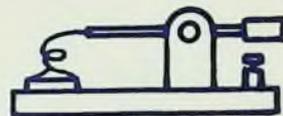


Spark-Gap Times



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The Old Old Timers Club



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CHATTANOOGA - TENN.

APRIL 1965



THOMAS APPLEBY, W3AX
DISTINGUISHED MEMBER OOTC.
(See Page 1)

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you're No. 1,
you
have
to try
twice
as hard

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Spark-Gap Times

APRIL 1965

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*
*
* ON OUR COVER THIS TIME APPEARS THE PHOTO OF OUR DISTINGUISHED MEM-
*
* BER THOMAS APPLEBY, W3AX. GRAND YOUNG MAN OF WIRELESS, DEAN OF
*
* THE OOTC, A GENTLEMAN AND SCHOLAR. A THUMB NAIL SKETCH OF HIS WON-
*
* DERFUL CAREER IS RECORDED ON PAGE 11 OF THIS ISSUE.
*
*

EDITORS OPINION

YOCB-11 THREW UP BOTH ARMS AND CRIED, "IS THERE NO HELP FOR THE POOR WIDOWS SON?" HE WAS IN DISPAIR OVER THE PRINTING OF SGT AND WHO SHOULD COME RUSHING OUT OF THE DARKNESS TO ASSIST HIM BUT ROB-ROY, W8HR. AND SO ROBIE WILL DO THE PRINTING FOR THE SAME PRICE YOCB-11 HAS BEEN JACK-LEGGING IT AROUND CHATTANOOGA. AND THIS WAS LIKE LIFTING A GREAT WEIGHT OFF OUR SHOULDERS. THE GOOD SAMARITAN, THAT'S ROB-ROY! YOU WILL SEE A TREMENDOUS IMPROVEMENT IN THE BOOK ALSO.

WELL THERE HAVE BEEN QUITE A FEW MEMBERS WHO HAVE EXPRESSED THEMSELVES IN FAVOR OF A SEPARATE PIN FOR 50 YEAR MEMBERS. MORE MEMBERS SEEM TO FAVOR A SEPARATE PIN THAN A BAR WHICH WOULD BE WORN BELOW THE PRESENT OOTC PIN. ONE MEMBER EVEN EXPRESSED DISSATISFACTION WITH THE PRESENT OOTC PIN FEELING THAT IT IS TOO SMALL, POORLY DONE, ENAMEL WAVY, AND THE SYMBOLS TOO SMALL TO BE SEEN AND RECOGNIZED FROM A LITTLE DISTANCE. HE ALSO SAYS, "MANY FOLKS DON'T EVEN RECOGNIZE IT AS OUR PIN, SO I NEVER WEAR MINE. I DO WEAR A VETERAN WIRELESS OPERATORS PIN AND A DEFOREST PIONEER'S LAPEL BUTTON WHICH ARE REALLY NICE, AND SYMBOLIZE WHAT THE ORGANIZATIONS MEAN. WE CAN DO THE SAME. I'D BE WILLING TO PAY FOR A REALLY DECENT PIN (OR LAPEL BUTTON) ABOUT THE SIZE OF THE DEFOREST PIONEER PIN (IT IS ROUND WITH THE 3 ELEMENT TUBE IN DIAGRAMETRICAL FORM). IT'S DONE IN BLUE AND GOLD. THE MEDAL SHOULD BE LARGER, PERHAPS THE SIZE OF A QUARTER, BUT THE PIN THE SIZE OF A PENNY PERHAPS WITH NO CALL LETTERS ON IT. THE MEDAL (50 YR) SHOULD HAVE THE CALL BY ALL MEANS AND SAY "50 YEAR AWARD", SOMEWHERE ON ITS FACE. THIS CAN BE WORKED OUT, I'M SURE."

"AS SWEENEY SUGGESTS, AND BELIEVES, THE MEMBERS IN THE 50 YEAR CATAGORY SHOULD BE ABLE TO "SPLURGE" A BIT. I'D BE GLAD TO KICK IN WHATEVER IS ASKED. IF WE CAN'T GET THE MEDAL PROJECT GOING, FOR PETE'S SAKE, LET'S GET A NEW OOTC LAPEL PIN, IT WOULD SURELY ADD TO OUR PRESTIGE, AND ALL OUR OTHER PROJECTS HAVE IMPROVED, LIKE SGT, ADMINISTRATION, LETTERHEADS, SEALS, ETC. SO LET'S MAKE THE BEST USE OF WHAT WE HAVE TO SHOW OFF WITH. WE DON'T HAVE TO TAKE A BACK SEAT FOR ANYBODY. WE ARE A UNIQUE ORGANIZATION AND THERE WON'T BE ANOTHER LIKE US."

YOCB-11 WILL HAVE A COMMITTEE APPOINTED TO LOOK INTO THIS SUBJECT-FROM ALL ANGLES VERY SOON. "SPARK GAP TIMES" HAS TAKEN SO MUCH OF

OUR TIME LATELY THAT THE SUBJECT OF A 50 YEAR MEDAL OR PIN HAS BEEN SORT OF SIDE-TRACKED. HADN'T THOUGHT MUCH ABOUT OUR OOTC PIN EITHER, BUT EVIDENTLY SOMEONE HAS RATHER STRONGLY.

FOUR NOTED OOTC MEMBERS JOINED THE SILENT KEYS RECENTLY. JIM CLAPP, W4AU; LOUIS HERRMAN, W8EL; HAROLD SEVER, W4OT; AND NELSON "PAT" EMMONS, W8TN. OUR SYMPATHY GOES TO THEIR FAMILIES. THEY WERE ALL ACTIVE IN AMATEUR RADIO. WE HAD A LETTER A SHORT TIME AGO FROM JIM ASKING US TO MAKE A CW SCHEDULE WITH HIM WHICH WE DID AND CONTACTED HIM. HE WAS JUST COMPLETING WAS (2 LETTER CALLS) AND HAD TWO STATES TO GO—TENNESSEE AND ANOTHER ONE. OUR QSL CARD WENT OUT TO HIM PROMPTLY. THESE MEMBERS WILL BE GREATLY MISSED.

IF SOME OF YOU ARE WONDERING ABOUT ROY ARMSTRONG, W5RIH, HE IS HALE AND HEARTY AND RUNNING THE TRANS-CONTINENTAL NAVY MARS CW NET EVERY NIGHT ON 7301 AT 0130Z. WE CHECK INTO THIS MARS NET QUITE FREQUENTLY. OUR CALL IS N0UAN. JACK DUNN, OUR GOOD VICE PRESIDENT ALSO HANDLES TRAFFIC FOR THE WEST COAST ON THIS NET. HIS CALL IS N0XVZ. WE HEAR HIM CHECKING INTO NET CONTROL. PROPAGATION IS IMPROVING STEADILY ON THE HIGHER FREQUENCY BANDS. YOCB-11 GOT TWO HARD TO GET ZONES ON CW ON A RECENT MARCH WEEKEND.

YOCB-11 WANTS TO THANK ALL THE CONTRIBUTORS TO "SPARK GAP TIMES". YOU MEMBERS HAVE BEEN WONDERFUL ABOUT SUBMITTING MATERIAL. AS THE CLUB GROWS AND MORE AND MORE MEMBERS COME IN THERE SHOULD BE PLENTY OF MATERIAL TO KEEP THE MAGAZINE GOING. KEEP THE STORIES ARTICLES, AND NEWS ITEMS COMING, WE APPRECIATE RECEIVING THEM. SOMETIMES YOCB-11 MAY NOT SEEM TO APPRECIATE SOMETHING YOU'VE SENT IN, BUT THE CORRESPONDENCE IS QUITE HEAVY AND SOMETIMES IT IS IMPOSSIBLE FOR US TO KEEP UP WITH IT. IF WE ARE SLOW ANSWERING YOUR LETTERS, DON'T DISPAIR, WE'LL EVENTUALLY GET AN ANSWER TO YOU.

THIS ISSUE, WE SALUTE THOMAS APPLEBY, W3AX. HE HAS BEEN CONNECTED WITH THE ART SINCE THE TURN OF THE CENTURY AND IS JUST ABOUT THE OLDEST ACTIVE OOTC MEMBER EXTANT. HIS HOBBIES ARE MANY AND HE NEVER CEASES TO STUDY. HE HAS JUST COMPLETED HIS PORTION OF A MANUSCRIPT FOR A BOOK TITLED "MAHLON LOOMIS, BIRTH OF WIRELESS". NEXT ISSUE OF SGT WILL CARRY A STORY OF MAHLON LOOMIS. WE SALUTE YOU, TOM, THE DEAN OF AMATEURS, THE GRAND YOUNG MAN OF WIRELESS AND THE OOTC.

LETTERS

315 N. ADAMS ST.
NEW CARLISLE, OHIO
JANUARY 11, 1965

Y.O.C.B. 11:

THIS WILL ACKNOWLEDGE RECEIPT A FEW WEEKS AGO OF THE 50 YEAR AWARD CONFERRED UPON ME BY THE OOTC. MY SINCEREST THANKS TO YOU AND ALL OTHERS WHO HAD ANYTHING TO DO WITH ITS INCEPTION AND FRUITION. I WAS SHOCKED TO LEARN IN THE DECEMBER SGT, WHICH ARRIVED ONLY A FEW DAYS AFTER I HAD RECEIVED THE AWARD, THAT OUR SECRETARY EARL WILLIAMS, WHO HAD SIGNED IT, HAD BEEN TAKEN FROM US. I HAD BEEN INTRIGUED BY THE PROPOSAL OF WISDT IN SGT, OCTOBER ISSUE THAT A 50 YEAR BAR BE PROVIDED FOR THOSE ELIGIBLE, TO ATTACH TO THE PRESENT MEMBERSHIP PIN. I WAS SURPRISED THAT A WRITTEN CITATION, WITH A "STAMP" OR "SEAL" FOR ATTACHING TO THE MEMBERSHIP CERTIFICATE, HAD BEEN PREPARED. IT IS A GREAT HONOR, AND I THANK YOU FOR THE RECOGNITION.

MY THANKS IS LONG OVERDUE ALSO FOR YOUR HAVING PUBLISHED THE ACCOUNT AND PICTURE ASSOCIATED WITH MY RETIREMENT OVER A YEAR AGO, IN THE FEBRUARY 1964 SGT. THE DEFENSE DEPARTMENT AGENCY FROM WHICH I RETIRED, LOCAL NEWSPAPER, AND ONE TV STATION WERE ALL VERY GENEROUS WITH THEIR PUBLICITY OF THE OCCASION.

BEFORE LONG I AM GOING TO TAKE THE TIME TO WRITE A FEW ACCOUNTS RELATING TO MY HUMBLE BEGINNING IN WIRELESS, AND SUBSEQUENT STRUGGLES TO KEEP GOING UNTIL I REACHED MY GOAL. I WONDER NOW WHY I HAD THE PERSISTENCE TO KEEP GOING.

THANKS AGAIN TO YOURSELF, AND ALL THE OTHERS WHO ARE DOING SUCH A FINE JOB TO MAKE THE OOTC ORGANIZATION, AND SGT THE OUTSTANDING IMPLEMENTS THEY ARE TO PERPETUATE THE ACTIVITIES OF THOSE WHO GAVE WIRELESS THE INITIAL IMPETUS IT NEEDED. YOU ARE BUILDING A TREMENDOUS HISTORICAL VOLUME THAT WILL BE INVALUABLE IN YEARS TO COME.

73
ANDREW L. SHAFER, W8TE
MEMBER # 179

DEAR Y.O.C.B. 11:

I THOT PERHAPS YOU COULD USE THE ENCLOSED, WHICH WAS A MONOGRAPH PRINTED BY

AWA. I HAVE THEIR PERMISSION, GLADLY, WITH WHICH TO GET THIS REPRINTED IN SGT. FEW SAW IT IN AWA.

PLEASE CHANGE THE CALLES AFTER THE BY LINE...TO READ W7ZC/W5CA. ALSO, IN THE BIOGRAPHY, IF USED.

I WOULD APPRECIATE THE RETURN OF THIS MONOGRAPH AFTER YOU ARE FINISHED WITH IT AS I DO NOT HAVE BUT A COUPLE OF THEM AND TOOK THIS ONE OUT OF MY FILES.

THANKS, 73

A. DAVID MIDDLETON W7ZC/W5CA
VICE PRESIDENT - AREA

DEAR EUNICE:

THANKS FOR YOUR VERY KIND LETTER OF THE 27TH, AND AM FORWARDING THE PHOTO YOU REQUESTED. AFTER IT HAS SERVED YOUR PURPOSE WILL APPRECIATE HAVING IT RETURNED TO ME TO ADD TO MY OTHER MOMENTOS. I AM WORKING PART TIME STILL HAVE SOME HEALTH PROBLEMS. THE LAST OPERATION, OCT. 6, 1964 PRIOR TO THAT IN OCT. 6, 1964, SO "I HAVE HAD IT".

SORRY ABOUT EARL W2EG, I WAS SURPRISED AFTER WRITING HIM, THAT HE WAS DECEASED.

MAY GOD BLESS YOU AND YOURS - THANKS FOR ALL PAST COURTESIES.

SINCERELY,
GEORGE PILGRAM W7HU
3332 DUNCAN STREET
ST. JOSEPH, MO.

FEB. 5, 1965

Y.O.C.B. 11:

I HAVE SEEN IN 'QST', DECEMBER 1964, PAGE 53, SOME NOTICES ON OUR OOTC. SORRY THAT THERE ARE TWO MISTAKES: ONE IS THE NAME OF THE SECRETARY/TREASURER AND THE OTHER THAT SPARK GAP TIMES IS SENT FREE TO MEMBERS; AS YOU KNOW THE MEMBERS MAY PAY \$2.50 PER YEAR AND
...CONT'D NEXT PAGE..

...LETTERS CONTINUED...

NON-MEMBERS \$3.00 PER YEAR.

IF YOU DECIDE TO WRITE THE EDITOR OF "QST" FOR CORRECTION, WOULD IT BE OF INTEREST THAT YOU SAY THAT THE RADIO AMATEURS OLD TIMERS INTERESTED TO JOIN OOTC, WHEN THEY RESIDE IN AMERICA, SOUTH OF THE REPUBLIC OF PANAMA, CAN WRITE TO ME.

YOU CAN READ IN THE SGT NUMBER 8, 1 APRIL 1962, PAGE 9, THE FOLLOWING: "IT IS HOPED THAT SOME DAY A SOUTH AMERICAN CHAPTER MAY BE FORMED, AND IT IS BELIEVED THAT AUGUSTO IS THE MAN TO PROMOTE THE INTEREST OF OOTC THROUGHOUT ALL SOUTH AMERICA. HE WILL BE EXPECTED TO APPROVE ALL APPLICATIONS FOR MEMBERSHIP BEFORE BEING FINALLY ACTED UPON BY THE BOARD AND TO ACT AS MEMBERSHIP CHAIRMAN FOR SOUTH AMERICA."

WITH BEST 73'S, I REMAIN FRATERNALLY YOURS

AUGUSTO, LU2AO
BUENOS AIRES,
JANUARY 30, 1965

"REPLY: THIS HAS BEEN DONE AS
AUGUSTO SUGGESTED. "
Y.O.C.B II

249 EAST PEACH ORCHARD FREE,
DAYTON 19, OHIO
JANUARY 3, 1965

Y.O.C.B. II:

THIS IS TO ACKNOWLEDGE THE RECEIPT OF THE OLD TIMERS CLUB 50 YEAR AWARD AND I WILL AFFIX IT TO MY OOTC MEMBERSHIP CERTIFICATE. IT DOES NOT SEEM LIKE 50 YEARS LAST APRIL THAT I STARTED IN AMATEUR RADIO THROUGH THE MEDIUM OF THE FIRST EDITION OF THE BOY SCOUT HANDBOOK, WHICH HAD A CHAPTER ON HOW TO BUILD A WIRELESS SET.

I WAS SORRY TO HEAR OF THE PASSING OF EARL W2EG. ALTHOUGH NOT HAVING MET HIM PERSONALLY I FELT I KNEW HIM THRU OUR CORRESPONDENCE.

YOU WILL NOTE THE ENCLOSED PHOTO AND LOCAL DAYTON, OHIO NEWSPAPER STORY OF OUR DAYTON AMATEUR RADIO ASSOCIATION - BUYING THE FIRST AMATEUR RADIO STAMPS. DAN MCCOY, W8DG AND YOURS TRULY K8OZ REPRESENTED OOTC AND QCWA. ALTHOUGH THE ARTICLE DIDN'T SAY SO, WE ALSO HAD TV CAMERA COVERAGE THROUGH THE MEDIUM OF WHIO-TV (A COX RADIO AFFILIATE).

I REALLY LOOK FORWARD TO EACH ISSUE OF SPARK GAP TIMES, WHICH IS GETTING BETTER WITH EACH ISSUE AND WILL BE LOOKING FORWARD TO GETTING THE NEW BLUE BOOK INSERTS SOON.

WITH BEST 73
WILLIAM G. BIDDLE, K8UZ

FEB. 1, 1965

Y.O.C.B. II:

AS I BELIEVE I TOLD YOU PREVIOUSLY, ELECTRONICS ILLUSTRATED HAVE ACCEPTED A RECENT ARTICLE OF MINE DESCRIBING AMATEUR RADIO MUSEUMS THROUGHOUT THE COUNTRY, THIS SHOULD APPEAR IN AN EARLY ISSUE.

IN RESEARCHING THIS STORY I WAS AMAZED AT THE NUMBER OF HAM MUSEUMS WHICH WE HAVE AND WHICH OFFER SOME PRETTY IMPRESSIVE DISPLAYS. THIS HAS SPARKED AN IDEA IN MY MIND; SEE WHAT YOU THINK OF IT.

IT IS PRETTY EVIDENT THAT A LARGE NUMBER OF THESE MUSEUMS ARE UNKNOWN EXCEPT IN THEIR LOCAL AREA HAM CIRCLES. THE MAJORITY ARE OPEN NOT ONLY TO HAMS BUT TO THE GENERAL PUBLIC; ALL ARE

FREE, OPERATED ON A VOLUNTEER BASIS.

