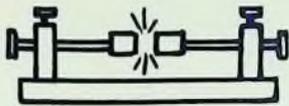
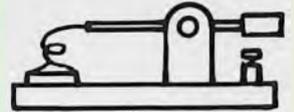


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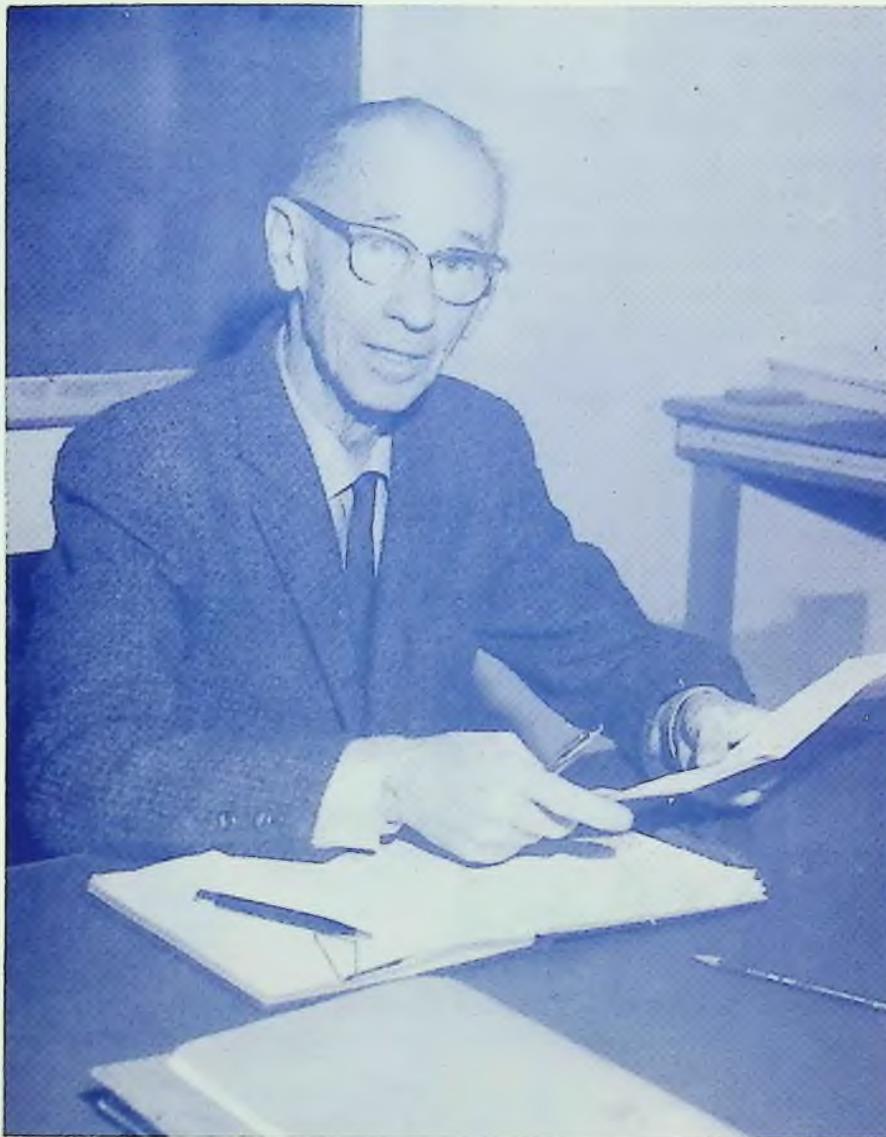
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EARL C. WILLIAMS, W2EG
Secretary & Treasurer of OOTC
(see page one)

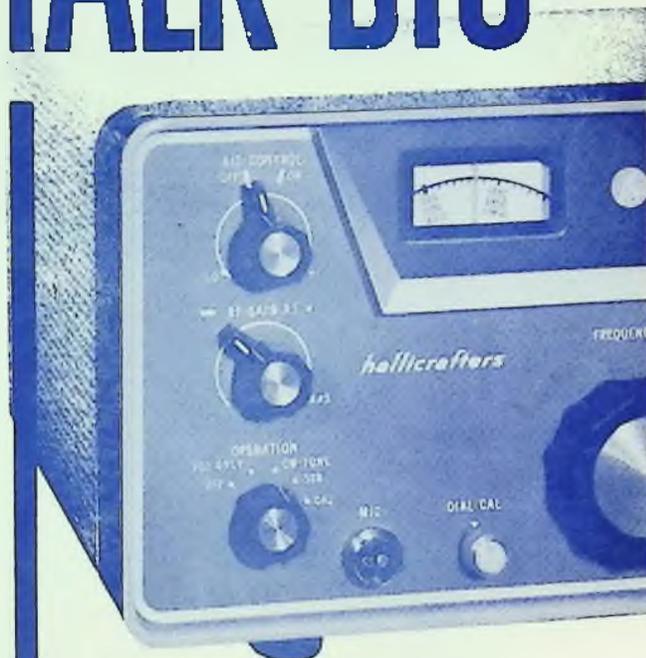


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*
* OUR COVER PICTURE *
* EARL C. WILLIAMS, W2EG, SECRETARY-TREASURER OF OOTC, IS THE BEST SECRETARY- *
* TREASURER ANY CLUB EVER HAD! HE CAN'T SLEEP AS LONG AS THERE IS ANY *
* UNFINISHED BUSINESS FOR OOTC ON HIS DESK! HE HAS DONE ENOUGH WORK IN THE LAST *
* THREE YEARS TO LAST A LIFETIME. COLLATING, DRILLING, STAPLING, PREPARING FOR *
* MAILING, ROSTERS, BLABBER-MOUTHS, SPARK-GAP TIMES, BLUEBOOKS, BLUEBOOK *
* INSERTIONS, MAILING OUT MEMBERSHIP APPLICATION BLANKS, CARRYING ON A HEAVY *
* CORRESPONDENCE, 1913 CALL BOOKS, STATIONERY, GUMMED STAMPS - ETC. ETC. ETC. - *
* IF YOU APPRECIATE WHAT CARL HAS DONE FOR YOU MEMBERS OF OOTC - DROP HIM A *
* CARD AND TELL HIM SO..... *

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April 1964

EDITORS OPINION

EVIDENCE OF THE ESTEEM IN WHICH CLINE WAS HELD BY HIS FELLOW MEMBERS WAS DISPLAYED BY THE DELUGE OF LETTERS WHICH CAME BACK IN ANSWER TO OUR LETTER REGARDING HIM. THEY ALL RECORDED SHOCK AND REGRETS. WE WISH THAT WE COULD CONVEY TO YOU THE SENTIMENTS CONTAINED IN THEM. WE KNOW THAT MOST OF OUR MEMBERS APPRECIATED WHAT HE DID FOR OUR WONDERFUL CLUB AND WILL NEVER FORGET HIM.

