACTIVITIES, HE INDICATED THAT, AS A PRINCIPLE TECHNICIAN AT VATICAN RADIO, HE IS NOT ALWAYS FREE TO TAKE ADVANTAGE OF GOOD PROPAGATION TO THE STATES. HOWEVER, HE HAS ALWAYS BEEN FILLED WITH ADMIRATION FOR THE AMERICAN HAM AND IS EAGER TO SATISFY AS MANY REQUESTS FOR CONTACTS AS HIS LIMITED TIME ALLOWS. HE REGRETTED THAT OTHER ACTIVITIES HAD KEPT HIS STATION VIRTUALLY SHUT DOWN FOR THE PAST FEW MONTHS BUT HE DID PLAN TO MAKE A CONCERTED EFFOERT TO DO MORE OPERATING IN THE FALL, PARTICULAR- ON SATURDAYS. IN THE FUTURE, DOM WILL HANDLE HIS OWN QSL CARDS, WITH THE COOPERATION OF

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THE ARRL, WHO WILL ROUTE THEM THROUGH THE VARIOUS W/K BUREAUS.

FOLLOWING HIS PARTICIPATION IN THE PICNIC FESTIVITIES, DOM SPENT THE EVENING AT THE HOME OF JIM RICKS, W9TO AND HIS XYL, PAT. ALTHOUGH DOM IS NOT A CW OPERATOR, HE WAS MUCH INTERESTED IN THE WORK OF W9TO, DESIGNER OF THE FAMOUS KEYS. DURING THE REMAINDER OF HIS FIVE-DAY VISIT TO CHICAGO, DOM PACKED IN THE FOLLOWING ACTIVITIES: GUEST OF HONOR AT A DINNER WITH BILL HALLIGAN, W9AC; TRAV MARSHALL, W9EBE; FRITZ FRANKE; NEALE LATORRACA, K1JMN; WALLY CUGA, W9JUF; MARV EICHORST, W9RUK; MAC REYNOLDS, W9EVI; MIKE HEXTER, W9JKC; BILL MALONEY, W9GRV; GEORGE SCHREIBER, W9YIX AND BOB JORGENSEN; A VISIT TO WGN RADIO AND TV WHERE HE BONED UP ON AMERICAN BROADCASTING TECHNIQUES; A TOUR OF THE EXTENSIVE HALLICRAFTERS LABORATORIES AND MANUFACTURING FACILITIES AND SOCIAL VISITS WITH MANY OF CHICAGO'S MOST PROMINENT HAMS. DOMENICO WAS ALSO TREATED TO HIS FIRST TASTE OF MOBILING AMERICAN STYLE WHEN HE ACCOMPANIED TRAV, W9EBE, ON A VISIT TO DETROIT AND HAD THE OPPORTUNITY TO USE THE SR-150 IN TRAV'S CAR. IN DETROIT, HE TOURED THE FORD MOTOR COMPANY PLANT AND VISITED THE FORD MUSEUM.

HEADING EAST, DOM MADE A SPECIAL VISIT TO THE NEW ARRL HEADQUARTERS IN NEWINGTON, CONNECTICUT, AND SPENT ALMOST A FULL DAY INSPECTING THE MODERN FACILITIES SET UP TO SERVE THE AMERICAN HAMS AND VISITING WITH JOHN HUNTOON, W1LVQ, GENERAL MANAGER, BOB WHITE, W1WFO OF DXCC AND PETE MORROW, W1VQ AND ED HANDY, W1BD1. "TREMENDOUS! IMPRESSIVE! NOTHING LIKE IT ANYWHERE ELSE IN THE WORLD! WERE DOM'S REACTIONS.

HIS STATESIDE VISIT ENDED IN A BLAZE OF GLORY WITH A 2 DAY EXPLORATION OF NEW YORK CITY, DURING WHICH HE ALMOST WORE OUT HIS GUIDES IN HIS EAGERNESS NOT TO MISS ANY OF THE BIG CITY'S WONDERS. ONE OF THE HIGHLIGHTS OF HIS MANHATTAN VISIT WAS A FAREWELL PARTY IN HIS HONOR, ATTENDED BY BILL HARRISON, W2AVA; BEN SNYDER, W2SOH; AENE TROSSMAN, W2DTJ, EDITOR OF CQ; NEAL LATORRACA, K1JMN; TRAV MARSHALL, K9EBE; URG LEJEUNE, W2DEC, DX EDITOR OF CQ; DOROTHY AND IRV STRAUER, K2MGE AND K2HEA, CQ SIDEBAND EDITORS; BOB FINLAY; AND BOB FINLAY, JR. W82RSF.

NINE DAYS AFTER HE FIRST SET FOOT ON UNITED STATES SOIL, AND FILLED WITH MEMORIES OF AMERICAN HAMS, MOBILING, MANUFACTURING, BROADCASTING, AND SIGHTSEEING, DOMENICO PETTI, TICNS, WAS HOMEWARD BOUND TO ROME. "WHAT IMPRESSED YOU MOST?" HE WAS ASKED. "YOU AMERICANS -- YOU ARE ALL SO FRIENDLY, SO KIND."

K9EBE

NOTICE

BILL HALLIGAN, W9AC, CHAIRMAN OF THE BOARD OF HALLICRAFTERS, CURRENTLY TOURING EUROPE, WILL OPERATE 4U1 ITU GENEVA AND HV1CN VATICAN CITY; SSB AND CW.

AT 4U1 ITU, HE WILL OPERATE FROM 2000 GMT, SEPTEMBER 27 TO 0200 GMT, SEPTEMBER 28. THE HV1CN OPERATION WILL BEGIN AT 1800 GMT ON SEPTEMBER 30 AND CONTINUE TO 0100 AND CONTINUE TO 0100 GMT, OCTOBER 1, 1963. WHILE OPERATING SSB, HE WILL TRANSMIT ON 14135 KC AND RECEIVE ON 14220KC. ON CW HE WILL TRANSMIT ON 14030 KC AND LISTEN 5 KC EITHER SIDE OF THIS FREQUENCY.

DE K9EBE

NOTE FROM EDITOR--- THE ABOVE MATERIAL CAME TO THIS OFFICE JUST AS WE WERE PUTTING SPARK GAP TIMES TO BED. IT WAS THOUGHT OF SUCH INTEREST AS TO JUSTIFY REOPENING FOR INSERTION IN THE OCTOBER ISSUE. HOPE YOU CAN CONTACT BILL.--GOOD LUCK BILL!!!

REPORT ON THE PROGRESS OF THE WORK

of the Department of the Interior, Bureau of Land Management, Washington, D. C.

The following is a summary of the work done during the year ending June 30, 1914. The work has been divided into three main sections: (1) the general work of the Bureau, (2) the work of the field offices, and (3) the work of the various bureaus and divisions within the Bureau.

The general work of the Bureau has consisted of the following:

1. The preparation and publication of reports, bulletins, and other publications. 2. The collection and preservation of specimens. 3. The study of the geology, paleontology, and natural history of the public lands. 4. The management and disposal of the public lands. 5. The investigation of the various problems connected with the public lands.

The work of the field offices has consisted of the following:

1. The surveying and mapping of the public lands. 2. The investigation of the various problems connected with the public lands. 3. The management and disposal of the public lands. 4. The collection and preservation of specimens. 5. The study of the geology, paleontology, and natural history of the public lands.

The work of the various bureaus and divisions within the Bureau has consisted of the following:

1. The Bureau of Geology and Mineral Resources. 2. The Bureau of Land Management. 3. The Bureau of Biological Resources. 4. The Bureau of Reclamation. 5. The Bureau of Indian Affairs.

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