WHAT IS NEEDED IN MY OPINION, IS A PRINTED "DIRECTORY OF AMATEUR RADIO MUSEUMS - U.S. AND CANADA". THIS COULD BE A LITTLE 16 PAGE, ABOUT 5 1/2 X 8 1/2" FOLDED AND STAPLED LITTLE PUBLICATION, VERY SIMILAR TO THE OLD TIMERS BULLETIN PUBLISHED BY BRUCE KELLEY. IT SHOULD CONTAIN A SHORT THUMB-NAIL DESCRIPTION OF WHAT THEY OFFER..AND/OR EARLY DAY BROADCAST RECEIVERS. SEVERAL PHOTOS OF THE OUT-STANDING DISPLAYS SHOULD ALSO APPEAR, TOGETHER WITH OWNERS NAME, ADDRESS, PHONE NUMBER AND VISITING HOURS OR A STATEMENT "PHONE FOR APPOINTMENT."

MY THOUGHT WOULD BE THAT SUCH A LITTLE PAMPHLET COULD BE PUBLISHED BY OOTC AND MADE AVAILABLE TO ANYONE INTERESTED, AT A NOMINAL COST TO COVER PRINTING AND PUBLICATION COSTS. I WOULD ESTIMATE ROUGHLY THAT SOMEWHERE BETWEEN \$200 AND \$300 WOULD COVER THIS

....CONT'D NEXT PAGE..

...LETTERS CONTINUED...

IN A QUANTITY OF 500, AT COMMERCIAL RATES; LESS THAN 500 COPIES IS SELDOM PRACTICAL ECONOMICALLY. IF OOTC DOES IT ON THEIR OWN PRESS, I DON'T KNOW WHAT THE COST MIGHT BE, PROBABLY SUBSTANTIALLY LESS.

WE HAVE, TO MY THINKING AT THE MOMENT, TWO METHODS THRU WHICH WE COULD RECOVER COSTS; CHARGE 50¢ A COPY FOR THE PUBLICATION OR ASK ALL MUSEUM OWNERS INTERESTED IN BEING LISTED THEREIN, TO PAY \$1.00 FOR SUCH LISTING, THEN SELL THE BOOKLET FOR 25¢ TO MEMBERS OF OOTC AND 50¢ TO ALL OTHERS. EITHER WAY SHOULD COME OUT PRETTY MUCH A "BREAK-EVEN" DEAL AND, AS A NON-PROFIT ORGANIZATION, WE DO NOT OF COURSE EXPECT TO PROFIT FINANCIALLY THEREBY; JUST RENDER AN AMATEUR SERVICE HELPING TO FURTHER PUBLICIZE THE HAM.

SUCH A LISTING SHOULD COME OUT NOT LATER THAN EARLY THIS SUMMER SO THAT HAMS AND OTHERS INTERESTED, COULD LOCATE MUSEUMS WHICH MIGHT BE ON THEIR VACATION TRAVEL ITINERARY.

I HAVE NO PRINTING FACILITIES MYSELF.. NOT EVEN A MIMEO MACHINE..BUT I WOULD BE WILLING TO DONATE MY TIME AND SERVICES IN EDITING SUCH A LITTLE PUBLICATION. WHY NOT PUT A PIECE IN THE SGT AND ASK FOR READER REACTION TO THIS SUGGESTION? THAT IS, ASSUMING THAT SUCH AN ACTIVITY WOULD NOT BE IN VIOLATION OF OOTC CHARTER OR CONSTITUTION AND BY-LAWS. WHAT DO YOU THINK?

"173"

HOWARD S. PYLE

FEBRUARY 1, 1965

Y.O.C.B. II:

GOSH...I HAD TO "PAINT OVER" SO MANY TYPOGRAPHICAL ERRORS IN THE ATTACHED LETTER YOU'LL THINK I'VE HAD A RELAPSE, HEALTH-WISE! NOPE, JUST SLOPPY THIS MORNING I GUESS! BOTH SUSIE AND I ARE IN VERY GOOD HEALTH FORTUNATELY, ALTHOUGH I'M EXPERIENCING A RATHER MISERABLE HEADACHE WHICH, FOR ME, IS A NOVELTY; HAVEN'T HAD ONE THAT I CAN REMEMBER SINCE I CONTRACTED DIABETES SOME 12 YEARS AGO! IN FACT I'VE RECOMMENDED TO ANYONE TROUBLED

WITH CHRONIC HEADACHES THAT THEY GET DIABETES AND END THE HEADACHE MISERY.

WE HAD A NICE HOLIDAY SEASON AND BOTH OF US APPRECIATED YOUR LITTLE CHRISTMAS NOTE. WE HAVE SO FAR GONE THROUGH THE WINTER WITH NO WEATHER PROBLEMS; A COUPLE OF INCHES OF SNOW JUST BEFORE CHRISTMAS BUT GONE BEFORE IT FELL ALMOST. A FEW RATHER COLD DAYS (FOR US) DOWN AROUND 24 TO 28 BUT GENERALLY IN THE UPPER 30'S AND 40'S; 47 TODAY. SOME FLOODING IN THE FOOTHILLS AROUND US AND A FEW MUD AND SNOW SLIDES HAVE BLOCKED A FEW ROADS, BUT THE ISLAND IS APPARENTLY IN A CHARMED AREA! SW WASHINGTON, ORE. AND NO. CALIF. REALLY DID HAVE IT BUT IT DIDN'T REACH HERE.

WELL, I WANT TO GET THIS TO THE P.O. NOW SO "173" - MORE LATER.

"YB" - W70E



DAYTON, OHIO. DEC. 16, 1964

POSTMASTER HUGH T. ALBRIGHT WITH OOTC MEMBERS K8BSC, K8UZ, AND W8DG, VIEWING A SHEET OF THE COMMEMORATIVE AMATEUR STAMPS.

LETTERS CONTINUED

WASHINGTON, D.C.
MARCH 13, 1965

Y.O.C.B. II:

JUST COMPLETED READING THIS FEB. 1965 COPY OF "SGT" - READ EVERY WORD, COMMA, DOT ETC! I WOULD SAY, WITHOUT RESERVATIONS, THAT I GET MY MOST PLEASURE IN READING THIS - AND CONSIDERING ALL THE HAM & RADIO AND ELECTRONIC ORGANIZATIONS PUBLICATIONS ETC - IT'S THE SPARK GAP TIMES! POSSIBLY THIS IS BECAUSE I AM AN "OLE TIMER" AND A BIT NOSTALGIC, BUT REGARDLESS IT'S TRUE - READING SGT TAKES ME BACK TO DAYS OF 1913 WHEN I FIRST MADE UP A CRYSTAL RECEIVER AND USED A DOOR BELL AS A "SPARK TRANSMITTER". I GET THE SAME EXCITEMENT UPON IT'S ARRIVAL IN THE MAIL THAT I GOT IN 1915 AND THOSE EARLY YEARS READING THE OLD "QST" - PAGE TO PAGE - ADS'N ALL. SO ON A COMPARATIVE BASIS (WITH OTHERS I SUBSCRIBE TO) IT IS WORTH MUCH MUCH MORE THAN THE \$2.50 YEARLY!! KEEP IT GOING!!

I ESPECIALLY LIKED EMILY ELLSWORTHS STORY ON "ECHOES FROM OTTER CLIFFS" - ALSO ARTHUR C. JACOBY W30Y "EXCERPTS FROM THE 1918 DIARY OF A MARCONI WIRELESS OPERATOR ETC. ETC. W30Y'S LOG IN WW-1 TOOK ME BACK TO MY WW-1 DAYS ABOARD THE "GEORGE G. HENRY (WIT) OIL TANKER CARRYING AVIATION GASOLINE FOR FRANCE AND ENGLAND, WE MADE 18 TRIPS AND ONLY TWO TRIPS WERE "NORMAL" (WITHOUT INCIDENTS) WE WERE SHELLED BY SUBS, TORPEDOED, FIRES AT SEA ETC. ETC. BUT WEATHERED THEM ALL - INCLUDING CRASHING INTO AND SINKING SS HERMAN FRASCH (IN A CONVOY - OPPOSITE DIRECTION). THIS VESSEL, THE GEORGE G. HENRY, WAS CITED BY THEN SEC. OF NAVY, JOSEPHUS DANIELS, AS OUTSTANDING MERCHANTMAN AS CONTRIBUTION TO WW-1 LOGISTIC EFFORTS. I WAS IN U.S. NAVY AS RADIO OPERATOR ABOARD HER IN THE ARMED GUARD CREW, WE HAD TWO GUNS - 5" 50 CALIBRE (OFF USS PENNSYLVANIA) FORWARD AND 3" 50 CAL. AFT - TOTAL ARMED GUARD CREW 24 MEN WITH A CHIEF MASTER-AT-ARMS AS PETTY OFFICER IN CHARGE" - WHAT MEMORIES- SENT THREE S.O.S. CALLS AND NUMEROUS "ALLO" MESSAGES.

I HAVE SERVED IN THREE WARS - WW-1 IN NAVY (CPO RADIOMAN) IN WW-2 (COMMISSIONED COMMUNICATIONS OFFICER, IN ARMY AIR CORPS) - KOREA (FULL COLONEL USAF - GROUP COMMANDER

IN AACS) - WAS RETIRED REGULAR AIR-FORCE FULL COLONEL, HQ. AIR MATERIAL COMMAND (NOW AFLC), JANUARY 31, 1957. HAVE BEEN WORKING IN DEFENSE ELECTRONIC SINCE USAF RETIREMENT.

I BELONG TO ARRL, QCWA, OOTC, ANTIQUE WIRELESS ASSOCIATION, USAF MARS, ROCK CREEK AMATEUR RADIO ASSOC. VETERAN WIRELESS OPERATORS ASSOC, ARMED FORCES COMMUNICATIONS, ELECTRONIC ASSOCIATION, AMERICAN ORDINANCE ASSOC. ETC. ETC. BUT SINCERELY I GET MOST PLEASURE OUT OF MEMBERSHIP IN OOTC AND IT'S "SPARK GAP TIMES"!

I WOULD STRONGLY RECOMMEND, ALONG WITH MEMBER W2DXX, C.P. SWEENEY THAT A SPECIAL MEDAL OR BAR BE OF GOLD, IN RESPECT TO ASSOCIATIONS "50 YEAR MEMBERS" (WITH PROVISION TO ATTACH OR INSERT CALL LETTERS.) I CERTAINLY BELIEVE WE CAN "SPLURGE" THIS ONCE (IN COSTS) AFTER 50 YEARS OF DIT & DAH!

I, ALONG WITH ALL OOTC MEMBERS EXPRESS SHOCK AND SYMPATHY IN RECENT DEATH OF OUR EXCELLENT SEC'Y EARL WILLIAMS, W2EG. ALSO SORRY TO LEARN OF HOWARD SEEFRED, W6EA, JOINING THE "SILENT KEYS".

I DID REALLY ENJOY SEEING THIS FEB. ISSUE COVER PHOTO OF W8HR, ROB ROY - IT'S EXCELLENT! AGAIN THANKS FOR HIS EFFORTS IN MAKING SGT SO GOOD WITH HIS DONATION OF "CUTS" ETC. WITHOUT REIMBURSEMENT.

PROBABLY COVERED TOO MUCH IN ONE LETTER - BUT WANTED YOU FOLKS AT "HQ" TO KNOW OF MY APPRECIATION FOR YOUR EFFORTS IN OOTC AND PUBLICATION SGT.

73

FRANK J. SHANNON, SR.
W3QR EX-3WK

Y.O.C.B II:

SURE PLEASED TO RECEIVE THE FEB. ISSUE OF THE BEST PUBLICATION IN THE WORLD! THIS OLD OLD TIMER RECENTLY RETIRED. A NEWSPAPER ACCOUNT OF THE RETIREMENT IS ENCLOSED FOR YOUR INFORMATION, AND FOR POSSIBLE USE IN AN ISSUE OF SGT.

WITH A BIT OF LEISURE BEFORE ME I PLAN TO GET OUT MY OLD "LOGS" OF SEA GOING DAYS. 73
MIKE LAMSON, WIGU

ARTICLES

(COPY FROM MINUTE BOOK)

MINUTES OF THE 1ST. WEEKLY MEETING OF THE O.O.T.C.
JANUARY 29, 1948

THE FIRST WEEKLY MEETING OF THE OOTC GOT UNDERWAY AT 8:15 P.M. - JANUARY 29, 1948, ON 3990 KC, AND WAS CLOSED BY OUR VENERABLE PRESIDENT WI-ZE AT 9:35 P.M.

THE FOLLOWING STATIONS REPORTED INTO THE ROUND-TABLE
W3NUN - WIZE - WILBI - W4VA - W2UH - W2APN - WIANA - W3FJU
W2TF - WINQ.

ANOTHER NEW MEMBER REPORTED IN AND WAS ACCEPTED BY THE MEMBERSHIP COMMITTEE, NAMELY, W2TF BOB OF ELIZABETHTOWN, NEW YORK. BOB'S TIME IN HAM RADIO, DATES BACK TO 1907 AND REALLY PUTS HIM IN THE OOT CLASS. THE NUMBER OF MEMBERS NOW AMOUNTS TO FOURTEEN (14).

W3FJU - DON OF CONYINGHAM, PA. REPORTED THAT W7F1J HARRY BERGEY OF 1224 HAYS STREET - BOISE, IDAHO WAS A POSSIBLE CANDIDATE FOR THE OOTC. HARRY HAS ALREADY BEEN NOTIFIED BY MAIL BY YOUR HUMBLE SECRETARY.

OUR VICE PRESIDENT - ROLAND WIANA REPORTED TO THE AUGUST ASSEMBLY THAT THE COMPLETE ANNOUNCEMENT OF THE OOTC WOULD DEFINITELY APPEAR IN THE MARCH ISSUE OF Q,S,T. WATCH FOR THIS ANNOUNCEMENT, AS IT WILL GIVE THE COMPLETE ROSTER AS OF JANUARY 1, 1948, AND THE QUALIFICATIONS NECESSARY FOR NEW MEMBERS TO ENTER THE CLUB.

TWO MATTERS WERE BROUGHT UP FOR DISCUSSION AT THIS MEETING, NAMELY, SUITABLE LAPEL PINS AND APPROPRIATE CERTIFICATES, WHICH WILL BE ISSUED TO ALL MEMBERS. THIS CONCLUDES THE MINUTES OF OUR FIRST MEETING.

(SIGNED:)

BERT INGALLS WINQ

SECT. OOTC

STORIES

AN OLD OLD TIMERS EXPERIENCES WITH RADIO EQUIPMENT & MEASUREMENTS
WHEN
RADIO WAS WIRELESS, _____ AND WIRELESS WAS RELATIVELY YOUNG

BY; W. HOLLIS HOFFMAN, W2WJ
740 KRESSON RD. R.D. 1
CHERRY HILL, N.J. 38034

IT WOULD PROBABLY BE EXTREMELY DIFFICULT TODAY FOR RADIO TECHNICIANS, ENGINEERS AND PHYSICISTS TO VISUALIZE THE PROBLEMS THEY WOULD HAVE IN MAKING RADIO MEASUREMENTS IF SUDDENLY THEY SHOULD BE DEPRIVED OF OSCILLOSCOPES, STABLE OSCILLATORS, R F BRIDGES, SENSITIVE METERS ETC. THAT WAS EXACTLY THE CONDITIONS CONTENDED WITH, NOT AGES AGO, BUT AS RECENT AS WORLD WAR ONE. THIS OLD OLD TIMER RECALLS SOME EXPERIENCES OF THOSE DAYS AND WONDERS IF ANYONE ELSE MAY BE AMUSED IF SOME OF THE OLD, NOW CRUDE, THINGS DONE FROM ABOUT 1915 TO 1930, ARE RELATED.

AT THE TIME OF MY FIRST ASSOCIATION WITH THE U.S. NAVY, AT THE BEGINNING OF WORLD WAR I, I WAS ASSIGNED TO A NAVY "LISTENING" STATION WHERE LOGGED ALL SIGNALS HEARD AND IF ANY SEEMED STRANGE OR WITHOUT PROPER IDENTIFYING CALL SIGNATURES, WE TOOK BEARINGS ON THEM WITH OUR RADIO DIRECTION FINDERS (NOW GRADUATED TO RADIO COMPASSES). THE COMPASS THAT WE USED WAS CONSTRUCTED BY OUR OWN STATION PERSONNEL IN ACCORDANCE WITH A FEW CRUDE INSTRUCTIONS FROM THE NAVY DEPARTMENT. WE ASSEMBLED A SQUARE WOODEN FRAME, ABOUT THREE FEET TO A SIDE AND WOUND A FEW TURNS OF DOUBLE COTTON COVERED WIRE AROUND IT. WE THEN ARRANGED A SWITCH TO CONNECT THIS COMPASS COIL IN THE PLACE OF THE REGULAR TUNING COIL OF THE RECEIVER. POINTS OF THE COMPASS WERE LAID-OUT ON THE FLOOR FROM A SMALL MAGNETIC COMPASS AFTER CORRECTIONS WERE MADE FOR TRUE NORTH. THE FRAME WAS ARRANGED TO ROTATE, SO IT COULD BE REVOLVED ABOVE THE MARKINGS. THERE WAS NO THOUGHT OF CORRECTING FOR ELECTROSTATIC COUPLING EFFECTS BUT NEVERTHELESS, FAIRLY SHARP MINIMUMS WERE OBTAINABLE ON RECEIVED SIGNALS. THE RECEIVER WAS AMATEUR CONSTRUCTED USING A SIMPLE "PICKLE" TUBE AS A REGENERATIVE DETECTOR. R F AMPLIFIER STAGES HAD NOT YET BEEN

DEVELOPED AND IT WAS FIVE OR SIX YEARS LATER THAT ARMSTRONG INVENTED THE SUPERHETERODYNE. THE ANTENNA HAD TO BE LEFT UNGROUNDED DURING COMPASS READINGS. IF GROUNDED THE COMPASS WOULD POINT TO THE ANTENNA DOWN-LEAD, DUE TO THE ANTENNA PICKING UP AND RERADIATING THE SIGNAL.