WE WANT TO CONVEY OUR GREAT APPRECIATION FOR THE FINE WORK THAT ROB-ROY, W8HR IS DOING FOR THE CLUB. HE MADE THE BEAUTIFUL COVER ON THE FEBRUARY ISSUE OF SHT AND ALL OF THE FINE HALF TONES IN THE ISSUE. THIS WORK RUNS INTO A CONSIDERABLE AMOUNT OF MONEY. WE SIMPLY HAVE TO ARRANGE OUR CLUB FINANCES SO THAT ROBIE CAN SEND US A BILL AND COLLECT FOR HIS WORK. IN THE MEANTIME, ROBIE, WE THANK YOU FROM THE BOTTOM OF OUR HEARTS, UNTIL YOU ARE PROPERLY PAID. THE EDITOR ONLY WISHES THAT THE REST OF THE JOURNAL CAME UP TO THE QUALITY OF THE COVER. THE FEBRUARY ISSUE WAS FULL OF TYPOGRAPHICAL ERRORS AND MISPELLED WORDS. WE'LL TRY TO DO BETTER IN THE COMING ISSUES IF WE ARE GOING TO BE THE EDITOR.

WE WANT TO PAY HOMAGE TO OUR WONDERFUL SECRETARY AND TREASURER THIS MONTH, EARL C. WILLIAMS, W2EG. NEVER DID A CLUB HAVE SUCH A WONDERFUL SECRETARY! I DON'T KNOW HOW IN THE WORLD HE EVER STOOD UP UNDER THE POUNDING HE HAS TAKEN IN THE LAST COUPLE OF YEARS. WHEN WE THINK OF THAT GARAGE FULL OF BLUEBOOKS HE HAD, ASSEMBLING THE DISTRICT SHEETS, ADDRESSING THEM, PACKING THEM, COLLATING "SPARK-GAP TIMES" ETC. ETC. ETC. - DOES ANYONE REALIZE THE AMOUNT OF WORK THIS MEMBER HAS DONE? IT IS FANTASTIC! YOU MEMBERS WHO COMPLAIN ABOUT SOME LITTLE THING, YOU SHOULD BE IN EARL'S SHOES FOR ABOUT A MONTH. WE HAVE GOTTEN HIM SOME HELP AT LAST - WITH WALLIE, W2WL PICKING UP SOME OF THE LOAD. BUT WE THINK IT WOULD BE NICE IF ALL YOU MEMBERS WOULD DROP EARL A POSTAL CARD AND TELL HIM HOW MUCH YOU APPRECIATE THE HARD WORK HE HAS DONE FOR YOU. LET HIM KNOW HE IS APPRECIATED.

WHILE WE ARE PASSING OUT BOUQUETS, WE WANT TO PASS A GREAT BIG ONE TO BILL HALLIGAN, TRAV. MARSHALL, AND HENRY KREAR OF THE AGENCY. WE HOPE YOU FELLOWS ALL READ THAT AD ON THE INSIDE OF THE FRONT COVER FOR THE HALLICRAFTERS HT-44 SSB/AM/CW TRANSMITTER. WE'VE HEARD A LOT OF THESE RIGS ON THE AIR AND THEY SOUND WONDERFUL. DON'T FORGET TO DROP TRAV. MARSHALL A LINE WHEN YOU ARE RESPONSIBLE FOR THE SALE OF ONE OF HIS PRODUCTS OR BUY ONE YOURSELF. THANK YOU HALLICRAFTERS!

LAST BUT NOT LEAST WE THANK ALL THE CONTRIBUTORS TO THE APRIL ISSUE, PAUL WATSON, W3BO FOR HIS WONDERFUL ARTICLE ABOUT HIS FABULOUS COLLECTION OF TUBES; FOR THE ARTICLE SUBMITTED BY JACK DUNN, W6WPF ON TELEGRAPH SOUNDERS; THE WANNEMAKER KEY WHICH WINQ. OUR HONORABLE FOUNDER, "LIBERATED"; THE PICTURE AND STORY ABOUT BILL HALLIGAN RECEIVING A SCROLL AND WRIST WATCH FOR HIS 50 YEARS IN RADIO; THE ITEM ABOUT REL PRESIDENT, FRANK GUNTHER BEING ELEVATED TO THE GRADE OF FELLOW BY IEEE; THE ARTICLE "I CAN'T BE BOTHERED" BY ROLAND BOURNE WIANA (CHARTER MEMBER); THE TELEGRAM OF CONDOLENCE BY BARRY GOLDWATER TO THE VERMILYA FAMILY (BY EUNICE THOMPSON, W1MPP); HERBERT HOOVER JR'S 50TH ANNIVERSARY MESSAGE TO A.R.R.L., PERMISSION TO REPRINT FROM QST GIVEN BY DICK BALDWIN, W1IKE, ASST. GEN'L MANAGER ARRL; THE STORY "THE PHANTOM SIGNALS" BY AL SONN, W2GC; "ITINERARY OF A MARCONI OPERATOR 1911-1915" BY CHARLEY ELLSWORTH, W1TU.

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April 1964

LETTERS

50 YEARS OF ARRL ANNIVERSARY MESSAGE FROM OUR PRESIDENT HERBERT HOOVER, JR. W6ZH
TO MY FELLOW LEAGUE MEMBERS:

THE COMING NEW YEAR, 1964, MARKS A VERY SPECIAL EVENT FOR AMATEUR RADIO - THE 50TH ANNIVERSARY OF THE FOUNDING OF THE AMERICAN RADIO RELAY LEAGUE. IT WILL BE A YEAR IN WHICH WE CAN JUSTLY TAKE A GREAT PRIDE IN OUR PAST ACCOMPLISHMENTS, AND YET REALIZE AT THE SAME TIME WE HAVE THE CHALLENGE OF MANY DIFFICULT PROBLEMS STILL AHEAD.