REALLY SERIOUS, TOP BRASS, NAVAL OFFICERS WANTED TO BE INFORMED OF HOW MUCH R F POWER THEIR SHIPS REQUIRED TO TRANSMIT GIVEN DISTANCES. AT ABOUT THE TIME THAT WW I STARTED, DR. LOUIS AUSTIN OF THE BUREAU OF STANDARDS AND A DR. COHEN DEVELOPED TRANSMISSION FORMULAS FOR DETERMINING THE R F CURRENT THAT COULD BE EXPECTED IN A RECEIVING ANTENNA FROM ENERGY EMITTED FROM A SENDING ANTENNA, FOR COMMUNICATION OVER SEA WATER. TO USE THE FORMULAS, THE EFFECTIVE HEIGHTS AND THE R F RESISTANCES OF THE TRANSMITTING AND RECEIVING ANTENNAS HAD TO BE KNOWN, PLUS THE VALUE OF CURRENT IN THE SENDING ANTENNA. I RECALL THAT FROM FIFTY TO ONE HUNDRED MICRO AMPERES IN A TEN OHM RECEIVING ANTENNA WAS THOUGHT TO BE EASILY DETECTABLE USING A CRYSTAL DETECTOR. USING SOME EARLY TUBES AS REGENERATIVE DETECTORS, ONE OR TWO MICRO AMPERES WOULD PRODUCE A SATISFACTORY SIGNAL. IT WASN'T UNTIL SOMETIME LATER THAT SENSITIVITY WAS RELATED TO EXPRESSIONS OF RADIO FIELD STRENGTH MEASURED IN VOLTS OR MICROVOLTS PER METER.

I HAVE ALWAYS FELT THAT I WAS FORTUNATE TO HAVE AN OPPORTUNITY TO DO LABORATORY WORK AND MUCH ANTENNA CHARACTERISTIC MEASUREMENT FOR DR. AUSTIN AND RECALL THAT THE ONLY MEANS THAT WE HAD TO MAKE SENSITIVE R F CURRENT MEASUREMENTS WAS BY USING A

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AN OLD OLD TIMERS EXPERIENCES WITH RADIO EQUIPMENT & MEASUREMENTS

WHEN

RADIO WAS WIRELESS...AND WIRELESS WAS RELATIVELY YOUNG

By: W. HOLLIS HOFFMAN, W2WJ

....CONTINUED.....

CRYSTAL DETECTOR AND A D C GALVANOMETER. SUCH A COMBINATION HAD TO BE CALIBRATED AT LOW FREQUENCIES BEFORE EACH PERIOD OF USE. FOR MEASUREMENT OF LARGER R F CURRENTS, THERE WERE THE HOT WIRE TYPE AMMETERS. THESE HAD THE DISADVANTAGE OF HAVING RELATIVELY HIGH INTERNAL RESISTANCE. AMMETERS USING INTERNAL THERMOCOUPLES WERE NOT YET AVAILABLE. I STILL HAVE A NOTEBOOK FULL OF CURVES, EACH SHOWING THE EFFECTIVE RESISTANCE AND THE EQUIVALENT CAPACITANCES OF FLAT TOP ANTENNAS IN THE RANGE OF 400 TO 3600 METERS, AT DIFFERENT NAVY INSTALLATIONS. ON ONE ASSIGNMENT IN THE EARLY TWENTIES, I WAS ASKED TO MEASURE THE CHARACTERISTICS OF THE BIG NSS, ANNAPOLIS ANTENNA FROM ITS FUNDAMENTAL, AROUND 4000 METERS TO 100,000 METERS. THIS LOW FREQUENCY END BEING IN THE MIDDLE OF THE AUDIO BAND. SPECIAL TEST EQUIPMENT HAD TO BE ASSEMBLED TO CARRY-OUT THE ASSIGNMENT. THE STATION WAS EQUIPPED WITH ARC TRANSMITTERS AT THAT TIME, AND WAS BEING OPERATED AT 17145 METERS (ABOUT 17500 CYCLES). INCIDENTALLY, THERE WAS NOT ANY WAVEMETER AVAILABLE THAT COULD BE READ TO THE FIFTH PLACE SO REQUIREMENTS TO MAKE ADJUSTMENTS WITHIN PLUS OR MINUS ABOUT TEN METERS WERE A LITTLE FOOLISH.

WORKING AROUND THE BUREAU OF STANDARDS, I HAD THE PLEASURE OF MEETING DR. FREDERICK KOLSTER, WHO HAD A FEW YEARS PREVIOUSLY, PRODUCED THE DECREMETER, WHEN SPARK, IMPULSE TYPE TRANSMITTERS WERE IN GENERAL USE. HIS DECREMETER FURNISHED MEANS FOR QUICKLY AND ACCURATELY, MEASURING THE DECREMENT OF AN EMITTED WAVE WITHOUT RESORTING TO ANY CALCULATIONS. I AM SURE MANY OLD TIMER RADIO INSPECTORS AND ENGINEERS HAVE APPRECIATED THE AVAILABILITY AND CAPABILITIES OF THE KOLSTER INSTRUMENT. IT IS DOUBTFUL IF MANY PRESENT DAY RADIO ENGINEERS HAVE EVER SEEN SUCH AN INSTRUMENT WHICH ONLY 50 YEARS AGO WAS EXTREMELY IMPORTANT. AND, TODAY AMATEURS MAY BE CONCERNED ABOUT A PURE D C NOTE, BUT CERTAINLY NOT ABOUT "WHAT'S MY DECREMENT?", OR OF DEFINING "DECREMENT" IN AN EXAMINATION FOR A TICKET.

IT WAS MY GOOD FORTUNE WHILE WORKING

IN A NAVY LABORATORY AT THE WASHINGTON NAVY YARD, DURING THE EARLY TWENTIES, TO BE ASSIGNED THE PROBLEM OF CONVERTING AN OLD ONE HALF KW SPARK TRANSMITTER TO A TUBE TYPE TRANSMITTER FOR USE ON SUBMARINES. IT HAD TO BE CAPABLE OF ENERGIZING A SUBMARINE LOOP AS WELL AS AN ANTENNA. THE ANTENNA MAST ON SUBMARINES WAS COLLAPSED WHEN THE SHIP SUBMERGED. THE LOOP WAS A PERMANENT ARRANGEMENT OF A HEAVY CABLE, INSULATED TO ABOUT A TWO INCH DIAMETER. IT STRETCHED FROM THE CONNING-TOWER FORWARD TO A SHORT STAFF ON THE BOW AND ASTERN TO ANOTHER SHORT STAFF. IT WAS THOROUGHLY GROUNDED AT THE BOW AND STERN ENDS. IT ENTERED THE FAIRWAY THROUGH INSULATING BUSHINGS, JUST ASTERN OF THE CONNING-TOWER. THIS WAS A TIME WHEN GE UV-203, 50 WATT OUTPUT TYPE TRANSMITTING TUBES WERE RELATIVELY NEW ON THE MARKET. TWO OF THESE TUBES WERE EMPLOYED, BACK TO BACK IN A COLPITTS OSCILLATING CIRCUIT AND I AM PROUD TO HAVE DESIGNED THE FIRST TUBE TYPE TRANSMITTER FOR USE ON UNCLASIFIED SAM'S SUBMARINES. (NAVY MODEL TM).

THE POINT I WANT TO EMPHASIZE, HOWEVER, IS THE METHOD USED TO DETERMINE THE RADIATION PATTERN WHEN TRANSMITTING ON THE SUBMARINE LOOP. I INSTALLED THE FINISHED SET ON THE R-22 AT THE NEW LONDON NAVAL BASE, CONNECTICUT. AT THIS TIME, RECEIVED SIGNAL STRENGTH WAS MEASURED BY AN AUDIBILITY METER. SUCH A GADGET FOR MEASURING THE RELATIVE STRENGTH OF RECEIVED SIGNALS, CONSISTED MERELY OF A VARIABLE RESISTANCE SHUNTED ACROSS THE HEAD-PHONES. THE SHUNTING RESISTANCE WAS VARIED UNTIL THE RECEIVED SIGNAL WAS JUST BARELY INCHES SQUARE AND 2 INCHES IN DEPTH, WITH A MULTI-POINT SWITCH ON TOP. TO DETERMINE THE LOOP TRANSMITTING PATTERN, WE FIRST SET UP A NAVY RECEIVING STATION, USING A NAVY RECEIVER (SE-1420) EQUIPPED FOR AUDIBILITY MEASUREMENTS, AT THE

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AN OLD OLD TIMERS EXPERIENCES WITH RADIO EQUIPMENT & MEASUREMENTS

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.....CONTINUED.....

COAST GUARD STATION AT GROTON, CONN. WE THEN PROCEEDED TO SAIL INTO BLOCK ISLAND SOUND TO AN AREA ABOUT 20 MILES DISTANT FROM GROTON. THIS WAS OF THE ORDER OF 30 WAVELENGTHS FROM THE RECEIVING POINT. KEEPING OUR TRANSMITTING POWER CONSTANT, WE THEN HAD THE SUB'S OFFICERS PROCEED SLOWLY, HOLDING THE SHIP ON FIRST ONE COURSE AND THEN ANOTHER FOR EACH TEN DEGREES OF THE COMPASS. FOR EACH COURSE WE TRANSMITTED A DIFFERENT CODE SIGNAL. THE CHIEF DOING THE RECEIVING DID A GOOD JOB FOR HE DIDN'T KNOW OUR CODE BUT WHEN HIS DATA WAS PLOTTED ON POLAR PAPER, IT SHOWED THE FIGURE EIGHT PATTERN THAT WAS TO BE EXPECTED.

THE BEST OSCILLOSCOPE IN THE LABORATORIES WHERE I HAD THE PRIVILEGE OF STRUGGLING TO DEVELOP RADIO EQUIPMENT UP UNTIL THE MID TWENTIES, CONSISTED OF A HIGH CABINET ABOUT 36x18x12 INCHES. THE VIBRATING ELEMENT CONSISTED OF A HAIR-PIN LOOP OF FINE WIRE WITH A TINY MIRROR GLUED TO ITS CENTER. THIS WAS SUSPENDED BETWEEN THE POLES OF A STRONG MAGNET. LIGHT FROM AN ARC LAMP WAS PICKED UP BY THE TINY MIRROR AND REFLECTED TO A FOUR SIDED MIRROR WHICH WAS REVOLVED BY A MOTOR. THE ADJUSTMENTS WERE TEDIOUS, TAKING MUCH HUMAN PATIENCE. FREQUENCIES UP TO TWO OR THREE THOUSAND CYCLES COULD BE OBSERVED. THE WIRE ELEMENTS WERE RELATIVELY HIGH RESISTANCE AND INDUCTIVE. THEY WERE IMMERSSED IN A THIN OIL FOR DAMPING THEIR MOVEMENT AND WHEN NOT USED FOR A SHORT PERIOD, THE OIL HAD A NASTY HABIT OF GETTING DIRTY.

IT WASN'T VERY LONG AFTER THE VACUUM TUBE BECAME AVAILABLE FOR USE AS A MORE SENSITIVE DETECTOR IN RADIO RECEPTION WHEN LABORATORY WORKERS STARTED FEEDING BACK SOME OF THE OUTPUT PLATE ENERGY TO THE INPUT GRID CIRCUIT AND USING TUBES AS OSCILLATORS. THESE ARRANGEMENTS WERE THEN

COMMONLY USED AS SOURCES OF RADIO FREQUENCY ENERGY FOR MANY TYPES OF MEASUREMENTS. IN ORDER THAT SUCH TUBES WOULD BE OPERATED WITHIN MANUFACTURERS RATINGS, IT WAS COMMON TO OBSERVE THE DC CURRENTS TO THEIR ELEMENTS. FOR SOME YEARS IT WAS OBSERVED BY MANY OTHERS AND MYSELF THAT THE CURRENTS TO THE ELEMENTS CHANGED APPRECIABLY FOR MANY OPERATING CONDITIONS WHEN THE OSCILLATOR WAS COUPLED TO OR ASSOCIATED WITH OTHER CIRCUITS. THE GRID CURRENT CHANGES WERE SO SENSITIVE TO SO MANY CONDITIONS IMPORTANT TO MEASUREMENT WORK THAT SOON AFTER ESTABLISHING A RADIO SECTION FOR THE BURGESS LABORATORIES IN 1924, I MADE UP AN OSCILLATOR (CALLED IT A DRIVER) USING THE 201 A TUBE WITH A DC GRID METER AND FIVE CHANGEABLE COILS WHICH COVERED THE FREQUENCY RANGE OF 375 KILOCYCLES TO 25 MEGACYCLES.

DATA FOR THE UNITS CONSTRUCTION WAS FURNISHED TO QST IN AUGUST 1926 AND RECENTLY, AN ARTICLE IN JUNE 1964 QST, REVIEWING SOME OF THE EQUIPMENTS OF YEARS AGO, STATES THAT IT WAS THE ORIGINAL "GRID-DIP" METER. AN AMATEUR STATION OR A LABORATORY TODAY SEEMS INCOMPLETE WITHOUT A GRID-DIP METER.

I RECALL WHEN AMATEUR DON MIX, STILL A TECHNICAL EDITOR FOR QST, MADE A TRIP TO THE ARCTIC REGIONS WITH McMILLAN ON THE SS BOWDOIN AND KEPT ALMOST CONTINUOUS COMMUNICATION BACK TO THE STATES ON 100 METERS, DURING THE EARLY TWENTIES, AND WE ALL THOUGHT THE 3 MEGACYCLES A HIGH FREQUENCY.

I THINK THAT I WILL STILL BE AMAZED AT THE NEW DEVELOPMENTS IF I LIVE TO SEE WHAT IS DISCOVERED AND PUT INTO USE IN ANOTHER TWENTY YEARS.

THOMAS APPLEBY W3AX

ASSEMBLED FIRST WIRELESS STATIONS IN 1899 WHEN HE PUT UP TWO STATIONS IN PHILADELPHIA A SHORT DISTANCE APART, ONE FOR TRANSMITTING EMPLOYING A SPARK-GAP IN THE GROUNDED AERIAL CIRCUIT SHUNTED BY THE SECONDARY OF A RUHKORFF $\frac{1}{2}$ INCH SPARK COIL WITH A TELEGRAPH KEY AND BATTERY IN THE PRIMARY COIL CIRCUIT. THE OTHER STATION WAS FOR RECEIVING ONLY AS THERE WERE NO OTHER AMATEUR STATIONS IN PHILADELPHIA AT THAT TIME, AND CONSISTED OF A GROUNDED AERIAL WITH A MARCONI TYPE SILVER-NICKEL FILINGS COHERER IN SERIES, AND A TELEGRAPH RELAY AND BATTERY IN SHUNT WITH THE COHERER IN ORDER TO OPERATE A BELL-TYPE TAPPER TO SHAKE UP THE FILINGS IN THE COHERER WHEN A SIGNAL WAS RECEIVED. HIS FIRST CALL LETTERS WERE "HN".

BY 1908 HE HAD A FULL FLEDGED AMATEUR STATION USING A $1\frac{1}{2}$ INCH SPARK-COIL FOR TRANSMITTING, AN AERIAL ABOUT 75 FEET LONG RADIATING A WAVE OF 360 METERS AS LISTED IN THE FIRST ANNUAL OFFICIAL WIRELESS BLUE BOOK OF THE WIRELESS ASSOCIATION OF AMERICA, EDITION OF MAY 1909, AND USING AN ELECTROLYTIC DETECTOR AND HEADPHONES FOR RECEIVING.

IN 1909 HE WENT TO SEA AS A COMMERCIAL WIRELESS OPERATOR FOR THE UNITED WIRELESS TELEGRAPH COMPANY, AND LATER THAT YEAR WAS ASSIGNED TO THEIR SHORE STATION "AX" ON THE MILLION DOLLAR PIER, ATLANTIC CITY, NEW JERSEY, WHERE HE REMAINED UNTIL 1911 WHEN HE RETURNED TO PHILADELPHIA SCHOOL OF WIRELESS TELEGRAPHY, CALL LETTERS "PW", ON APRIL 1, 1911. ONE YEAR LATER HE WAS EMPLOYED BY THE MARCONI COMPANY TO MANAGE AND OPERATE THE JOHN WANAMAKER-MARCONI 5 K.W. SYNCHRONOUS ROTARY SPARK STATION WHE ON THE PHILADELPHIA STORE WORKING WITH A CORRESPONDING STATION WHI IN NEW

YORK CITY WHERE DAVE SARNOFF WAS MANAGER AND OPERATOR.

AT THE BEGINNING OF WORLD WAR I, HE ENTERED THE NAVY AS A LIEUT. (J.G.) AND WAS ASSIGNED TO THE PHILADELPHIA NAVY YARD. AFTER A FEW MONTHS HE WAS ORDERED TO THE OFFICE OF THE DIRECTOR OF NAVAL COMMUNICATION, WASHINGTON, D.C. WHERE HE FIRST WROTE THE "WARTIME RADIO INSTRUCTIONS FOR MERCHANT VESSELS" WHICH WAS DISTRIBUTED TO ALL U.S. AND ALLIED SHIPS AND SHORE RADIO STATIONS AND STOOD PRACTICALLY UNCORRECTED THROUGHOUT THE WAR. HE LATER ORGANIZED AND DIRECTED THE INSTALLATION AND OPERATION OF THE FIRST 33 NAVAL SHORE RADIO DIRECTION FINDING STATIONS ON THE ATLANTIC COAST.

IN 1920 HE WAS REGISTERED IN THE U.S. PATENT OFFICE AS A PATENT ATTORNEY AND SERVED NUMEROUS RADIO MANUFACTURERS AND INVENTORS, LATER EXPANDING HIS ACTIVITY TO CONSULTING RADIO ENGINEER REPRESENTING BROADCAST STATIONS BEFORE THE FCC.

HE WAS RECALLED TO ACTIVE DUTY AT THE BEGINNING OF WORLD WAR 2, AND SERVED UNTIL DECEMBER 1946. HE WAS RETIRED IN 1947 WITH THE RANK OF FULL COMMANDER, ON ACCOUNT OF A SERVICE ACQUIRED PHYSICAL DISABILITY, AND HAS SINCE BUSIED HIMSELF WITH HIS HOBBIES, MUSIC, IN WHICH HE TOOK A COLLEGE COURSE IN 1950 AND LATER RECEIVED THE DEGREES OF BACHELOR AND MASTER; AMATEUR RADIO, TO WHICH HE RETURNED IN 1960; AND PHOTOGRAPHY IN WHICH HE HAS BEEN INTERESTED SINCE ABOUT 1900. HE HAS JUST COMPLETED HIS PORTION OF A MANUSCRIPT FOR A BOOK HONORING THE FIRST INVENTOR OF A WIRELESS SYSTEM - TITLED MAHLON LOOMIS, BIRTH OF WIRELESS. HE IS A MEMBER OF OOTC, VWOA AND QCWA, AND LIVES AT 5415 CONNECTICUT AVE., N.W. WASHINGTON, D.C. HIS PRESENT CALL IS W3AX.

NEWS ABOUT MEMBERS

DIARY OF A MARCONI WIRELESS OPERATOR
 BY: ARTHUR C. JACOBY, W3OY

ADDENDUM TO THE 1918 DIARY

REFERRING BACK TO AUGUST 21, 1918 WHEN WE SIGHTED THE EMPTY LIFEBOAT FROM THE SS PROTEUS OF THE MORGAN LINE A SHORT DISTANCE SOUTH OF FRYING PAN SHOALS WHILE I WAS ON THE SS NACOOCHEE, I RECEIVED INFORMATION RECENTLY FROM LOU. GALLO, W5AU FROM NEW ORLEANS, AS TO HOW THAT LIFEBOAT BECAME A-DRIFT. HE WAS THE SENIOR RADIO OFFICER ON THE PROTEUS AT THAT TIME. QUOTING FROM CORRESPONDENCE WITH LOU, HE SAID--"THE LIFEBOAT YOU SAW WHILE ON THE NACHOOCHEE WAS PROBABLY THE ONE I WAS IN WHEN WE WERE PICKED UP, THERE WAS ONLY ONE OTHER LIFEBOAT AND THAT ONE WAS SUNK WHEN WE BOTH WERE PICKED UP. THE COLLISION HAPPENED, AS CLOSE AS I CAN REMEMBER, ABOUT 50 OR MORE MILES EAST OF CAPE HATTERAS ON A BRIGHT MOONLIGHT NIGHT. ONE SECOND LATER I WOULD HAVE BEEN CRUSHED TO DEATH. AS IT WAS, THE STEEL DOOR OF MY ROOM WAS SMASHED SO THAT I HAD TO CRAWL THROUGH A HOLE 1½ FEET BY 1½ FEET. THE OLD KKP WAS CUT RIGHT IN HALF. THIS HAPPENED AROUND THE 10TH OF AUGUST 1918. I CANNOT RECALL THE EXACT DATE."

IN A LATER LETTER LOU WROTE--"ALL I CAN REMEMBER OF THE COLLISION WAS THAT IT WAS A LARGE TANKER AND THAT THE MOON WAS AS BRIGHT AS COULD BE. (WE WERE RUNNING WITHOUT LIGHTS). THE WARNING BLASTS WOKE ME AND I SAW THE BOW OF THAT TANKER RIGHT ON US, THEN THE CRUNCH, (NOT A CRASH). ONE OR TWO SECONDS LATER AND I WOULD NOT BE WRITING TO YOU AS IT STRUCK ONE CABIN AHEAD OF WHERE I WAS SLEEPING AT ABOUT MIDNIGHT. I WAS JUST AHEAD OF THE CAPTAIN TO LEAVE THE SHIP WHICH WAS FOLDED AS THE CRASH PRACTICALLY CUT IT IN TWO AMIDSHIP. HAD TO SLIDE DOWN ROPE TO GET INTO LIFEBOAT WHICH WAS OVERLOADED, SO I HAD CHARGE OF THE TILLER WHICH BROKE LOOSE AND GAVE ME A MERRY TIME TRYING TO CATCH IT. IT LOOKED SO LITTLE IN THE WATER, BUT BOY WHEN I CAUGHT THE ROPE AND PULLED IT I HAD ALL I COULD HANDLE TO GET IT IN THE SOCKETS. I CAN HONESTLY SAY I DO NOT REMEMBER PANICING FOR A MOMENT AND IT WAS SOME SIGHT TO SEE THAT OLD KKP STICK ITS NOSE IN THE AIR AND SLIDE DOWN IN ABOUT 10 MINUTES."

EXCERPTS FROM THE 1919 DIARY

- JAN.26 LEFT PIER 33 ATLANTIC BASIN ON THE MS SANTA ISABEL, WHN, OF THE GRACE LINE AT 11:30 A.M. BOUND FOR THE WEST COAST OF SO. AMERICA VIA PANAMA CANAL.
- JAN.30 SHIP MAKING ABOUT 180 MILES PER DAY. AT NOON 653 MILES SOUTH OF SCOTLAND LIGHT, 450 MILES OFF THE COAST.
- FEB. 2 RECEIVED NOTICE VIA RADIO TO BE ON LOOKOUT FOR DISABLED CUBAN SCHOONER "LUCIA" AND REPORT IF FOUND.
- FEB. 3 NOON POSITION 10 MILES WEST OF CAPE DAME MARIE, HAITI.
- FEB. 4 HELPED THE CREW HOIST THE SQUARE SAIL IN THE MORNING.
- FEB. 6 COPIED PRESS FROM NBA.
- FEB. 7 ANCHORED COLON BAY 4 P.M.
- FEB. 8 PASSED THROUGH THE CANAL AND DOCKED AT BALBOA 5 P.M.
- FEB. 9 WENT ASHORE WITH THE 1ST OFFICER AND HIRED A CAB. DROVE AROUND PANAMA, TIVOLI, ANCON, AND BALBOA. LATER LOOKED OVER SOME FORMER GERMAN SHIPS.
- FEB.10-13 HAVING MOTORS OVERHAULED.
- FEB.13 LEFT BALBOA FOR WEST COAST OF SO. AMERICA.
- FEB.14 PASSED THE GRACE LINE SS SANTA LUISA ABOUT 4 P.M.
- FEB.16 CROSSED THE EQUATOR. RAINING AND WATER LEAKING INTO MY QUARTERS AND THE RADIO SHACK.
- FEB.18 ARRIVED PAITA, PERU, AT NOON AND STARTED UNLOADING CARGO. TRIED TO CONTACT THE SS SANTA TECLA, BUT UNSUCCESSFUL.
- FEB.19 FINISHED UNLOADING SHORTLY AFTER DAYBREAK. LEFT 7 A.M. AS THE SS SANTA TECLA ARRIVED. ARRIVED TALLARA 1 P.M. THE SS E. H. MEYER AND SS LADY SYBIL ARRIVED SHORTLY AFTERWARDS. HAD A HEAVY RAIN SHOWER DURING THE NIGHT. WE WERE TOLD IT WAS THE FIRST RAIN IN THAT AREA IN A GOOD MANY YEARS.

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EXCERPTS FROM THE 1919 DIARY CONT'D

- FEB. 22 LEFT TALARA 7 A.M., PROCEEDING TO PIMENTAL, ARRIVING FOLLOWING DAY 1:30 P.M. BEING A SUNDAY, NO CARGO WAS UNLOADED.
- FEB. 25 SLOWLY DISCHARGING OUR CARGO DUE TO THE HEAVY SWELLS PREVAILING OFF SHORE.
- FEB. 26 FINISHED UNLOADING 5 P.M. LEFT FOR ETEN, ARRIVING 7:15 P.M.
- FEB. 27 THE SS JAMES S. WHITNEY, (WPW) PROMISED TO SEND ME SOME PRESS BUT HE GOT OUT OF RANGE IN THE MEANTIME. (THE SANTA ISABEL HAD ONLY A $\frac{1}{2}$ KW QUENCHED GAP TRANSMITTER AND BEING A WOODEN SHIP, GROUNDING WAS ACCOMPLISHED BY MAKING USE OF COPPER STRIPS ATTACHED TO THE SHIP'S HULL.)
- FEB. 28 HEARD THE PERUVIAN SS UCAYALI REPORT TO OAT (TRUJILLO) THAT SHE HAD A FIRE ABOARD.
- MAR. 1 FINISHED UNLOADING CARGO & LEFT ETEN 5 P.M. EVERYTHING GOING ALONG VERY NICELY UNTIL 9 P.M. WHEN THE TAIL SHAFT BROKE. RUNNING ALONG LIKE A LAME DUCK ON ONE LEG, MAKING ABOUT 3 KNOTS PER HOUR.
- MAR. 3 WORKED THE SS ARDMORE TODAY.
- MAR. 4 WORKED THE SHORE STATION AT LIMA TODAY. THE COOK CAME UP WITH SOMETHING FOR DINNER TODAY THAT I NEVER HAD BEFORE AT SEA, CREAM PUFFS, AND THEY WERE VERY DELICIOUS.
- MAR. 5 ARRIVED AND ANCHORED IN CALLAO BAY 10 A.M. THE SS SANTA ELENA HOLDING DOWN THE DRYDOCK AT PRESENT. OPERATOR BROWN FROM THE SANTA ELENA CAME ABOARD IN THE AFTERNOON. WORKED HIM WITH THE MORSE LAMP IN THE EVENING. THE SANTA TECLA LEFT FOR PORTS SOUTH AT 5 P.M.
- MAR. 6 VISITED BROWN ABOARD THE SANTA ELENA DURING THE DAY.
- MAR. 7 SANTA ELENA LEFT THE DRYDOCK. HAD DINNER ABOARD HER. LATER CHEWED THE RAG WITH HIM ON 300 METERS.
- MAR. 8 SANTA ISABEL WENT ON THE DRYDOCK IN THE MORNING. SANTA RITA ARRIVED 5 P.M. WITH HER FLAGS AT HALF MAST. (REASON UNKNOWN TO ME.) WORKED 300 METERS AGAIN.
- MAR. 9 SUNDAY. BROWN, ROBERTS AND MYSELF WENT UP TO LIMA TO THE BULL FIGHT WHICH WAS A VERY TAME AFFAIR. 3 BULLS WERE KILLED. AFTERWARDS THEY LEFT A SORT OF TAME BULL IN THE ARENA AND THE PEOPLE FROM THE STANDS WENT INTO THE ARENA AND CHASED IT AROUND. THIS WAS MORE FUN TO WATCH THAN THE REGULAR FIGHTS.
- MAR. 12 TALKING WITH THE SANTA ELENA ON 300 METERS USING AMERICAN MORSE CODE UNTIL THE OPERATOR AT OAA, LIMA, TOLD US TO QRT.
- MAR. 16 SANTA ELENA LEFT CALLAO THIS MORNING.
- MAR. 18 THE AMERICAN SS MIDDLEBURY ARRIVED THIS AFTERNOON.
- MAR. 19 LEFT DRYDOCK THIS MORNING AND ANCHORED CLOSE BY.
- MAR. 20 SS SANTA LUISA ARRIVED 9:30 P.M. AND TALKED WITH HER ON THE MORSE LAMP.
- MAR. 21 VISITED THE SANTA LUISA BRIEFLY TODAY. ABOARD THE SANTA ISABEL I WAS PLAYING WITH ONE OF 3 PUPS CALLED "ISABEL". WE ALSO HAVE LIVE CHICKENS AND TURKEYS RUNNING AROUND.
- MAR. 22 LEFT CALLAO 11:00 A.M. AFTER CRUISING AROUND THE BAY A SHORT TIME WE HEADED SOUTH. SANTA LUISA ALSO LEFT HEADING SOUTH. MAKING GOOD TIME. TALKED WITH THE SANTA RITA, NORTH BOUND.
- MAR. 23 I WAS CHASED OUT OF MY BUNK AT 4:50 A.M. AND TOLD THAT THE SHIP HAD RUN AGROUND. GOT UP AND DRESSED AND FOUND THE SHIP AGROUND AT PUNTA COLES, A SHORT DISTANCE SOUTH OF ILO. LIFE BOATS WERE LAUNCHED AND PREPARING TO LEAVE SHIP. SEND SOS AT CAPTAIN'S ORDERS BUT COULD NOT RAISE ANYONE. HOWEVER THE SHIP WAS ABLE TO FREE ITSELF BY 6:15 P.M. WITH APPARENTLY NO DAMAGE DONE. PROCEEDED TO ARICA, ARRIVING 5 P.M. LEFT AT 8:30 P.M. FOR IQUIQUE, CHILE.
- MAR. 26 IN SIGHT OF LAND ALL DAY, PASSING CALETA BUENA AT NOON AND ARRIVED AT IQUIQUE 1:30 P.M. AND ANCHORED. 8 EX-GERMAN SHIPS HERE. BEGAN LOADING NITRATE FOR MARTINIQUE AND BARBADOS.

EXCERPTS FROM THE 1919 DIARY CONT'D

- MAR. 28 LEFT IQUIQUE AT 6:30 P.M.
 MAR. 31 PROCEEDING NORTH, MAKING GOOD TIME, USING 2 SAILS TO HELP THINGS ALONG, AVERAGING ABOUT 185 MILES PER DAY. FINE WEATHER. DO NOT SEE ANY SHIPS.
- APR. 3 SAW A VERY LARGE SHARK TODAY. WEATHER GETTING WARM DUE TO APPROACHING THE EQUATOR.
- APR. 5 VERY WARM TODAY. CROSSED THE EQUATOR BETWEEN 5 AND 6 P.M. HEARD NAA, NAX AND NPJ. VERY GOOD SIGNALS FROM NAA BUT TOO MUCH QRN TO COPY.
- APR. 7 STRONG HEAD WINDS, CUTTING DOWN OUR SPEED.
- APR. 8 TAIL SHAFT BROKE AGAIN AT 11:50 A.M. BUSY ON THE RADIO TRANSMITTING MESSAGES. A TUG LEFT BALBOA AT 10 P.M. TO MEET US AND TAKE US IN TOW. MAKING ABOUT 3 MILES PER HOUR.
- APR. 9 WE MISSED THE TUG, (ON PURPOSE I WAS TOLD) AND ARRIVED AT BALBOA WHERE A TUG DOCKED US AT PIER 18 AT 4 P.M. I RECEIVED 19 LETTERS IN THE SHIP'S MAIL.
- APR. 11 BEGAN UNLOADING CARGO IN ORDER TO GO ON DRY DOCK. WEATHER VERY HOT.
- APR. 13 PALM SUNDAY. HAD THE FIRST HEAVY SHOWER OF THE RAINY SEASON. THE SANTA LUISA ENTERED THE CANAL, NORTH BOUND.
- APR. 15 MOVED ON THE DRYDOCK. THIS DRYDOCK IS SO LARGE THAT THE SANTA ISABEL LOOKS LIKE ONE EGG IN AN EGG CRATE. RAINING MOST ALL DAY.
- APR. 16 VERY HOT AND WE CANNOT USE OUR ELECTRIC FANS DUE TO THE SHIP BEING SUPPLIED WITH ALTERNATING CURRENT FROM ASHORE. VISITED THE SS JAMES S. WHITNEY.
- APR. 18 TOO HOT ABOARD SHIP, SO WAS SPENDING MOST OF MY TIME ASHORE AT THE YMCA OR THE CLUBHOUSE.
- APR. 20 EASTER SUNDAY. ATTENDED CHURCH SERVICE AT THE BALBOA UNION CHURCH.
- APR. 24 SAW THE BRITISH CRUISER BERWICK ENTER THE CANAL.
- APR. 26 MET SOME GOBS ASHORE FROM THE USS NANSHAN. TOWN FLOODED WITH ANZAC TROOPS LAYING OVER FOR THE NIGHT AT BALBOA.
- MAY 2 VICTORY SHIP USS CRANE PASSED THROUGH AT 7 A.M. A HYDROPLANE WHICH I HAD SEEN THIS MORNING CRASHED INTO THE MIRAFLORES LOCKS ABOUT 5 P.M. KILLING A MAJOR CLARK AND A LIEUT. TONKIN.
- MAY 3 LEFT THE DRYDOCK AT 1:30 P.M., TAKING ONLY 35 MINUTES FROM THE TIME THEY BEGAN FLOODING THE DOCK UNTIL THE GATES WERE OPENED. TIED UP AT A COAL PIER FOR A FEW DAYS.
- MAY 4 FOR A LITTLE EXCITEMENT CHIPS AND THE STEWARD WERE AFTER EACH OTHER WITH A HATCHET AND MEAT CLEAVER, BUT THE SKIPPER SOON QUIETED THEM DOWN.
- MAY 5 TOOK ON OIL AND WATER AND THEN BEGAN RELOADING.
- MAY 6 MET HARRY M. LINDGUN, MARCONI OPERATOR ON THE MS MT. SHASTA. IN EVENING ATTENDED A PAGEANT AT THE BALBOA STADIUM. HEARD COL. CHESTER HARDING, GOVERNOR OF THE CANAL ZONE AND THE HONORABLE H.S. PRICE, THE U.S. MINISTER TO PANAMA, SPEAK.
- MAY 7 VISITED THE MT. SHASTA. THE US SUBMARINE C-3 ARRIVED AND DOCKED JUST AHEAD OF US. SHE WAS THE FIRST SUBMARINE TO CARRY MAIL, ESPECIALLY FROM THE ATLANTIC TO THE PACIFIC. SHE BROUGHT MAIL FROM CRISTOBAL TO BALBOA, VICTORY LOAN SUBSCRIPTIONS.
- MAY 8 THE SANTA ELENA ARRIVED AND DOCKED AT THE OIL CRIB. OPERATORS LINDGUN, BROWN AND MYSELF TOGETHER MOST OF THE DAY.
- MAY 9 LEFT BALBOA 6:45 A.M. TO PROCEED THROUGH THE CANAL. CHIPS AND THE BOSUN WERE PAID OFF DURING THE DAY. ARRIVED CRISTOBAL 8:30 P.M. AND IMMEDIATELY PUT OUT TO SEA.
- MAY 10 RELAYED 3 MESSAGES FOR THE SANTA FLAVIA, BOUND FOR COLON FOR FUMIGATION. NOT MAKING VERY GOOD HEADWAY DUE TO STRONG HEAD WINDS. UNABLE TO COPY PRESS DUE TO QRN.
- MAY 14 NOT MUCH DOING THESE DAY. CLEANED RADIO SHACK AND EQUIPMENT.
- MAY 18 PASSED BETWEEN ISLANDS OF MARTINIQUE AND ST. LUCIA DURING THE AFTERNOON. HAD TRAFFIC FOR VPO BUT UNABLE TO RAISE HIM. 3 OTHER SHIPS ALSO CALLING HIM.