IN THIS AND SUCCEEDING 1964 ISSUES OF QST, THE EDITORS PLAN TO TELL SOMETHING OF THE HISTORY AND ACCOMPLISHMENTS OF AMATEUR RADIO DURING THE LAST 50 YEARS. THEY WILL SHOW HOW IT GREW ORIGINALLY FROM A FEW HUNDRED DEDICATED ENTHUSIASTS IN AMERICA AND EUROPE TO MORE THAN 350,000 AMATEURS NOW SCATTERED IN ALMOST EVERY COUNTRY OF THE WORLD. THEY WILL RECOUNT THE STORY OF OUR TECHNICAL PROGRESS FROM THE EARLY TIMES, WHEN WE COULD WORK EACH OTHER FOR A FEW HUNDRED MILES WITH SPARK SETS ON 200 METERS; TO THE MODERN ERA OF VACUUM TUBES AND TRANSISTORS WITH WHICH WE CAN NOW TALK ALMOST ANYWHERE IN THE WORLD ON S.S.B., A.M., C.W., AND RTTY, USING THE HARMONICALLY RELATED BANDS THAT ARE ASSIGNED TO US THROUGHOUT THE H.F., V.H.F., AND U.H.F. SPECTRUM.

THERE WERE THE EXCITING DAYS IN THE 1920'S FOR INSTANCE, WHEN REINHARTZ, SCHNELL, AND DELOY TURNED THE ACCEPTED THEORIES OF LONG-DISTANCE RADIO COMMUNICATIONS UPSIDE DOWN AND PROVED FOR THE FIRST TIME THE ENORMOUS USEFULNESS OF SHORT WAVE. THIS SPIRIT OF TECHNICAL PROGRESS AND SCIENTIFIC ADVENTURE HAS PERSISTED STEADILY DOWN THROUGH THE YEARS, AND THERE HAS YIELDED MANY SOLID CONTRIBUTIONS TO RADIO COMMUNICATIONS. WHETHER LARGE OR SMALL EACH OF THEM HAS BEEN A STEP FORWARD - AND ANOTHER FEATHER IN THE CAP OF AMATEUR RADIO. IN RECENT TIMES THE ACHIEVEMENTS OF PROJECT OSCAR HAVE BEEN A VIVID DEMONSTRATION THAT THIS PIONEERING TRADITION IS STILL VERY MUCH ALIVE.

AS WE DELVE INTO PAST HISTORY IT ALSO BECOMES APPARENT THAT THE FOUNDERS OF THE LEAGUE, PARTICULARLY HIRAM PERCY MAXIM AND CLARENCE TUSKA, REALIZED FROM THE BEGINNING THAT IF AMATEUR RADIO WAS TO PERSIST IT HAD TO HAVE A FIRM FOUNDATION OF PUBLIC SERVICE. IT WAS UNDOUBTEDLY FOR THIS REASON THEY INCLUDED THE WORD "RELAY" IN THE LEAGUE'S NAME, FOR THAT WAS THE ONLY KNOWN WAY OF HANDLING TRAFFIC IN THOSE EARLY DAYS. THEY CONTINUALLY STRESSED THE NEED FOR OPERATING SKILL AS ONE OF THE BASIC PREREQUISITES FOR OUR EXISTENCE, AS THEY FORESAW THAT NOWHERE COULD THESE SKILLS BE BETTER DEVELOPED AND PUT TO CONSTRUCTIVE USE THAN IN HANDLING TRAFFIC AND EMERGENCY COMMUNICATIONS. WE MUST BE EVERLASTINGLY GRATEFUL TO THOSE OLD TIMERS FOR HANDING DOWN TO US THESE TRADITIONS OF PUBLIC SERVICE, TECHNICAL PROGRESS, AND OPERATING SKILL. WITHOUT THEM HAM RADIO WOULD HAVE PERISHED LONG AGO.

IN OUR CONCERN WITH TODAY'S PROBLEMS WE SOMETIMES FORGET THAT THE OLD TIMERS HAD PLENTY OF TROUBLES, TOO. BUT THEY MET THEM WITH COURAGE AND FORESIGHT, AND THEY HAVE LEFT US WITH A GREAT HERITAGE FOR THE FUTURE. WE OWE THE FOUNDERS OF THE LEAGUE A GREAT DEBT OF GRATITUDE, FOR THEIR VISION AND LEADERSHIP PROVIDED THE BASIS FOR OUR GROWTH AND HAVE MADE AMATEUR RADIO AND THE LEAGUE WHAT THEY ARE TODAY.

OOTC:

FEBRUARY 2, 1964

AM SADDENED INDEED TO LEARN OF THE DEATH OF "YE OLDE COPPYE BOYE." HE WILL BE SORE MISSED. FORTUNATE YOU WERE THERE TO REPRESENT US ALL. AND NOW, WITHIN THE PAST FEW DAYS, THE SAD WORD ABOUT WIZE. AM NOT EQUAL TO ACTIVE PARTICIPATION IN PRODUCTION OF SGT. MY CONTRIBUTION WOULD BE IN THE LINE OF MORAL SUPPORT. I TRUST SOMEONE WILL BE ABLE TO PICK UP THE TASK. RECEIPT OF MY COPIES OF THE SGT ALWAYS MARK ANOTHER SWELL TRIP INTO THE NOSTALGIA OF EARLY "HAM" DAYS, FOR ME.

I WONDER IF IT WOULD BE POSSIBLE TO INQUIRE, THRU SGT, IF ANY OF THE OLD GANG BELONG TO THE "NEW ENGLAND AMETEUR WIRELESS ASSOCIATION" ARE STILL AROUND? BEFORE W.W.I., WE USED TO MEET AT FILENE'S STORE IN BOSTON. THE GANG WAS HEADED UP BY GUY ENTWISTLE, WHAT A TREAT, AT THAT TIME, WERE THE FIRST COPIES OF QST AND WHAT A TREAT, TOO, TO VISIT THE ROOF-TOP AT FILENE'S AND WATCH THE OPERATION OF "WBF" ON 600 METERS! SINCE THEN, FOR MYSELF MANY YEARS OF OPERATING IN THE MERCHANT MARINE, COASTGUARD, AIRLINES, AND MORE RECENTLY ENGINEERING AND NEWS CASTING AT A LOCAL BROADCASTING STATION. 73, "MIKE" LAMSON. WIGU

OOTC:

J. J. HOLMES
15 WINDERMERE DR. WESTMOUNT, SYDNEY
C.B. NOVA SCOTIA - MARCH 1, 1964

I GUESS I SHOULD HAVE REPLIED TO YOUR KIND LETTER DATED NOVEMBER 4TH, 1963, LONG BEFORE THIS BUT IN THAT LETTER YOU SAID THAT YOU WERE WORKING ON THE VE'S AND THAT I SHOULD BE GETTING MY BLUE BOOK SHEETS AROUND THE FIRST OF THE YEAR, SO I DECIDED TO WAIT UNTIL SOME TIME AFTER THE FIRST OF THIS YEAR FIGURING I WOULD ACKNOWLEDGE RECEIPT OF YOUR LETTER AND THE BLUE BOOK SHEETS AT ONE AND THE SAME TIME. IT IS NOW THE FIRST OF MARCH AND NO BLUE BOOK SHEETS YET. IT MIGHT WELL BE THAT THINGS DID NOT GO SO WELL AS YOU FIGURED LAST NOVEMBER RESULTING IN UNEXPECTED DELAY.

DUE TO THE FACT THAT I WAS LIVING IN CALIFORNIA IN 1912 WHEN I WAS GIVEN THE CALL SIGN 60Q, I DID FEEL THAT I WOULD BE INCLUDED IN THE "6" DISTRICT LISTING IN THE BLUE BOOK. I AM ONE OF THOSE WHOSE NAME, CALL SIGN ETC., APPEARED IN THE FIRST CALL BOOK, ISSUED IN 1913 I BELIEVE, BY THE U.S. GOVERNMENT CONTAINING THE NAMES OF AMATEURS AND, AS FAR AS I KNOW, I AM THE ONLY ONE NOW RESIDENT IN CANADA WITH THAT DISTINCTION.

I DON'T WANT TO APPEAR CHILDISH BUT I HAVE BEEN DISAPPOINTED WITH THE O.O.T.C. IN THAT WHEN I JOINED I SENT IN A SUMMARY OF MY AMATEUR AND COMMERCIAL OPERATORS CAREER AND NOTHING HAS BEEN MENTIONED ABOUT ME OTHER THAN TO LIST MY NAME IN THE MEMBERSHIP LISTINGS. I OPERATED COMMERCIALLY BOTH ASHORE AND AT SEA FROM 1915 TO ABOUT 1922 AND I CONSIDER THAT MY EXPERIENCES AND THE EQUIPMENT USED WAS JUST AS ANCIENT AS SOME OF THOSE WHO ARE GIVEN SEVERAL PAGES TO DETAIL THEIR CAREERS AND EXPERIENCES IN SPT. ONE OF THE HIGHLIGHTS OF MY COMMERCIAL CAREER WAS WHILE SERVING ON A BRITISH MERCHANT SHIP AND BEING THE FIRST SHIP TO BE ATTACKED BY TORPEDO QUITE NEAR THE U.S. EAST COAST. ON THE INSTRUCTIONS OF THE SHIP'S CAPTAIN I, AS WIRELESS OPERATOR, REPORTED THIS FACT TO THE U.S. AUTHORITIES BUT THEY DID NOT BELIEVE IT AT THE TIME BUT DID SO A DAY OR TWO LATER WHEN A NUMBER OF MERCHANT SHIPS WERE SUNK QUITE CLOSE IN TO SHORE. THESE FACTS, INCLUDING THE NAME OF THE SHIP I WAS ON, ARE CONTAINED IN THE BOOK "RAIDERS OF THE DEEP" BY LOWELL THOMAS.

IN ADDITION, I WAS ON A SHIP THAT WAS TORPEDDED IN THE FIRST WORLD WAR, SHELLED BY A SUBMARINE WITH GUNS FORE AND AFT. SHIPS I WAS ON WENT ASHORE TWICE, IN COLLISION WITH AN ICEBERG ONCE, IN COLLISION AND SANK ANOTHER SHIP, WAS ON A SHIP WHEN FOUR OR FIVE CREW MEMBERS WERE SHOT AND KILLED.

HOPING TO RECEIVE THE BLUE BOOK SHEETS IN THE NEAR FUTURE. 73'S JIMMY VE-1AJ.

OOTC:

WAS HORRIBLY SHOCKED WHEN I RECEIVED YOUR LETTER ABOUT THE SUDDEN PASSING OF PRESIDENT CLINE. WHILE THIS IS SOMETHING WE ALL HAVE TO GO THROUGH SOONER OR LATER IT CERTAINLY DOESN'T DO US ANY GOOD WHEN WE HEAR OF THE PASSING OF ONE OF OUR FRIENDS. AND WHILE I DIDN'T KNOW EARL PERSONALLY WE ALWAYS FELT AS THOUGH WE DID. I KNOW THAT EVERY MEMBER FEELS AS YOU SO WELL EXPRESSED IT WHEN YOU SAID "NO ONE CAN EVER EQUAL THE EXAMPLE OF CLINE IN OOTC AFFAIRS."

WOULD HAVE WRITTEN SOONER TO EXPRESS MY FEELINGS BUT OUR CLUB OPERATED A BOOTH AT THE FLORIDA STATE FAIR AND THERE JUST DIDN'T SEEM TO BE TIME TO DO WHAT WE HAD TO DO TO GET IT STARTED AND KEEP IT GOING.

73'S JOHN W4CI (JOHN FOGARTY)

OOTC:

MARCH 3, 1964

THIS WILL ACKNOWLEDGE RECEIPT OF YOUR LETTER OF FEBRUARY 27, 1964, TOGETHER WITH A COPY OF "SPARK-GAP TIMES". I WILL DISCUSS THE SUBJECT OF ADVERTISING IN YOUR JOURNAL WITH OUR SALES AND ADVERTISING PEOPLE THIS COMING WEEK, AND WE WILL IN TURN CONTACT YOU AGAIN SHORTLY THEREAFTER.