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EXCERPTS FROM THE 1919 DIARY CONT'D

- MAY 19 CLEARED TRAFFIC WITH VPO AT 5:15 A.M. ARRIVED BRIDGETOWN, BARBADOS 1 P.M. WENT ASHORE AND DID SOME SIGHTSEEING.
- MAY 23 LEFT FOR MARTINIQUE AT 9 P.M. SHIP ROLLING BADLY.
- MAY 24 ARRIVED FORT DE FRANCE, MARTINIQUE 2 P.M. ANCHORED ABREAST OF THE RADIO STATION. I COULD HEAR HIM SENDING PRESS STANDING ON DECK. FORT DE FRANCE IS ONE OF THE MOST BEAUTIFUL PORTS I HAVE EVER BEEN IN, EVERYTHING SO FRESH AND GREEN. FULL OF PALM TREES WHICH JUST ABOUT HIDE FROM VIEW THE FRENCH LINER HAITI DOCKED CLOSE BY.
- MAY 26 MOVED UP THE BAY AND BEGAN DISCHARGING CARGO. NOTHING TO DO BUT LOAF AND READ.
- MAY 28 FINISHED DISCHARGING CARGO AT NOON. RADIOED FOR A PILOT TO COME AT ONCE BUT HE DID NOT SHOW UP UNTIL 4 P.M. WHEN WE MOVED BACK TO THE FORT. IN THE EVENING I REQUESTED THE OPERATOR AT FKQ TO TRANSMIT HIS PRESS A BIT SLOWER SO I COULD COPY IT, WHICH HE DID.
- MAY 29 NO CARGO WORKED TODAY, SOME SORT OF A HOLIDAY ASHORE. CATHEDRAL BELLS RINGING MOST ALL DAY. WENT ASHORE IN AFTERNOON, TOOK A LONG WALK AND SOME VERY NICE PICTURES.
- MAY 30 BEGAN UNLOADING AGAIN. WENT ABOARD THE SS PARIMA. ASHORE IN THE AFTERNOON. A CAB DRIVER WANTED \$30.00 TO TAKE THE 2ND OFFICER AND ME UP TO ST. PIERRE TO SEE THE RUINS OF THE CITY THAT WAS DESTROYED BY VOLCANIC ERUPTION IN 1902.
- MAY 31 FINISHED UNLOADING IN THE MORNING AND LEFT FOR NEW YORK AT NOON. PASSED CLOSE TO ST. PIERRE BUT COULD NOT SEE MUCH DUE TO A HEAVY MIST. HEAVY RAINS FLOODING THE RADIO SHACK AGAIN.
- JUNE 1 MAKING GOOD HEADWAY. PASSED THE ISLANDS OF NEVIS, ST. KITTS, ST. EUSTATIUS AND SABA DURING THE DAY. CAN'T HEAR MUCH ON THE RADIO DUE TO SEVERE QRN. WASHED SOME CLOTHES IN THE AFTERNOON. COPIED NAA PRESS FOR FIRST TIME.
- JUNE 3 HAD TO EVACUATE THE RADIO SHACK DUE TO RAIN LEAKING IN FROM SEVERE SHOWERS OVERHEAD AND FLOOD WATER FROM THE TOILET NEXT DOOR. HAD TO REMOVE ALL MY CLOTHING AND PERSONAL THINGS UNTIL THE PLACE WAS CLEANED UP.
- JUNE 5 WAS ABLE TO GET A POSITION REPORT OFF THROUGH KDA, SS PASTORES OF THE UNITED FRUIT CO. TO NDW. STILL MAKING GOOD TIME.
- JUNE 6 SHORTLY AFTER SUPPER SIGHTED 2 US NAVAL VESSELS. WATCHED THEM THROUGH THE GLASSES UNTIL ONE CAME IMMEDIATELY ASTERN OF US. IT WAS THE USS SOUTH CAROLINA AND THE OTHER THE USS MISSOURI. WORKED THE SO. CAROLINA FOR ABOUT 15 MINUTES WITH THE MORSE LAMP.
- JUNE 7 SUNDAY. CALLED NAH FOR A BEARING AND RECEIVED THE FOLLOWING: SVC 1 TO WHN-YOUR TRUE BEARING AT 10:45 FROM FIRE ISLAND 216, DOUBTFUL, MANTOLOKING 85. YOUR SIGNALS NOT HEARD AT OTHER STATIONS--NAH CAPTAIN SAID POSITIONS WERE VERY TRUE, ONLY 28 MILES TO AMBROSE LIGHTSHIP.
- JUNE 8 ARRIVED AT QUARANTINE ABOUT 7 A.M. THE FRENCH LINER LA SAVOIE CAME ASTERN OF US WITH TROOPS ABOARD. DOCKED AT 11:30 A.M. AT PIER 44 BROOKLYN, THE NEW GRACE LINE PIER. WENT OVER TO 42 BROAD STREET BUT THE OFFICE HAD MOVED TO 25 ELM STREET AGAIN. REQUESTED A LEAVE OF ABSENCE AND LEFT FOR HOME THE NEXT DAY.
- JUNE 9 RECEIVED A TELEGRAM FROM J. B. DUFFY TO REPORT TUESDAY, JULY 8.
- JULY 7 LEFT FOR NEW YORK. WHILE ON THE FERRY, THE GEORGE WASHINGTON ARRIVED WITH PRESIDENT WILSON ON BOARD AND PASSED ALONG SIDE OF US. AT THE OFFICE FITZPATRICK GAVE ME THE CHOICE OF SEVERAL SHIPS. I SELECTED THE SS MUNALBRO BOUND FOR SWEDEN BUT DECLINED IT AFTER TAKING ONE LOOK AT THE RADIO ROOM. WAS THEN ASSIGNED TO THE SS EDNA BOUND FOR NORWAY ON A 140 DAY TRIP. LOOKED HER OVER AT THE BUSH DOCKS. SURE

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EXCERPTS FROM THE 1919 DIARY CONT'D

- WAS A LOUSY LOOKING TUB. AFTER 3 DAYS ABOARD HER I WENT TO DUFFY AND SAID I WOULD NOT SHIP OUT ON HER. HE SEEMED VERY DISGUSTED.
- JULY 11 GOT ANOTHER GROUP OF SHIPS TO SELECT FROM AND PICKED THE SS GLEN WHITE, CALL KSIE, OF THE COASTWISE TRANSPORTATION CO. WENT ABOARD HER IN THE ROBINS SHIPYARD. A VERY NICE 9000 TON FREIGHTER AND I ACCEPTED THE ASSIGNMENT. SHIP GOING TO PHILADELPHIA TO LOAD COAL FOR ROTTERDAM. HAVE 2 VERY NICE ROOMS TO MYSELF. MARINE STRIKE BEGAN TODAY. FIREMEN DEMANDING \$90.00 PER MONTH.
- JULY 12 DUE TO STRIKE SHIP DID NOT SAIL AS SCHEDULED TODAY, EVERYONE BUT OFFICERS WALKED OUT.
- JULY 13 SAW THE USS IMPERATOR ARRIVE SHORTLY AFTER SUPPER.
- JULY 14 NOT MUCH TO EAT ABOARD SHIP. THE 2ND OFFICER ACTING AS COOK. EVERYONE DOING SOMETHING AROUND THE SHIP. MY JOB WAS TO DRY THE DISHES, HI.
- JULY 19 STRIKE STILL ON. HELPED MOVE SHIP UP TO FOOT OF 79TH STREET, NORTH RIVER. LATER IN DAY TOOK THE TRAIN HOME. RETURNED ON THE 21ST.
- JULY 22 MARCONI INSPECTOR ABOARD CHECKING RADIO EQUIPMENT. CHECKED BATTERIES ETC. ALL OK.
- JULY 24 OVER TO THE URTA IN AFTERNOON. RAN ACROSS JACK POPPELS AND CORNELIUS QUINN. LATER WE ALL WENT OVER TO CONEY ISLAND.
- JULY 25 OVER TO THE URTA AGAIN. LATER VISITED MORTON STEARNS, EX 3JZ FROM BETHLEHEM, PA. NOW LIVING IN NEW YORK CITY.
- JULY 26 "RADIO STRIKE MAY TIE UP ALL SHIPPING" IN BIG HEADLINES APPEARED IN THE "WORLD'S" MORNING EDITION. THE URTA DEMANDING \$174.00 FOR CHIEF OPERATOR AND \$150.00 FOR JUNIOR OPERATOR.
- JULY 27 SUNDAY. TOOK A TRIP ON THE STEAMER MANDALAY TO THE HIGHLANDS. SAW THE USS BARNEY WHOSE SOS I HAD ANSWERED IN SEPTEMBER 1917 WHILE ON THE SS JAMESTOWN OF THE OLD DOMINION LINE.
- JULY 28 STRIKE FINALLY SETTLED AND ALL HANDS RETURNED TO THEIR SHIPS. OVER TO THE URTA AGAIN. LAWYER AXTELL IS IN CHARGE OF THE RADIO OPERATORS DEMANDS FOR INCREASED WAGES. A CONFERENCE TO BE HELD EARLY THIS WEEK.
- JULY 30 LEFT NEW YORK AT 7:30 A.M. FOR PHILADELPHIA, ARRIVING OFF DEL-AWARE BREAKWATER 11:00 P.M.
- AUG. 1 DOCKED AT GREENWICH POINT COAL PIER 8 P.M. THE AMERICAN SS HAVERFORD ARRIVED WITH A SHIPLOAD OF YMCA WORKERS. ALL THE SHIPS IN THE HARBOR SALUTED HER AS WELL AS THE FACTORY WHISTLES ASHORE.
- AUG. 2 RECEIVED TELEGRAM FROM MOORE OF URTA OFFICE THAT EFFECTIVE AUGUST 1 CHIEF OPERATOR TO RECEIVE \$125.00 PER MONTH AND JUNIOR OPERATOR \$100.00 PER MONTH.
- AUG. 3 FINISHED LOADING COAL AND MOVED OUT INTO THE RIVER. HEAVED ANCHOR 3 P.M. BOUND FOR ROTTERDAM. PASSED THE USS MINNESOTAN ARRIVING WITH TROOPS.
- AUG. 4 FEELS GOOD TO BE OUT AT SEA AGAIN. HELPED THE OM WITH A FEW ODD JOBS.
- AUG. 6 HEARD THE USS LEVIATHAN, MUST BE CLOSE BY, SIGNALS VERY STRONG. PASSED THE MARTHA WASHINGTON IN AFTERNOON. HEARD AN SOS BUT COULD NOT GET ANY DETAILS.
- AUG. 7 HEARING VCE, VCS, VCT AND VCU. NAA COMING IN VERY GOOD AT NIGHT.
- AUG. 8 RECEIVING ICE REPORTS, BUT NONE CLOSE BY.
- AUG. 10 HEARING BWP, PONTA DELGADA IN THE AZORES.
- AUG. 11 HEARD FL FOR THE FIRST TIME. RECEIVED MINE REPORTS FROM VARIOUS SHIPS. NAA OUT OF RANGE FOR PRESS REPORTS.
- AUG. 16 MUST BE GETTING NEAR LAND, SIGHTING BRITISH TRAWLERS WITH THEIR COLORED SAILS.
- AUG. 17 WORKED BREST AND OUESSANT, FRANCE ALSO LANDS, END, ENGLAND. HAD ONE P MSG. FOR FFF AND RELAYED 2 FOR A FRENCH SAILING VESSEL. HAD MY FIRST GLIMPSE OF ENGLAND, THE
- TO BE CONTINUED—

EARLY HAM HISTORY OF R. H. KAUFMANN, K2DMR

THE ORIGINAL $\frac{1}{4}$ KW SPARK RIG WENT ON THE AIR EARLY IN 1921 USING A RIBBED ZINC STATIONARY GAP. WHAT A ROCK CRUSHER! THE UNPLEASANT NOTE, AND WIDE BAND EFFECTS (FAST DECREMENT) RATHER PROMPTLY LED TO THE SUBSTITUTION OF A ROTARY GAP (NOT A BENWOOD THOUGH). THIS BATCH OF HOME-BREW DID A MIGHTY CREDITABLE JOB NONE-THE-LESS. ESSENTIALLY ALL OF THE CONTACTS WITH THIS SET-UP WERE WITHIN THE STATE OF IOWA. DESTINY BROUGHT ABOUT AN EARLY RETIREMENT IN THE FORM OF A CW OUTFIT.

MY DAD EXHIBITED A KEEN INTEREST IN RADIO FROM THE BEGINNING. HE COULDN'T READ CODE TRANSMISSIONS HOWEVER. ONE EVENING WHILE DOING A BIT OF LISTENING, OF ALL THINGS WE INTERCEPTED AN AM BROADCAST OF SPEECH AND MUSIC ORIGINATING AT STATION KDKA IN PITTSBURGH. AT ONCE, HE POSED THE QUESTION, COULD WE DUPLICATE THIS KIND OF TRANSMISSION? AFTER A BIT OF CHECKING WITH OTHER HAMS IN DES MOINES, I REPORTED BACK THAT IT WAS NOT IMPOSSIBLE. WELL, SAID HE, "WHAT ARE WE WAITING FOR?" - AS HE SHELLED OUT A MODEST AMOUNT OF THAT PRECIOUS GREEN STUFF.

AND SO BEGAN PLANS FOR A CW RIG WITH AM. A UV 202 WOULD TAKE THE CENTRAL SPOT AS A 5-WATT GLOW BOTTLE. THE ANTENNA WOULD REMAIN UNCHANGED, THE OSCILLATOR TANK COIL WAS HAND WOUND ON A HOME-MADE WOOD RIB CYLINDRICAL SKELETON FRAME USING SOME MULTISTRAND LIGHTNING ROD DOWN-LEAD CONDUCTOR. THE TUNING CONDENSER (NOW A CAPACITOR) WAS A RUGGED DESIGN OF RECEIVER VARIABLE WITH WIDER-THAN-NORMAL SPACING. THE TUBE SOCKET, FILAMENT TRANSFORMER, RHEOSTAT, AND BLOCKING CONDENSERS WERE "STORE BOUGHT ITEMS".

SOME OF THE REMAINING COMPONENTS TOOK A BIT OF DOING. THE NEED TO KEEP THE COST DOWN WAS THE PRINCIPLE MOTIVATING FORCE.

THE ANTENNA AMMETER WAS A HOME-MADE HOT-WIRE AFFAIR USING A PIECE OF GERMAN-SILVER HEATER WIRE, THE BALANCE WHEEL SHAFT AND COIL SPRING FROM AN OLD DOLLAR WATCH, A FEW BITS OF WIRE AND SUCH, ALL MOUNTED IN A DISCARDED CIGAR BOX WITH A GLASS WINDOW INSTALLED. (IT PROBABLY TOOK NO MORE THAN 50% OF THE RF OUTPUT TO OPERATE THE AMMETER).

THE PLATE-SUPPLY WAS A REAL STICKLER. ABOUT 350 VOLTS, (AT A SMALL FRACTION OF AN AMPERE) WAS THE GOAL. I LOCATED A $\frac{1}{4}$ HP IN A

WASHING-MACHINE MOTOR WHICH COULD DO THE TURNING. FOR THE GENERATOR, I FOUND AN EMERSON 115 VOLT DC WASHING-MACHINE MOTOR IN GOOD CONDITION AND WITH A LOT OF COMMUTATOR BARS. (THIS CAME AS A BARGAIN AS DES MOINES WAS IN THE PROCESS OF CHANGING OVER FROM DC TO AC). TO REWIND THE ARMATURE WITH THREE TIMES AS MANY TURNS SEEMED LIKE A POSSIBLE JOB, AND I TACKLED IT (WITH SUCCESS). I JUST COULDN'T SEE MYSELF REWINDING THE ZILLIONS OF TURNS ON THE FIELD COILS SO - I LEFT THE FIELD ALONE. I MOUNTED A SINGLE BRUSH-HOLDER PART WAY ACROSS THE COMMUTATOR SPAN, NARROWED THE BRUSH TO THE POINT THAT IT ABOUT COVERED A SINGLE COMMUTATOR BAR. THIS INTERMEDIATE BRUSH WAS USED TO PICK UP A FRACTION OF THE GENERATED ARMATURE VOLTAGE FOR FIELD EXCITATION. THEORY TO THE CONTRARY THIS MONGREL WORKED DEPENDABLY FOR THE FULL LIFE OF THE 5-WATT RIG, INCLUDING THE TEMPORARY USE DURING THE INITIAL OPERATION OF STATION WGF AT THE REGISTER & TRIBUNE. THERE WAS A CONTINUOUS LINE OF SPARKING AT THE TRAILING EDGE OF THE EXCITATION BRUSH, BUT IT DID NOT APPEAR VICIOUS, AND IT DID NOT WEAR DOWN THE BRUSH TO A NOTICEABLE EXTENT.