THANK YOU VERY MUCH FOR YOUR CONSIDERATION OF US AT THIS TIME AND REST ASSURED THAT THE OLD OLD TIMERS WILL GET DUE CONSIDERATION WHEN REVIEWING OUR ADVERTISING PROGRAM.

VERY TRULY YOURS.

HAMMARLUND MANUFACTURING CO.

STUART MEYER, W2GHK

OOTC:

I AM WRITING THIS LETTER FOR TOM. YOU ALL WERE SO VERY KIND TO SEND HIM LETTERS AND CARDS DURING HIS ILLNESS. THEY CHEERED HIM A GREAT DEAL BUT AS HE GOT WEAKER HE JUST SMILED AS I READ EACH ONE TO HIM. HE HAD THAT SMILE FOR EVERYONE ALMOST TO THE VERY LAST. HE ENJOYED A GOOD LIFE AND WAS HAPPY WHEN HE COULD DO THINGS TO MAKE OTHER PEOPLE HAPPY. I TOLD HIM I WOULD ANSWER EVERY LETTER AND CARD.

THIS IS THE GREATEST SADNESS THAT WE HAVE HAD IN OUR LONG LIFE TOGETHER. TOM AND I HAD BEEN MARRIED FOR ALMOST FIFTY FIVE HAPPY YEARS. WE ENJOYED EVERYTHING TOGETHER. I WAS ALWAYS READY TO TRAVEL WITH HIM WHEREVER HE WENT. AFTER HE RETIRED AND WE SETTLED IN OURS HOME WE ENJOYED THE RADIO TOGETHER SO MUCH. I WAS GOOD TO HEAR THE VOICES OF THE FELLOWS COMING OVER THE AIR.

AFTER CHRISTMAS I SAT DOWN TO THE TYPEWRITER TO WRITE LETTERS FOR TOM. HAD A LETTER STARTED TO MR. CLINE AND WAS ON THE FIRST PAGE AND HAD A TELEPHONE CALL FROM TAY MEYERS AND I TOLD HIM I WAS STARTING MY LETTERS AND WAS WRITING TO MR. CLINE. THEN HE TOLD ME THAT MR. CLINE HAD JUST PASSED AWAY ON THE 24TH OF DECEMBER. IT WAS JUST A MONTH TO THE DAY THAT TOM PASSED AWAY. THAT DID SOMETHING TO ME AND I JUST COULD NOT DO ANY WRITING FOR QUITE SOMETIME.

I KNOW THE TIME HAS TO COME WHEN WE ALL HAVE TO LEAVE THIS EARTH BUT GOD WAS GOOD TO US TO LET US BE TOGETHER FOR SO MANY YEARS.

I AM SENDING UNDER SEPERATE COVER TOM'S "CERTIFICATE OF SKILL". WHEN HE WAS IN THE HOSPITAL HE ASKED OUR SON TO MAIL IT TO THE OOTC. I WROTE TO ROY ARMSTRONG ABOUT IT AND HE SENT ME YOUR ADDRESS. WE HAVE KNOW ROY FOR OVER FIFTY YEARS.

I ENJOY READING THE SPARK-GAP-TIMES VERY MUCH AND WAS SO GLAD TO HAVE THE BLUEBOOK AND LOOK AT THE PICTURES OF THE OLD OLD TIMERS.

THANK YOU FOR EVERYTHING.

E.B. STEVENS
5858 SHARPS CIRCLE
CARMICHAEL, CALIFORNIA 95608

SINCERELY,
EMMA STEVENS

OOTC:

ANTIQUE WIRELESS ASSOC., HOLCOMB, N.Y.

THE GENERAL CHAIRMAN OF THE A.R.R.L. NATIONAL CONVENTION (NEW YORK CITY, AUGUST) HAS ASKED THE A.W.A. TO HAVE ANOTHER HISTORICAL DISPLAY WITH DEMONSTRATIONS IN THE EXHIBITION HALL SIMILAR TO WHAT WE HAVE HAD AT OTHER CONVENTIONS.

IN DISCUSSING THE CONVENTION WITH OOTC MEMBERS W2GB AND W2QY (PRES. AND V.P. A.W.A) IT WAS SUGGESTED TO ALSO HAVE A MEETING AND PROGRAM AT THE CONVENTION FOR THE OT WIRELESS OPERATOR.

SINCE THE A.W.A. IS A RELATIVELY SMALL GROUP, W2GB ASKED ME TO WRITE YOU SUGGESTING WE COMBINE THE MEETING WITH THE O.O.T.C. THE MEETING WILL BE HANDLED BY THE O.O.T.C. AND THE PROGRAM BY THE A.W.A.

WE SUGGEST PRESENTING THE SHOW TITLED "120 YEARS OF BRASSPOUNDING" WHICH RUNS FOR 44 MINUTES. WE FAVOR THIS PROGRAM SINCE IT CONCERNS ALL FORMS OF EARLY WIRELESS AND PRACTICALLY ALL PARTICIPANTS ARE O.O.T.V. MEMBERS! (WINQ, WIZE, WISS, W2EG, W2EXM, W2QY, W221, W8DG, W8FX AND OTHERS...)

THE A.W.A. HAS NOT COMMITTED ITSELF ON THIS MATTER WISHING TO GET YOUR THOUGHTS ON THE MATTER OF COURSE.

73, BRUCE W2ICE (BRUCE KELLEY)

OOTC:

I AM DEEPLY GRIEVED TO LEARN FROM G6BY OF THE DEATH OF THE PRESIDENT OF THE OLD OLD TIMERS' CLUB (W4PPZ) AND ON BEHALF OF THE MEMBERS OF THE RADIO AMATEUR OLD TIMERS' ASSOCIATION, I EXTEND TO YOU AND THE MEMBERS OF YOUR CLUB OUR SYMPATHIES.

THE FINE WORK DONE BY YOUR LATE PRESIDENT IS WELL KNOWN TO MANY OF THE OLD TIMERS IN THE UNITED KINGDOM WHO WILL BE VERY GRIEVED TO LEARN OF HIS PASSING.

I OFFER YOU MY PERSONAL GOOD WISHES FOR A HAPPY TENURE OF OFFICE AS PRESIDENT OF THE O.O.T.C.