THE COMPLEXITIES OF A MODULATOR SYSTEM WERE SIDETRACKED BY A SIMPLE EXPEDIENT OF ABSORPTION-LOOP MODULATION. AN EX-BELL TEL. MIC CONNECTED DIRECTLY TO A TWO-TURN LINK ON THE MAIN TANK COIL DID THE BUSINESS. (I DOUBT THAT MANY OF THE HAM COMMUNITY IN THOSE DAYS HAD ANY IDEA OF WHAT DEGREE OF MODULATION WAS BEING ATTAINED.) (IN ANY CASE, I DIDN'T). ONLY THE W.E. TYPE 229 MIC WOULD HANDLE THE RF CURRENT WITHOUT BECOMING "MUSHY". AGAIN THIS WAS IN HARMONY WITH THE TIMES. THE BELL SYSTEM WAS IN THE PROCESS OF GRADUALLY RETIRING THE 229 MIC WITH ONE OF HIGHER INTERNAL RESISTANCE.

WELL, WELL A CW SIGNAL ON THE AIR WITH AMPLITUDE MODULATION CAPABILITIES. THE TONE WAS NEAR PERFECT DC. SEVERAL CONDENSERS (CAPACITORS TO NEWCOMERS) FROM A SCRAPPED TYPE TA GENERATOR

...CONT'D NEXT PAGE...

EARLY HAM HISTORY

OF
R. H. KAUFMANN, K2DMR

....CONTINUED....

VOLTAGE REGULATOR SMOOTHED OUT THE COMMUTATOR RIPPLE.

DAD'S INTEREST LEAPED UPWARD WITH AM. HE COULD BE FOUND IN THE SHACK REGULARLY ON AN EVENING, WHEN AN AM TRANSMISSION WAS IN PROGRESS. HE PARTICULARLY ENJOYED BEING A PARTICIPANT TO AN EXCHANGE OF ENTERTAINMENT ON THE AIR. (THE TRANSMISSION OF LOCAL ENTERTAINMENT MATERIAL FROM HAM STATIONS AT THAT TIME WAS NOT FROWNED UPON. - IN FACT, THE YONKER BROTHER'S TEA ROOM, WOULD OFTEN CALL US ON THE PHONE AND ASK FOR A TRANSMISSION SO THAT THEY MIGHT DEMONSTRATE TO THEIR TEA ROOM GUESTS HOW THIS NEW-FANGLED WIRELESS WORKED.

THIS ENTIRE INTERVAL OF HAM OPERATION WAS WITHOUT ASSIGNMENT OF AN OFFICIAL LICENSE. THERE SEEMED TO BE AN ENDLESS CHAIN OF MIX-UPS AND MISUNDERSTANDINGS. THE APPLICATION PAPERS WOULD WIND UP IN THE WRONG OFFICE AND BE DELAYED. THEN WOULD COME A REQUEST FOR SOME ADDITIONAL TECHNICAL INFORMATION ABOUT THE ANTENNA DESIGN, OR THAT OF SOME PART OF THE TRANSMITTER. BY THE TIME THESE PAPERS ARRIVED, MAJOR CHANGES HAD BEEN MADE IN THE WHOLE STATION. SO, EVERYTHING WOULD BE SCRAPPED AND WE WOULD START ALL OVER AGAIN. THIS PROCESS WAS STILL IN PROGRESS WHEN I TOOK OFF FOR COLLEGE IN THE SUMMER OF 1922. SO, THE WHOLE DEAL WAS DROPPED AT THAT TIME. THROUGHOUT THIS PERIOD OF MORE THAN A YEAR, I OPERATED UNDER THE CALL OF "HK".

THERE IS ONE MORE VERY INTERESTING EPISODE TO THIS STORY PRIOR TO MY DEPARTURE TO COLLEGE.

ONE EVENING, WHILE MY DAD AND I WERE ENGAGED IN A BIT OF "ENTERTAINING" ON THE AIR, A CALL CAME THROUGH ON THE LAND LINE FROM THE MANAGING EDITOR OF THE REGISTER AND TRIBUNE NEWSPAPER. HE REPORTED THAT HE HAD BEEN LISTENING TO US ON A RECEIVER (WESTINGHOUSE RC SET) INSTALLED AT THE TOP OF THE R & T BUILDING. HE EXPLAINED TO ME THAT THEY HAD PLANNED A LOCAL BROADCAST STATION AND HAD PARTS ORDERED FOR QUITE SOME TIME, BUT THAT DELIVERY HAD BEEN UNUSUALLY SLOW. HE SAID THERE WERE RUMORS AFoot THAT A COMPETITIVE NEWSPAPER INTENDED TO SCOOP THE R & T BY GOING ON THE AIR FIRST WITH A HAY-WIRED BUCKET OF BOLTS. HE ASKED IF I WOULD CONSIDER MOVING MY RIG

TO THE R & T BUILDING FOR TEMPORARY USE UNTIL THEIR PERMANENT EQUIPMENT ARRIVED.

WELL, I HARDLY SWALLOWED MY ADAMS APPLE MORE THAN PERHAPS FOUR TIMES BEFORE I SAID, "SURE". WHEN ASKED WHEN IT WOULD BE CONVENIENT, I REPLIED, "ANYTIME, I GUESS". QUICK AS A FLASH CAME BACK THE STACCATO, HOW ABOUT TONIGHT? WOW, THESE NEWSPAPER PEOPLE REALLY MOVE. WITHIN HALF AN HOUR, MR. WAYMACK WAS AT THE FRONT DOOR. INTO THE BACK OF THE CAR GOES THE PRICELESS RIG, DOWNTOWN TO THE R & T BUILDING, AND UP THE 13TH FLOOR. (NO SUPERSTITION HERE) ONE MORE FLIGHT OF STAIRS ON FOOT AND WE WERE JUST BENEATH THE ROOF.

OH, OH, DOWNTOWN DES MOINES IS STILL ON DC POWER. (IT'S NOW ABOUT 9 PM) I EXPLAIN THAT WE CANNOT DO ANY MORE HERE AS WE NEED A DIFFERENT DRIVE MOTOR. MR. WAYMACK ASKS, WHAT DO WE NEED? THE ANSWER - A 1/4 HP 1800 RPM DC WASHING MACHINE MOTOR. WELL, HE GETS A POWER COMPANY FRIEND OF HIS ON THE PHONE AND RELAYS THE NEED. YOU CAN GUESS HIS REPLY, "I'LL LOOK INTO IT THE FIRST THING IN THE MORNING." - THAT WON'T DO - WE NEED IT TONIGHT. AND, WITHIN THE HOUR, HERE COMES THE NON-TOO-HAPPY POWER COMPANY MAN, CLIMBS THE STAIRS, BANGS HIS HEAD ON THE LOW-LEVEL OVERHEAD PIPE, AND AFTER A FEW CHOICE WORDS, HANDS OVER THE CARGO.

IT IS EXACTLY WHAT WAS ORDERED. EVEN SHAFT DIAMETER AND DIRECTION OF ROTATION ARE CORRECT. A LITTLE FIDDLING WITH THE HOLD-DOWN SCREWS TO TIGHTEN THE BELT AND WE ARE READY TO GIVE IT A TRY. (IN THE MEANTIME, SOME CAR STORAGE-BATTERIES HAVE BEEN ROUNDED UP FOR FILAMENT HEATING) O-KAY, CLOSE THE POWER SWITCH. WITH A QUICK ZING AND THEN A WHINE, WE HAVE PLATE SUPPLY. THEN A BIT OF ANTENNA TUNING AND OVERALL ADJUSTMENT TO A SOMEWHAT LOWER FREQUENCY, AND HOT DOG! IT WORKS. BEFORE MIDNIGHT, STATION WGF HAS RADIATED IT'S FIRST SIGNAL.CONT'D NEXT PAGE....

EARLY HAM HISTORY

OF

R. H. KAUFMANN, K2DMR

.....CONTINUED.....

BEFORE I LEFT FOR COLLEGE AT AMES, THE PARTS FOR THE INITIAL PERMANENT STATION ARRIVE. BEING IN ON THE GROUND FLOOR, YOU MIGHT GUESS THAT I GOT THE JOB OF ASSEMBLY. THE OUTFIT WAS A 10 WATTER USING TWO 5-WATT BOTTLES. ANTENNA CIRCUIT MODULATION WAS EMPLOYED USING THE RCA MAGNETIC MODULATOR. WITH THIS UNIT, THE MICROPHONE CIRCUIT REQUIRED A DC BATTERY. ESSENTIALLY NO RF CURRENT WAS SUPPOSED TO FLOW IN THE MICROPHONE CIRCUIT. PLATE SUPPLY WAS OBTAINED FROM AN ELECTRIC SPECIALTY COMPANY MOTOR-GENERATOR SET. MY FAITHFUL 5 WATTER WENT INTO RETIREMENT, NEVER AGAIN TO PUT A SIGNAL ON THE AIR.

DURING THE FOUR YEARS AT IOWA STATE, I MAINTAINED AN ACTIVE INTEREST IN THE LOCAL RADIO CLUB, AND IN THE COLLEGE STATION (9YI). THEY HAD A LARGE VERTICAL FAN ANTENNA. BOTH XMTR AND RCVR WERE EX-NAVY EQUIPMENT. THE RECEIVER USED VT 1 TUBES. THE XMTR WAS A 500 CYCLE M*G SET WITH SYNCHRONOUS ROTARY GAP. WHAT A SWEET NOTE THAT STATION PUT OUT. THE TANK CIRCUIT CONDENSERS TOOK THE FORM OF A RACK OF LEYDEN JARS. WHEN IN OPERATION, THERE WOULD BE CORONA APPEAR AROUND THE UPPER TERMINAL OF THE FOIL. THE SHACK WAS SMALL ENOUGH SO THAT THE ODOR OF OZONE WAS CLEARLY EVIDENT AFTER A FEW MINUTES OF OPERATION.

WHILE ATTENDING COLLEGE, (ABOUT 30 MILES FROM DES MOINES) I MAINTAINED A RATHER CLOSE ASSOCIATION WITH THE REGISTER & TRIBUNE PEOPLE. FOR A TIME, I EDITED A QUESTION AND ANSWER COLUMN ON RADIO IN THEIR NEWSPAPER. ON A COUPLE OF OCCASIONS, I PREPARED A SHORT WRITE-UP ON THINGS ELECTRICAL WITH THE FLAVOR OF AN ELECTRICAL EXPERIMENTER.

IT WAS WHILE ATTENDING SCHOOL, THE JUNIOR YEAR, I BELIEVE, THAT STATION WGF DECIDED TO GO TO A 100 WATT RIG. AGAIN I WAS FAVORED WITH THE JOB OF ASSEMBLY. TWO 50-WATT BOTTLES RAN AS SELF EXCITED OSCILLATORS, COUPLED DIRECTLY TO THE ANTENNA CIRCUIT. TWO ADDITIONAL 50-WATT BOTTLES FUNCTIONED AS MODULATORS IN A

HEISING CIRCUIT. A TWO-STAGE SPEECH AMPLIFIER RAISED THE POWER LEVEL SUFFICIENTLY TO DRIVE THE UV 203s. THE 1000 VOLT PLATE SUPPLY AGAIN WAS PRODUCED BY A MOTOR DRIVEN GENERATOR. A LOCAL COMPANY, THE ELECTRIC EQUIPMENT CO., UNDERTOOK THE JOB OF PRODUCING THIS SET. THE CARCUS FOR THE GENERATOR WAS A 550 VOLT MACHINE PREVIOUSLY USED BY THE ELECTRIC TRACTION COMPANY. BOTH THE ARMATURE AND FIELD OF THIS MACHINE WAS REWOUND BY THE ABOVE COMPANY TO THEIR OWN DESIGN. IT PERFORMED BEAUTIFULLY. AT THE TIME THIS STATION WAS INSTALLED, THE STUDIO WAS RELOCATED TO RATHER ELABORATE QUARTERS ON THE SIXTH FLOOR (WHERE PREVIOUSLY ALL PROGRAM MATERIAL ORIGINATED IN THE SAME ROOM WITH THE TRANSMITTER, DIRECTLY BENEATH THE ROOF.)

AFTER JOINING GENERAL ELECTRIC IN 1926, MY COMPLETE ATTENTION WAS DIRECTED TO DEVELOPING MY CAREER AND RAISING A FAMILY. THE DANGLING THREADS OF HAM RADIO WERE PICKED UP AGAIN SHORTLY AFTER WORLD WAR II. I AM NOW AN ACTIVE MEMBER OF THE CLAN OPERATING UNDER THE CALL K2DMR.

I COULD LOCATE NONE OF MY ORIGINAL QSL CARDS. I DID FIND THAT I HAD PRESERVED SOME NEWSPAPER CLIPPINGS WHICH CERTIFY THAT IT WAS MY HAM RIG WHICH WAS TEMPORARILY BORROWED TO INITIATE OPERATION OF RADIO STATION WGF IN DES MOINES, IOWA. I HOPE THAT THIS WILL BE ACCEPTED AS EVIDENCE THAT I WAS ENGAGED IN AMATEUR COMMUNICATION PRIOR TO 1924.

73

R. H. KAUFMANN, K2DMR

LAST VOYAGE

BY HUGO L. ESTBERG, W2SVR

DURING A FIVE YEAR STINT AS WIRELESS OPERATOR FOR AMERICAN MARCONI BEGINNING IN 1917, I HAD EXPERIENCED THE USUAL ASSIGNMENTS ABOARD TUG BOATS, OIL TANKERS AND CARGO SHIPS. FINALLY IN 1921, I HAD REACHED THE "EXALTED" PLATEAU OF THE NORTH ATLANTIC PASSENGER SERVICE IN THE FORM OF THE SS SUSQUEHANNA (KOLN).

THE KOLN WAS BUILT IN THE LAST CENTURY BY THE GERMANS AS THE SS RHEIN, AND WAS SEIZED BY US IN WW1 AND USED AS A TROOP TRANSPORT. NOW, AS AN AMERICAN PASSENGER SHIP, SHE HAD ACCOMODATIONS FOR 1800 "STEERAGE" AND 150 "CABIN". DURING THIS PERIOD IMMEDIATELY FOLLOWING WW1, RESTRICTED IMMIGRATION HAD NOT YET SET IN AND ANY PASSENGER SHIP THAT COULD FLOAT WAS ASSURED OF A FULL PASSENGER LIST.

THIS WAS MY THIRD TRIP ON THE KOLN AND I HELD THE SECOND OPERATOR SPOT WITH SHIPLEY AS CHIEF AND MORT. SMITH AS THIRD. WE HAD LEFT DANZIG AND BREMERHAVEN BOUND FOR NEW YORK AND WERE LOADED TO THE LIMIT WITH OUT HUMAN CARGO.

NOTHING UNUSUAL HAPPENED UNTIL WE APPROACHED THE AMERICAN SIDE OF THE BIG POND WHERE WE RECEIVED ORDERS DIVERTING OUR DESTINATION FROM NEW YORK TO BOSTON. THIS WAS BECAUSE OF THE OVERCROWDED CONDITIONS ON ELLIS ISLAND.

THE NAVIGATIONAL ROUTINE THEN WAS TO PICK UP CAPE COD LIGHT AND SET A COURSE ACROSS CAPE COD BAY TO BOSTON. IT WAS THEN THAT OLE MOTHER NATURE STUCK IN HER OAR BY PRESENTING US WITH A NEW ENGLAND FOG; VISIBILITY ONE SHIP'S LENGTH.

THE BOYS ON THE BRIDGE THEN HAD TO RESORT TO BLOWING THE FOG HORN AND RELY ON "DEAD RECKONING" WHICH WAS LIMITED TO SOUNDINGS. NOT MUCH INFORMATION WAS TO BE OBTAINED THIS WAY SO THEY DECIDED TO AVAIL THEMSELVES OF THE "NEW FANGLED" RADIO COMPASS.

THE OLD TIME OPS WILL PROBABLY REMEMBER THAT THE GOVERNMENT HAD SET UP RADIO COMPASS POINTS AT THE PRINCIPAL HARBORS ALONG THE COAST. THE PROCEDURE FOR A SHIP WAS TO REQUEST A BEARING FROM THE CONTROL STATION, GENERALLY THE NAVY YARD, BY SENDING THE MO SIGNAL FOR TWO MINUTES UPON COMPLETION OF WHICH A TRIPLE BEARING WOULD BE FURNISHED.

IN THOSE DAYS THE "OLD SALTS" DIDN'T HAVE,

MUCH CONFIDENCE IN ANYTHING ELECTRONIC. HOWEVER, WE SUBMITTED THE FIRST BEARING AND SHORTLY GOT A REQUEST FOR ANOTHER AND THEN WERE REQUESTED TO KEEP 'EM COMING. WORD TRICKLED BACK TO THE "SHACK" THAT THE CAPTAIN WAS VERY MUCH IMPRESSED AND PLEASED.

THE KOLN PLODDED ALONG AT REDUCED SPEED AND FINALLY SIGHTED BOSTON LIGHTSHIP AT DUSK AND BOARDED THE PILOT. THE FOG WAS AS THICK AS EVER BUT EVERYONE FELT GOOD AS WE HAD OUTWITTED MOTHER NATURE SO FAR. THE PLAN THEN WAS TO ENTER THE HARBOR TO AN ANCHORAGE AND DISCHARGE THE PASSENGERS IN THE MORNING.

AS WE SLOWLY PROCEEDED, SOME UNCHARTED CURRENT GRABBED THE OLD KOLN AND PLANTED HER HARD AND FAST ASHORE ON GRAVES ROCK. PLENTY OF WATER ENTERED THE ENGINE ROOM BUT THERE WAS NO DANGER AND NO PANIC AS THE PUMPS TOOK CARE OF THE WATER AND MOST OF THE PASSENGERS HAD GONE TO BED. THE TIDE WAS AT FLOOD AND WE FLOATED AGAIN IN A FEW HOURS. AND TO ADD TO THE IRONY OF THE SITUATION, THE FOG THEN LIFTED AND GRAVES LIGHT STOOD OUT BRIGHT AND CLEAR.

THAT WAS THE FINISH OF THE SUSQUEHANNA, AS SHE NEVER SAILED AGAIN. THE DECISION TO SCRAP HER WAS MADE BECAUSE OF HER AGE WHICH MADE THE COST OF REPAIRS UNJUSTIFIABLE. THE ERA OF THE "STEERAGE" PASSENGER SHIP HAD COME TO AN END. BUT MOTHER NATURE HAD PREMATURELY STEPPED IN AND PULLED DOWN THE CURTAIN WHILE THERE WERE STILL A LOTTA MILES LEFT.

I GUESS THE OLE GAL, BEING A WOMAN, INSISTED ON HAVING THE FINAL WORD. HI.

A LEFTHANDED TRIODEL TRON
FOR A RETTYSNITCH.
1912 MODEL



EUNICE SAYS IT WAS INVENTED BY MEL, W1BHD, WHO HAS A LARGE SUPPLY ON HAND AND WILL BE GLAD TO TAKE YOUR ORDER \$1.79 EACH, WHILE THEY LAST.



W1GU (NEWS Photo by Ward)

NEWSMAN MILES LAMSON
(The Final Deadline Draws Near)

Saturday Begins A New Life For Miles Lamson

ROCKLAND—When Rockland radio newsman Miles Lamson awakes Saturday morning at his West Rockport farm home it will be the first time in nearly five years that he won't responsible "24 hours a day, eight days a week" as he puts it, for gathering local news for Radio Station WRKD.

As of midnight Friday, the 63-year-old Lamson, a familiar figure making his daily rounds in this Knox County seat, will be retired from the news game. From now on he will be accepting a regular check from Uncle Sam.

Always connected with radio one way or another

—he began operating his own amateur radio outfit in 1912 even though radio broadcasting didn't make it debut until nearly 10 years later — Lamson became chief engineer for WRKD in 1956.

He served in that capacity through 1960, when he took over the job of gathering local news for the station. During that time he has built up the station's local news coverage to a near saturation point, grinding out fresh news for spots every hour on the hour, in addition to regular daytime and evening newscasts.

Prior to a period devoted to raising poultry at his farm, Lamson spent 12 years as a radio operator with Pan-Ameri-

can Airlines. He also has served with the Coast Guard, including a hitch on the old icebreaker Kickapoo at Rockland, served in the Merchant Marine, and was with the old Eastern Steamship Lines on the Boston to Rockland run.

Although he was born in Cambridge, Mass., Lamson considers himself a native of coastal Maine. And well he should—an ancestor, Jonathan Lamson reportedly settled in this area in 1760, and Lamson families have lived in the area ever since.

One of the first things the energetic Lamson plans to do in his retirement is trace his family tree. He's extremely interested in genealogy, as he is in reading "all books, except trash. . . ."

If those two hobbies don't keep him busy, he has his amateur radio station, call letters [redacted] Or his model trains. Or his brand new pool table. Or his chess, provided he can find a partner for that one. And then there's the farm and woodlot to take care of, and there'll be fires to go to as a member of the volunteer fire department.

One thing's for sure. The popular newsman who lives at his West Rockport farm home with his wife Dorothy and is visited periodically by the grandchildren, won't be idle.

He never has been, so why start now?



CHIEF OPR. SHIPLEY
2ND OPR. HUGO ESTBERG
3D OPR. "MORT" SMITH
S.S. SUSQUEHANNA .. 1921

Local 'hams' observe 50th anniversary

Local amateur radio operators observed the fiftieth anniversary of the founding of the American Radio Relay League this week by purchasing five-cent commemorative postage stamps that were issued here yesterday in recognition of amateur radio.

Dan C. McCoy, of 7546 Normandy Lane, and William G. Biddle, of 249 E. Peach Orchard Rd., were among ham operators who bought the first of the stamps issued locally yesterday.

Mr. McCoy, Mr. Biddle and T. L. Suarez, president of the Dayton Amateur Radio Association, purchased the stamps from Dayton Postmaster Hugh T. Albright.

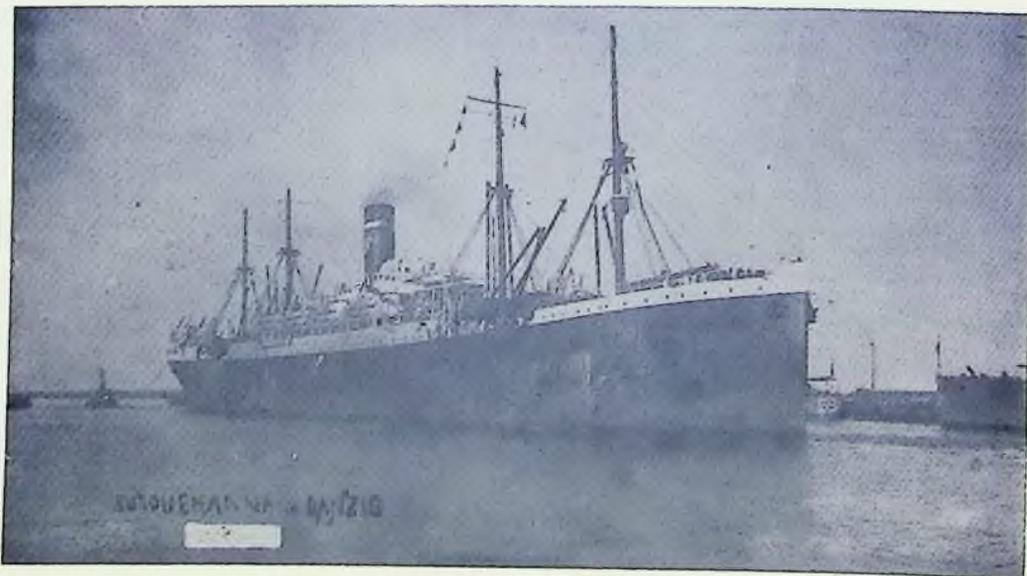
The commemorative stamp was first issued Tuesday in Anchorage, Alaska, in recognition of the emergency communications work done by amateurs after the Alaskan earthquake last March.

Some 50 messages were originated and relayed via the National Traffic System from Dayton ham operators within 18 hours after the Alaskan disaster.

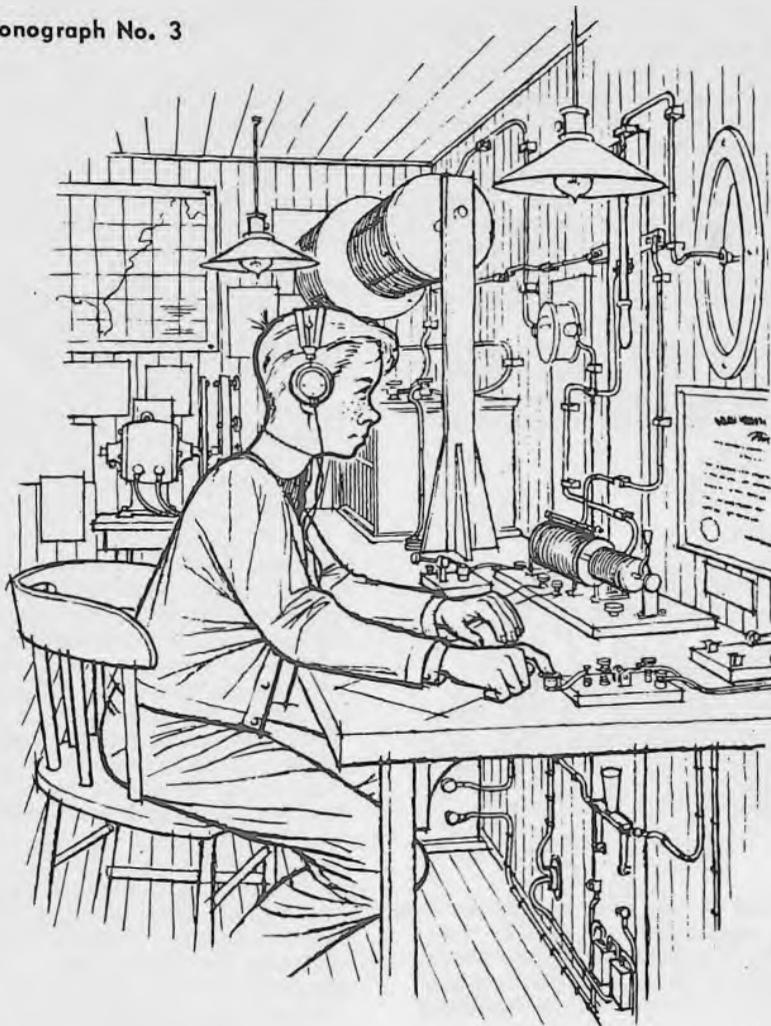
Mr. McCoy, who is a retired engineer, is the oldest active ham operator in this area. He has been a 'ham' since 1906. Mr. Biddle, a salesman with Graybar Electric Co., first became a 'ham' in 1914.



Ship-to-shore service for the Boston area with Art Stockellburg, now of Bedford rd., Lincoln, the operator. This is the United Wireless Telegraph Co., with call letters BH, in Quincy as it looked in 1911. Photo was submitted by Stockellburg.



A.W.A. Monograph No. 3



THEY ALWAYS CAME BACK!

by

A. David Middleton, W5CA

It's a mid-summer's day just prior to World War One in a small town in the West Virginia hills.

We are standing outside a neat wooden shack in the back yard of a neat but ordinary home. In one wall of the shack is a round hole covered with glass. A ship's porthole?

Take a peek in thru the "port hole." There is a small boy—intense, concentrated—sitting in front of a compli-

cated-looking set of electrical equipment. His nimble fingers move dexterously over the array of switches and knobs. He adjusts the receiving set. You recognize now, that this is a wireless outfit, 1917 style. The boy leans back, a smile of victory on his keen young face. His eyes roam over the map-filled walls.

Now he leans forward, slams in a switch on the desk and his fingers

start to beat out a steady tattoo on the lever key on the desk. He sends a streak of code, then shuts off the sending set. Making an entry in his log book, he smiles contentedly. He is oblivious to us. Don't worry. We are not disturbing him.

As we watch, the lad calls up station after station scattered over the entire USA. He appears to be exchanging messages and signal reports with them. There is seemingly no limit to the range of this station, and to the skill of the operator.

We are impressed. This wireless station looks to be equipped with the very latest apparatus, according to all contemporary magazine layouts we have seen.



Overhead we can look up and see long, gleaming strands of copper wire hung between wide spreaders on huge poles. A fan-lead-in comes down and connects to the wall insulator in professional fashion.

Although our young operator--then, as now--has to wait his turn, he never fails eventually to raise any station he calls. For--at this station--they always came back!

The quiet of the mid-summer day is punctuated only by the sound of switches being thrown in the wireless shack, by the exclamations of the young lad at the controls, by the rising whine of the rotary gap wheel followed by the flashing spark of the transmitter. Our noses tingle as the fleeting scent of ozone filters out to us.

Truly, this is an unusually successful wireless station to be able to reach out and to raise and talk to those distant stations!

To what can the success of this station be attributed? The excellence of the elaborately constructed equipment?

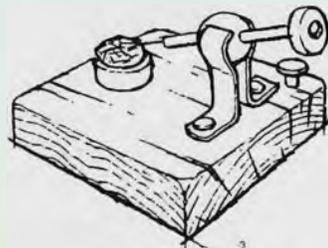
The location of the station? Or could it be just good propagation characteristics?

Or, maybe it could be entirely due to the operating and engineering skill of the station builder and "operator." Who is this lad, anyway? As station owner and operator, his certificate of station license and call assignment are right there on the wall. Let's look.

But, please--don't look too closely at that certificate. We are afraid it is only a painstakingly well-done facsimile of the real thing, even though it does look legal enough!

Move up closer, old friend, and let's take an understanding look at the entire layout. No, please don't disturb the lad. He is lost in his work and roaming the wide world--in his fashion. He will not know we are watching!

Above us rise the poles, but on second look they are not as tall as they appear. Just de-limbed saplings--and not very high at that! Back guys hold up the crooked poles against the strain of the big antenna. The wide spreaders are 1 x 1's carefully patched and spliced. The shining glass insulators? Why, they are necks from medicine bottles, carefully cut off (the old burning string technique) and smoothed down. These long spans of copper wire? But, old friend, there are scores of Western Union splices in those spans. How else could one get those long lengths except by splices, when the only source of wire was odd lengths of discarded house wire? How come the copper shines so? (Did you ever hear of stripping the insulation off wire by pulling it thru a hole in a board, and then cleaning off the tar residue by lots of elbow grease and wet sand?) The fan lead-in connects to



a bolt running thru the glass wall insulator. Yes, the glass is cracked. In spite of lots of care and plenty of time in rotating the broken-off file bit--the glass finally cracked. It usually did! And glass baking dishes were hard to come by.

On the wall inside the shack, see that porcelain-based antenna change-over switch and power-on switch? Take another look. That "porcelain base" is merely an excellently-painted board--white enamel. The fittings on the switch look familiar. Yes, they should for they are strips, brackets and fittings from a Meccano set! And the switch handle? Sure--that is a pot holder!

On the operating desk sits a beautifully-constructed receiver in the modern 1917 manner. A three-slide tuner, a crystal detector stand with swivel arm, a condenser block to which is fastened the leads to the ear phone. Those leads, they look like string. Well, they are! Just plain carpenter's twine. But they do look like wire, and they are flexible. But there is only one ear phone! And it looks strangely like a watch-case. It should, for that is exactly what it is--carefully fastened to a head strap that could be made of only one thing--a corset stay, carefully bent!

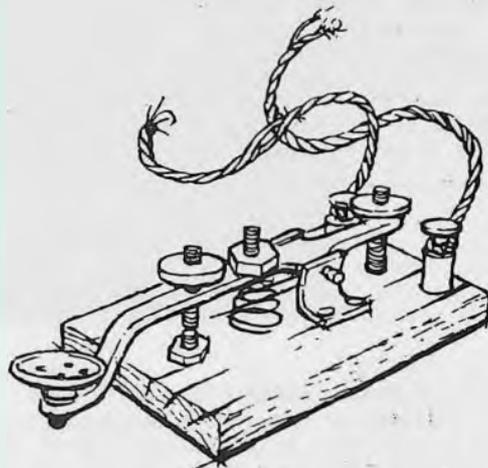
That tuner! Say, that is not wire around that form, it is more string! And the form--why, it's a metal can! But doesn't that look like a slick copper strip under the sliders? Just golden radiator paint, old friend.

The rotary gap. Is that too a model? Yes, but it is cleverly done, with a wooden rotor wheel and cut-off bolts in the right places for studs. Besides, it does not turn very fast with that over-worked motor. Take a look at that motor. Sure, it's the one type available to a kid--from an Erector set. And did that take some skillful trading to get it away from its previous owner! The spark coil looks like a beat-up Ford coil and so it is; but to the lad, it is a Thordarson 1/4 Kw at least! Meccano parts make up the rest of the rotary.

The transmitter coil is just more patched shiny copper wire, but the dowel pins and the end pieces are properly made and assembled, and look just like the ones in the Wm. B. Duck catalogue!

The condenser block at the earphone leads? Another "simulation," this time a block of wood carefully painted black. And all the other parts of the entire equipment are likewise just models or mock-ups.

Sure, it's a laugh! But, old friend, please do not disturb the lad. What does it matter. To us, it is a make-believe wireless station. To him, it's as real as life! He can roam the ether, talk to ships at sea, and land stations all over the country, and perhaps contact the operator aboard one of the dirigibles being talked about. And, to top it off, he can even talk to NAA! Youth with imagination knows no barriers!



Be careful not to disturb him. Let him tinker with the cat's whisker and his piece of coal (well, it does look like galena!) Let him operate switches, pound the hand-made key and start his rotary in the best approved fashion. Don't laugh, old friend. Some day you may envy this lad. He might turn out to be one of the really greats in amateur radio, for he has already uncovered its deepest secrets, understands its technique.

Come, let's steal silently away and let him "operate." For now, and probably for the only time in his life--they'll always come back to his calls!

OUR ARTIST - The drawings for Mid's story are by Jim Triggs, whose fine illustrations and articles for Gun Digest, True Magazine and others have been enjoyed by many of our readers interested in firearms. This is Jim's first crack at antique wireless. There may be an inadvertent short circuit here and there. But the single finger on the key is a deliberate rebuke to Jim's OM*, who learned land Morse this way with his hand bandaged up due to poison ivy. The habit is almost conquered now. But the kidding, we think, is Jim's revenge for being conned into doing the drawings while on vacation. *WZYBK.

Meet the Author

Dave Middleton - W5CA / W7ZC

The monograph for this "Bulletin" is somewhat of a departure from our previous articles. Dave, the author, is well known in the amateur field having started in the game in 1917 and having held a variety of calls including 1CA, 4CA, 5CA, 10JH, 20EN, 8AKA, 8UC, 7GLH, 9GX, 9BGL, 9AOB and many others! A former A.R.R.L. Director and Engineer, Dave also has found time to write articles for QST, CQ, R9, Radio News, etc.

Reminiscing of the 'ole daze, he has whipped together for us a fanciful yarn which will bring many a smile to the OT or even the young squirt who daydreams of a kilowatt and an antenna farm as his 50 watts is snowed under in the QRM!



PUBLIC MUSEUMS TO VISIT

Following is a partial list of museums of interest to the amateur historian. At a later date we'll print a list of private collections which members have in their homes.

EAST:

Edison Museum - Maine and Lakeside Ave.
West Orange, New Jersey

A.R.R.L. Museum - West Hartford, Conn.

Ford Museum - Dearborn, Michigan

Western Union Museum - 60 Hudson St.
New York City, N.Y.

New Hampshire Historical Museum
Manchester, N.H.

Michigan State Museum - Lansing, Mich.

U.S. Army Signal Corp - Ft. Monmouth.
New Jersey

Great Lakes Marine Museum - Detroit
Michigan

Smithsonian Institution - Washington,
D.C.

Franklin Institute - Philadelphia, Pa.

George DePlain Museum - New Brunswick,
New Jersey

Antique Wireless Assn. Museum, Main St.,
Holcomb, N.Y.