SINCERELY,
JOHN CLARRICATS, O.B.E (G6CL)

OOTC:

JUST HAD A CALL FROM JACK DUNN ASKING THAT I SEND SOMETHING ON MORT. THE ENCLOSED PARTIALLY TELLS THE STORY. HE SURE WAS AN ARDENT SUPPORTER OF THE AMATEUR SERVICE, A GOOD FRIEND AND A LONG TIME ONE.

WE FIRST WORKED TOGETHER IN BROOKLYN, NEW YORK, WAY BACK WHEN AND LATER WHEN HE OPERATED A STATION UP IN TARRYTOWN, NEW YORK AT A MILITARY ACADEMY. HE POUNDED MANY A MESSAGE FROM THE GEORGE WASHINGTON FOR PRESIDENT WILSON TO ME AT BAR HARBOR, MAINE AND BELIEVE IT OR NOT WHEN I MET HIM IN LOS ANGELES AT A HAM CONVENTION, AFTER NOT SEEING HIM FOR THIRTY YEARS, WE BOTH KNEW EACH OTHER ON SIGHT AND A HAPPY SIGHT IT WAS.

ALL OF US WILL MISS MORT. HIS SON STEVE HAS JUST PASSED HIS NOVICE LICENSE AND I'M GOING TO DO WHAT I CAN TO GET HIM GOING ON THE GENERAL AND HOPE WE CAN GET FCC TO RE-ASSIGN HIS DAD'S CALLS TO HIM.

73 RAY E. MEYERS W6MLZ
717 ANDERSON WAY
SAN GABRIEL, CALIFORNIA

OOTC:

JUST RECEIVED MY 1964 ROSTER OF THE O.O.T.C. UPON EXAMINING SAME FOUND MY NAME MISSING FROM THE RANKS. THE SAME THING HAPPENED IN THE 1963 ROSTER. I WROTE TO SOMEONE, DON'T REMEMBER WHO ABOUT IT BUT NEVER RECEIVED AN ANSWER.

MY PICTURE AND ALL THE REST OF THE FACTS ARE IN THE BLUE BOOK UNDER THE CALL W9FM/W40T SO IMAGINE IN THE HUSTLE AND BUSSEL MY CARD WAS MISPLACED. HAVE BEEN ASKED ABOUT WHY MY NAME WASN'T IN THE ROSTER AND HAD NO EXPLANATION FOR SAME.

WE ARE HAVING A NICE RETIREMENT HERE IN FLORIDA AND DON'T HAVE ANY DESIRE TO RETURN TO THE LAND OF COLD AND SNOW. HAVE MADE A LOT OF FRIENDS HERE AND AM ON THE AIR A LOT. PERHAPS MY CARD WAS LOST SOMEWHERE.

HOPE THIS WILL STRAIGHTEN THINGS OUT. BEST OF LUCK FOR A JOB ON THE O.O.T.C. IT'S BEEN WONDERFUL.

SINCERELY YOURS, HAL C. SEVER W9FM/W40T
LAKEWOOD PARK, RT. 2
Box 3263-A
FORT PIERCE, FLORIDA

OOTC:

OLD TOP I SURE HAVE BEEN A BUSY "HOMBRE" SINCE I LAST CONTACTED YOU. FROM THE HEADING OF THIS LETTER YOU WILL SEE I HAVE MOVED FROM MY "COUNTRY ESTATE" TO THE CITY. HI. HI. MY WIFE FINALLY TWISTED MY ARM TO SELL OUT AND MOVE HERE NEAR HER FOLKS. I MADE A GOOD DEAL FOR CASH AND CAME HERE AND BOUGHT A GOOD DEAL FOR CASH. IT IS SMALLER BUT ENOUGH FOR US TWO. VERY COMFORTABLE AND CONVENIENT. I FIGGER WE ARE NOT GETTING YOUNGER SO THAT WE MIGHT AS WELL GET CLOSE TO HER FOLKS. MY FOLKS ARE GONE EXCEPT FOR A SISTER IN RACINE, WIS. FINALLY GOT THE RIGS GOING AND TRIED TO CATCH UP ON NAVY MARS BIZ. ABOUT OK NOW.

CONTACTED HAWLEY, W4WDS AND JOHN W2MDB, MONDAY. SO GUESS MY NEW LOCATION WILL BE OK FOR HAMMING HI.

BERT, I HEARD THAT MORT, W6HSC AND IRVING VERMILLYA WIZE HAVE PASSED ON ALSO. WE SURE ARE LOSING THEM.

MRS. STEVENS WROTE ME THAT TOM'S AND HER BOY, HARLAND, PASSED AWAY 26TH FEB. IT MUST OF BEEN A SHOCK FOR HER - TWO WITHIN SO SHORT TIME. WELL BERT WILL BE MORE ACTIVE NOW AND HOPE TO SEE YOU ON 14295.

AM WRITING EARL W2EG ABOUT MY CHANGE OF ADDRESS. IF YOU CAN STICK ADDRESS IN SGT NEXT ISSUE, FINE.

73 R. E. ARMSTRONG W5RIH
511 CHERRY RIDGE DRIVE
SAN ANTONIO, TEXAS 78213

OOTC:

THANK YOU FOR YOUR LETTER OF SYMPATHY, IT WAS DEEPLY APPRECIATED. AS YOU MUST KNOW THIS WAS A TERRIBLE SHOCK TO ME AND THE FAMILY AS LARRY WAS DOING SO WELL SINCE HIS OPERATION ALMOST 2 YEARS AGO. AFTER SUCH A FIGHT TO REGAIN HIS HEALTH AND THEN SOMETHING ELSE COME ALONG - A BLOOD CLOT (CORONARY) - HE HAD EVERY COMFORT HERE AND SO HAPPY WITH HIS FAMILY AND FRIENDS. I KNOW I HAVE A LOT TO BE GRATEFUL FOR - OVER 43 HAPPY EVENTFUL YEARS AND A WONDERFUL FAMILY TO HELP ME THROUGH. NOW I MUST DO AS LARRY WOULD WANT ME TO AND TO FACE THINGS AS HE ALWAYS DID. WE HAVE HAD THE YOUNGEST DAUGHTER AT HOME WITH US FOR THE PAST YEAR, SO I AM NOT ALONG AT PRESENT. IT HELPS A GREAT DEAL. THE 3 YEAR OLD IS A LOT OF COMPANY TOO, KEEPS ME BUSY. LARRY WAS VERY PROUD OF BEING A MEMBER OF "THE OLD OLD TIMERS CLUB" AND HAS ENJOYED RADIO VERY MUCH. HE AND "TEMP" CAMPBELL HAVE BEEN FRIENDS FOR MANY YEARS.

I WANT TO THANK YOU VERY MUCH FOR YOUR KIND LETTER AND OFFER OF SERVICE AT ANY TIME. I APPRECIATE IT VERY MUCH. SINCERELY, MRS. BARTON.

OOTC:

THE EXPRESSION OF YOUR KINDNESS AND SYMPATHY WILL ALWAYS BE REMEMBERED WITH DEEP GRATITUDE. YOU HELPED SO MUCH AND WE DO APPRECIATE MORE THAN WORDS CAN EXPRESS. THE FLOWERS WERE BEAUTIFUL. PLEASE THANK THE O.O.T.'S FOR THEIR KIND WISHES.

KATHRYN SMITH (MRS. MORTIMER SMITH)

A NEWS ITEM SENT TO SGT BY EUNICE, WIMPP, AND CLIPPED FROM THE WEEKLY MATTAPOISETT NEWSPAPER: *****

*BARRY GOLDWATER SENDS WIRE OF SYMPATHY.....SENATOR BARRY *
 *GOLDWATER, NOW ENGAGED IN BUSY PRIMARY CONTEST, TOOK TIME OUT *
 *TO SEND THE FOLLOWING TELEGRAM TO MR. WILLIAM I. VERMILYA OF *
 *ATKINSON WAY, MATTAPOISETT. *
 *WASHINGTON, D.C. TO THE FAMILY OF IRVING VERMILYA. WORD HAS JUST *
 *REACHED ME OF MR. IRVING VERMILYA'S PASSING AND AS ONE WHO *
 *SHARED HIS INTEREST IN HAM RADIO OPERATION, I WISH TO EXTEND MY *
 *DEEPEST SYMPATHY TO THE FAMILY. SIGNED, BARRY GOLDWATER *

W.E.D. (BILL) PARKER, GGBY, BRITISH REPRESENTATIVE OF OOTC AND MEMBER OF THE BRITISH "OLD TIMERS CLUB" SENT IN THE FOLLOWING PRAYER WHICH HE RECITES TO THEIR NET (WHEN SOMEONE "STRAYS". "IT'S WONDERFUL BILL"! - EDITOR...)

OTC PRAYER.....LORD, THOU KNOWEST THAT I AM GROWING OLDER. KEEP ME FROM BECOMING TALKATIVE AND POSSESSED WITH THE IDEA THAT I MUST EXPRESS MYSELF ON EVERY SUBJECT. RELEASE ME, O LORD, FROM THE CRAVING TO STRAIGHTEN OUT EVERYONES AFFAIRS. KEEP ME FROM THE RECITAL OF ENDLESS DETAIL. GIVE ME WINGS TO GET TO THE POINT. SEAL MY LIPS, O LORD, WHEN I AM INCLINED TO TALK OF MY ACHES AND PAINS. MAKE ME THOUGHTFUL BUT NOT NOSEY. HELPFUL BUT NOT BOSSY. WITH MY VAST STORE OF WISDOM AND EXPERIENCE LORD - IT DOES SEEM A PITY NOT TO USE IT ALL, BUT THOU KNOWEST, LORD, THAT I WANT A FEW FRIENDS AT THE END.

SEVEN FOLD AMEN.

ARTICLES



THIS PICTURE OF PAUL AND DR. & MRS. LEE DE FOREST WAS TAKEN AT THE ANNUAL DINNER OF THE "DE FOREST PIONEERS," NOVEMBER 3, 1954.

PAUL WATSON, W3BO, HAS BEEN COLLECTING ELECTRON TUBES FOR OVER FORTY-ONE YEARS. AS A RESULT HE HAS A COLLECTION WHICH IS ONE OF THE FINEST IN THE WORLD. IT CONSISTS OF OVER 1400 TUBES RANGING FROM A SMALL TUBE FOR AN ANTI-AIRCRAFT PROXIMITY FUSE TO A GIANT MEGOWATT TUBE FOR OVERSEAS COMMUNICATION.

PAUL IS ONE OF 25 COLLECTORS OF ELECTRON TUBES IN THIS COUNTRY AND IS PROBABLY THE ONLY ONE WHO HAS HIS ENTIRE COLLECTION ENCASED, CROSS INDEXED, AND WITH THE TECHNICAL DATA THAT APPLIES TO THEM.

THE COLLECTION IS LOCATED IN PAUL'S HOME IN WEST CHESTER, PENNA. AND IT INCLUDES EARLY ELECTRONIC EQUIPMENT AND RECORDS PRINCIPALLY ELECTRON TUBES. EACH TUBE IS INDEXED BY CODE NUMBER AND HAS ASSOCIATED WITH IT A CARD BEARING A COMPLETE TECHNICAL DESCRIPTION.

FROM THE BEGINNING OF "WIRELESS" TELEGRAPHY THE MOST IMPORTANT SINGLE PROBLEM HAD BEEN THE LACK OF SENSITIVITY OF THE DETECTING DEVICE. SIGNAL TRANSMISSION BY MEANS OF AN INTERRUPTED ARC OR SPARK GAP AND LATER BY ROTARY GAP, QUENCHED GAP AND CONTINUOUS ARC, WAS CERTAINLY SUFFICIENT FOR THE NEED. BUT THE PROBLEMS OF STATIC AND/OR SIGNAL-TO-MORSE RATIO TOGETHER WITH THE NEED FOR COMPONENT SIMPLICITY CAUSED AN EARLY AND DELIGINT SERCH FOR MORE EFFECTIVE DETECTORS. THE COHERER WAS THE FIRST DETECTOR AND HAD A RELATIVELY LONG USE. IT WAS INVENTED BY PROF. EDWARD BRANLY IN 1892. THE DEVICE CONSISTED OF IRON FILINGS IN A GLASS TUBE. WHEN A CURRENT PASSED THROUGH THE TUBE THE FILINGS WOULD COHERE OR JOIN TOGETHER AND PASS CURRENT. RAPPING THE TUBE WOULD RESTORE IT TO A NON-CONDUCTING STATE.