WEST:

Douglas Perham Museum - New Almaden,
California

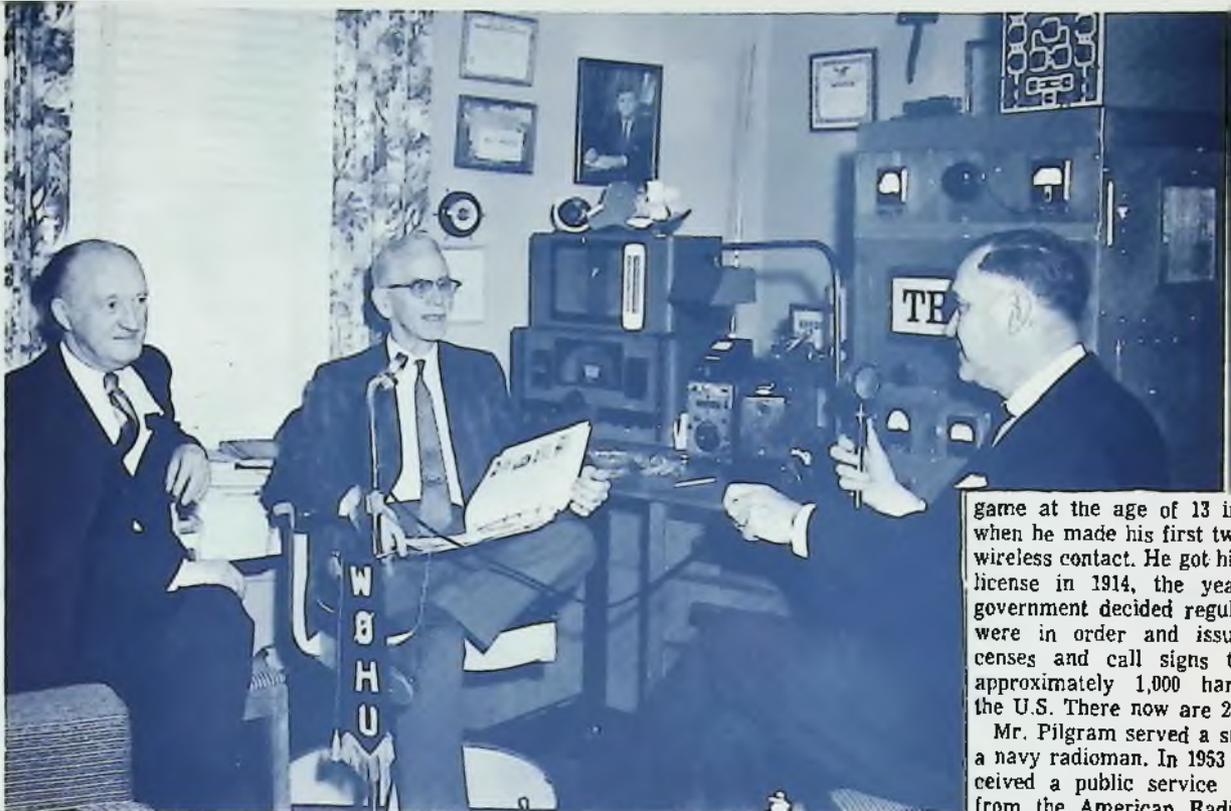
Seattle Historical Museum - Seattle,
Washington

OUTSIDE:

Canadian Bell Telephone Co., Montreal.
Quebec, Canada

British Science Museum, London, England

(If you know of any others - let us know so we can add them to the list.)



W0NH

W0HU

W0PR

"FROM ST. JOSEPH, MO. GAZETTE"

PIONEER HAM OPERATORS . . . These three St. Joseph ham radio operators have logged more than 150 years of amateur radio operation. Talking over their many years of experience are (left to right) J.B. Abercrombie, George Pilgram and Howard Sisson. Mr. Abercrombie made his first two-way wireless transmission in 1904, Mr. Pilgram did the same in 1911 and Mr. Sisson went on the air in 1919.

Pioneer Hams Here Among Many Cited by Stamp Design

This year is the 50th anniversary of the first licensing of amateur radio operators in the United States. But among the 250 to 300 "hams" in St. Joseph are at least two whose radio activities began prior to 1914.

They, and other local "old timers", have watched—and have helped—hamming grow from primitive, early "wireless" communications to its present stature in science in which hams put code-transmitting satellites into orbit and bounce signals off the moon.

They find the challenge that existed when they used spark gaps to put their signals out

still exists. They find the opportunity for public service in times of disaster or for helping bring friends and relatives together via radio still exists, too.

Three of St. Joseph's pioneer hams, assembled one night this week, represent 155 total years

in amateur radio.

Senior of the trio is J. B. Abercrombie, 1810 Crescent drive, who made his first two-way wireless contact in 1904 after seeing this new communications medium demonstrated at the St. Louis World's Fair.

Mr. Abercrombie is believed to be the oldest ham, from the standpoint of years in the activity, still living in the United States.

He was only 11 when his ham "career" began 60 years ago. By 1912, when hams first began to organize among themselves, he was operating a two-kilowatt spark transmitter that was a marvel of its time. He made his first transoceanic contact in 1924, when he "worked" a New Zealand ham, but he had been heard by a ham in Scotland as early as 1919.

Mr. Abercrombie — Jack on the air—adopted radio as a vocation as a youth and he constructed many of the early-day broadcast stations in this area.

Now 250,000 Operators

George W. Pilgram, 3332 Duncan street, got into the ham

game at the age of 13 in 1911 when he made his first two-way wireless contact. He got his first license in 1914, the year the government decided regulations were in order and issued licenses and call signs to the approximately 1,000 hams in the U.S. There now are 250,000.

Mr. Pilgram served a stint as a navy radioman. In 1953 he received a public service award from the American Radio Relay League, also 50 years old this year, for his emergency service during the floods of 1952.

The "youngster" of the three is Howard R. Sisson, 1210 Ashland avenue, who says the biggest thrill of his 45-year ham career was his first two-way contact—35 miles from Maysville, Mo., to St. Joseph. This was in 1919, at the age of 13, after he found an article in a Sunday school paper on building wireless equipment.

Mr. Sisson organized and commanded a naval reserve communications unit and at one time worked in a broadcast station.

Two-Letter Men

All three men hold two-letter call signs, reserved for those hams with service of 40 years or more. All are listed in the roster of The Old, Old Timers Club composed of those who communicated with wireless equipment. The term "radio" did not come into use until after the vacuum tube was made practical following World War I.

In honor of the long public service record of hams, commemorative postage stamps go on sale today at post offices throughout the United States.

SILENT KEYS

JAMES KILTON CLAPP

DECEMBER 30, 1897

FEBRUARY 9, 1965

JAMES KILTON CLAPP WAS BORN IN DENVER, COLORADO, DECEMBER 30, 1897. AT THE AGE OF 12 HE BUILT HIS FIRST "WIRELESS" RECEIVER, WHICH CONSISTED OF A SLIDER-TYPE TUNING COIL WOUND ON A NO. 6 DRY-CELL CARDBOARD CASING AND A HOME-MADE SILICON-CRYSTAL DETECTOR. A YEAR LATER, 1910, AN INTERESTED FRIEND BUILT A TRANSMITTER, WITH WHICH CRUDE EQUIPMENT THEY HAD MANY ONE-WAY CONTACTS.

BY 1912 HE HAD BUILT A 1.5 KW ROTARY SPARK GAP TRANSMITTER. MR. CLAPP MOVED TO BOSTON MASSACHUSETTS, IN 1913, AND OBTAINED HIS FIRST AMATEUR LICENSE, 10B, OPERATING A 0.5 KW SPARK GAP TRANSMITTER.

IN 1914 HE RECEIVED HIS COMMERCIAL FIRST CLASS LICENSE, AFTER ATTENDING A "WIRELESS SCHOOL" AT FILENE'S STORE, SPONSORED BY MR. A. LINCOLN FILENE. THE CLASSES WERE TAUGHT BY HAROLD POWER, THEN A STUDENT AT TUFTS UNIVERSITY, LATER PRESIDENT OF AHRAD COMPANY. IN THE FALL OF 1914, HE JOINED THE MARCONI WIRELESS TELEGRAPH COMPANY OF AMERICA AND WENT TO SEA ON THE TANKER SS WINIFREO, OWNED BY THE GULF REFINING CO.

DURING 1915 HE TRANSFERRED TO THE USS MELVILLE, A MOTHERSHIP FOR SUBMARINES, AND IN THE FALL, RETURNED TO HOME AND HIGH SCHOOL.

IN FEBRUARY OF 1917 HE ENLISTED IN THE USNRF AS RADIO 2ND CLASS AND, ON APRIL 6, 1917, WAS CALLED TO ACTIVE DUTY. HIS FIRST ASSIGNMENT WAS TO TAKE OVER THE MARCONI WIRELESS STATION, WBF, ON FILENE'S BOSTON STORE. THEN HE WAS TRANSFERRED TO THE FOLLOWING SHIPS; SS OCHENFELS, A GERMAN FREIGHTER SEIZED BY THE U.S. NAVY; USS MAINE; AND THE USS HANNIBAL.

DISCHARGED FROM THE NAVY, WITH THE RANK OF ENSIGN, IN THE FALL OF 1919, HE ENTERED MASSACHUSETTS INSTITUTE OF TECHNOLOGY AND WAS GRADUATED IN 1923. HE RECEIVED HIS S.B. DEGREE IN ELECTRICAL ENGINEERING IN 1923 AND HIS S.M. DEGREE IN 1926.

AFTER GRADUATION HE TAUGHT AT MIT AND OPERATED HIS AMATEUR STATION WIBYX. HE WAS RADIO EDITOR FOR THE BOSTON EVENING TRANSCRIPT AND CHIEF ENGINEER OF WBET, THE NEWSPAPER'S BROADCASTING STATION.

ON JULY 1, 1928, MR. CLAPP JOINED THE ENGINEERING STAFF OF GENERAL RADIO CO. BY 1930 HE DEVELOPED THE FIRST COMMERCIAL QUARTZ-CRYSTAL FREQUENCY STANDARD. OCTOBER 1931 HE FILED FOR A PATENT ON AN FM DEMODULATOR-FREQUENCY MONITOR-DEVIATION METER. THAT SAME YEAR MR. CLAPP AND HIS ASSISTANT AT THAT TIME, MR. C. E. WORTHEN, FILED A JOINT PATENT CALLED "VIBRATOR APPARATUS", WHICH CONSISTED OF A FIXED AIR-GAP QUARTZ BAR EMPLOYING THE USE OF BAFFLES AT THE ENDS OF THE BAR TO REDUCE THE AIR LOSSES. THIS CRYSTAL BECAME THE GENERAL RADIO COMPANY'S TYPE 576-A QUARTZ BAR USED IN THE TYPE 590-A CONSTANT TEMPERATURE CONTROLLED OVEN ALSO PATENTED BY MR. CLAPP IN 1932. DURING THE NEXT TWO YEARS HE DEVELOPED THE FIRST COMMERCIAL FREQUENCY-MEASURING SYSTEM KNOWN AS THE C21 HLD.

EARLY IN 1933 HE DEVELOPED A TIME SIGNAL TRANSMITTING EQUIPMENT FOR THE U.S. NAVAL OBSERVATORY USED ON MARE ISLAND, AND A PRIMARY FREQUENCY STANDARD FOR THE CANADIAN RADIO BROADCASTING COMMISSION, CANADA.

HIS CONTRIBUTIONS INCLUDED A NUMBER OF FREQUENCY-MEASURING EQUIPMENTS; THESE INCLUDED, TO NAME A FEW: BROADCAST AND POLICE MONITORS; DEVIATION METERS; THE FIRST ELECTRONIC FREQUENCY METER OF HIGH ACCURACY; AND AN INTERPOLATION OSCILLATOR.

MR. CLAPP WAS A FELLOW OF THE INSTITUTE OF RADIO ENGINEERS AND SERVED ON THE FOLLOWING COMMITTEES: EDITORIAL REVIEWER, 1954-58; PAPERS REVIEW; PIEZOELECTRIC CRYSTALS AND STANDARDS ON DECEMBER 31, 1957 HE RETIRED AND SINCE SPENT WINTERS AT ENGLEWOOD FLA. AND SUMMERS AT MEREDITY NECK, NEW HAMPSHIRE OPERATING HIS AMATEUR STATION W4AU

HIS MANY CONTRIBUTIONS TO ELECTRONIC ENGINEERING AND SCIENCE WILL LONG BE REMEMBERED. HE WAS A MEMBER OF ARRL, IEEE, OOTC AND VETERAN WIRELESS OPR.

ALBERT M. WENTWORTH, WIBSX

Spark-Gap Times

SPARK-GAP TIMES IS PUBLISHED BI-MONTHLY BY THE OLD OLD TIMERS CLUB. THE SUBSCRIPTION PRICE TO MEMBERS IS \$2.50 PER YEAR. A LIMITED NUMBER IS AVAILABLE TO NON-MEMBERS AT \$.50 PER COPY - \$3.00 PER YEAR.

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* — SILENT KEY

EARL E. CLINE, SR., W4PPZ

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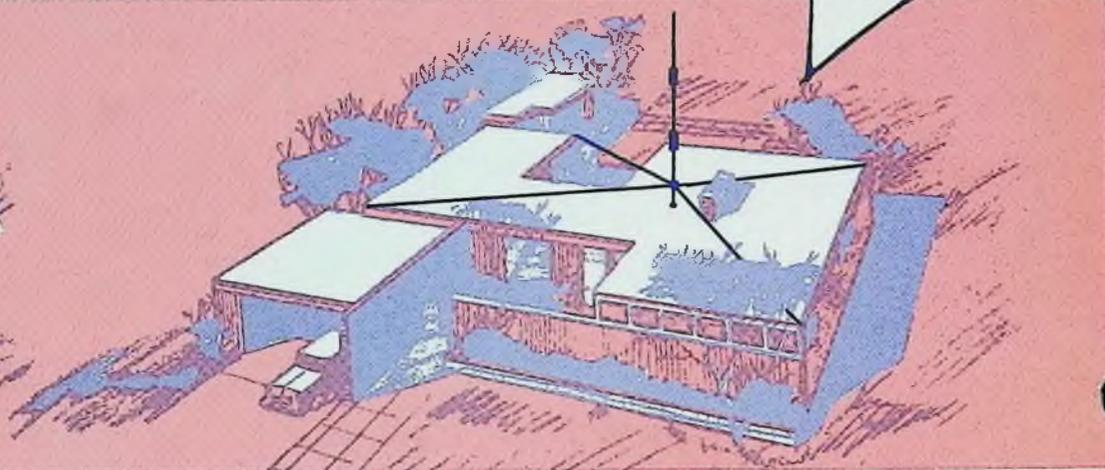
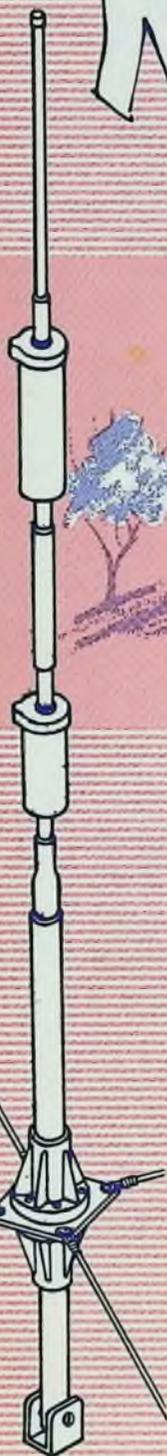
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100	LETTERHEADS -----	\$2.00
200	GUMMED STAMPS (WITH OLD OLD TIMERS SEAL) -----	\$1.00*
	LAPEL PINS (EITHER PIN TYPE OR LAPEL PIN) -----	\$2.00
	OLD OLD TIMERS CLUB "BLUE BOOK" --- FIRST ONE ONLY -----	\$3.00
	NON-MEMBERS AND AFTER THE FIRST ONE TO MEMBERS -----	\$5.00
	REPRODUCTION OF 1913 GOVERNMENT CALL BOOK -----	\$2.00
	SUPPLEMENT (SET) -----	\$3.00
	AWARD CERTIFICATE -----	\$1.00
	1909, 1910 AND 1911 E.I. COMPANY AND MODERN ELECTRICS CALL BOOK (SET) -----	\$3.00

SEND ALL ORDERS TO THE SECRETARY-TREASURER, EUNICE R. THOMPSON, W1MPP, CHRISTIAN HILL ROAD, LOVELL, MAINE.

*SEND SELF-ADDRESSED ENVELOPE WITH 10¢ IN STAMPS WITH ORDER FOR GUMMED STAMPS.

NEW mosley roof mounting antenna



Mosley engineers have developed a self-supporting roof mounting vertical antenna. This antenna (RV-4) can be mounted on the ground or on any roof. The RV-4 operates as a quarter wave vertical antenna on 10, 15, 20 and 40 meters. The RV-4 features the Mosley slim line "Trap-Master" traps that have earned user acclaim through daily use in tens of thousands of installations throughout the world. These weather proof traps are of high-quality design, wound on grooved, high impact polystyrene forms to maintain resonant points under wide variations of temperature and humidity. The RV-4 vertical antenna is heavy duty built in every detail to meet exacting commercial standards. Element end is weather sealed with a molded cap. The exclusive Mosley base insulator assembly is constructed of "Cycloac" and heavy guage steel for rugged durability. Mosley RV-4 is an optimum performing, automatic band switching antenna, that is completely factory pre-tuned to maintain low SWR over entire range.

The RV-4RK Kit for roof mounting includes radial wire, mast and hinged mounting. No radials required for ground mounting if a good ground connection can be provided within a few inches of the antenna base. Antenna rated at 750 watts on AM phone, 1000 watts CW and 2000 watts P. E. P. on SSB, input to final amplifier. Uses single 52 ohm coax line. Antenna height 20' 8-5/8" above insulator, with roof mount 25' 2-5/8". Weight of antenna 10 lbs., with roof mount 14½ lbs.

ANTENNA MODEL RV-4 **AMATEUR NET 30.42**
ROOF MOUNT MODEL RV-4RK **AMATEUR NET 16.77**

Mosley Electronics, Inc.

In request of further information write for literature code 14.

4610 N. Lindbergh Blvd. Bridgeton, Mo. 63044