ITS FIRST WIRELESS APPLICATION WAS MADE BY OLIVER HODGE, IN 1894 AND LATER WAS ADOPTED BY MARCONI, FORMING THE BASIS FOR HIS EARLY EFFORTS AT SIGNAL RECEPTION. IN 1903 AND LATER IN 1906, THE ELECTROLYTIC AND CRYSTAL DETECTORS, RESPECTIVELY WERE INVENTED. IT WAS DURING THIS PERIOD THAT DE FOREST "CAPTURED" THE INCANDESCENT GAS (WHICH HE LATER LEARNED HAD NOTHING TO DO WITH THE CASE) AND MADE A GAS FILLED THREE ELEMENT TUBE.

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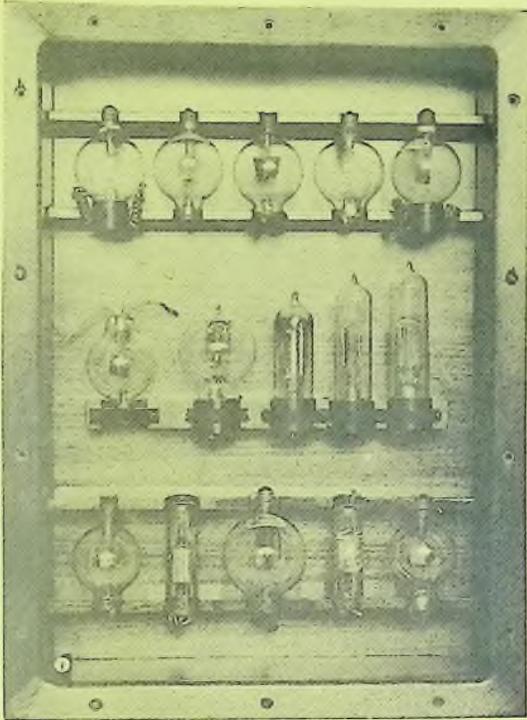


Fig. 1

THESE ARE TUBES DEVELOPED BY DR. LEE DEFOREST, FATHER OF AMERICAN RADIO, BETWEEN 1907 & 1915. CMDR. WATSON TESTED SOME OF THESE WHEN THEY WERE DEVELOPED AND OTHERS WERE DESIGNED FOR THE U.S. NAVY.

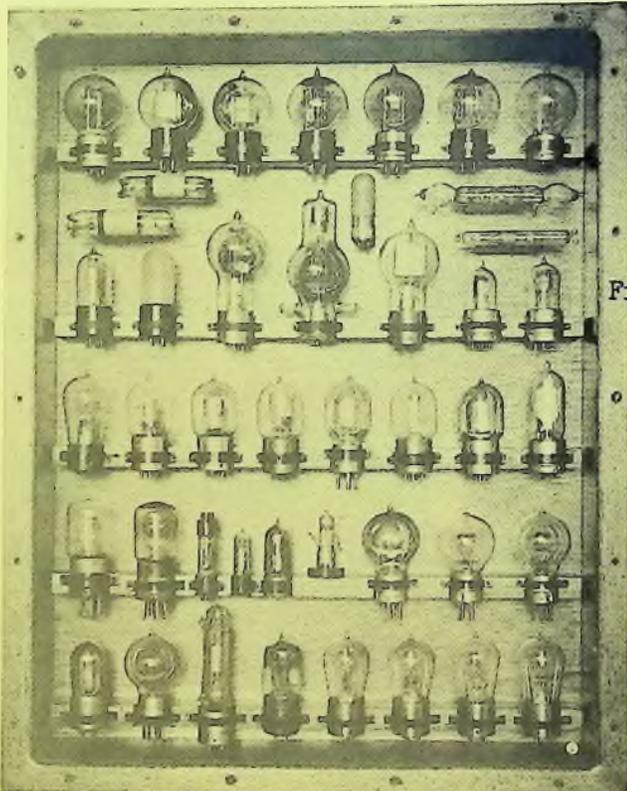


Fig. 2

THESE TUBES MAKE UP THE FIRST COMPLETE LINE OF TUBES PRODUCED BY RADIO CORP. OF AMERICA IN 1920-21.

PAUL WATSON, W3BO TUBE COLLECTIONS...
CON'T..

IN 1904 DE FOREST WAS ACTIVE IN THE DEVELOPMENT OF A TRANSCONTINENTAL WIRELESS COMPANY TO COMPETE WITH WESTERN UNION. DURING THE FIRST SUMMER, CONDITIONS HAD BEEN GOOD AND THE CRYSTAL AND ELECTROLYTIC DETECTORS EMPLOYED WERE SATISFACTORY. SUBSEQUENT CONDITIONS HOWEVER, REVEALED SOME DEFICIENCIES. EARLIER IN 1903, HE HAD ATTEMPTED TO USE INCANDESCENT GAS AS A RECTIFYING DEVICE. EMPLOYING TWO PLATINUM ELECTRODES, HELD IN BUNSEN BURNER FLAME, WITH THEIR LEADS CONNECTED ON AN ANTENNA AND EARPHONES, DE FOREST AND HIS ASS'T, C.D. BABCOCK, HAD ACTUALLY RECEIVED SHIP SIGNALS, ALTHOUGH THE NOISE LEVEL WAS HIGH. OTHER ATTEMPTS TO PRODUCE A "FLAME" RECTIFIER FAILED, BUT LEAD, HOWEVER, TO AN ENCLOSED FLAME, SO TO SPEAK, AN INCANDESCENT CARBON FILAMENT LAMP WITH A PLATINUM PLATE. THIS WAS THE FIRST VACUUM TUBE DETECTOR TO USE BOTH FILAMENT AND PLATE BATTERIES.

IT WAS THIS DEVICE WHICH WAS NAMED "AUDION" BY BABCOCK, A NAME USED TO IDENTIFY ALL DE FOREST VACUUM TUBES THEREAFTER.

"IT WAS SOON EVIDENT THAT THE SECOND PLATE, OR CONTROL ELEMENT (THE GRID) COULD BE LOCATED MORE EFFECTIVELY BETWEEN THE PLATE AND THE FILAMENT, AND SO A SMALL PLATINUM PLATE WITH MANY PERFORATIONS WAS PREPARED AND ANOTHER TUBE MADE WITH THIS INSERTED BETWEEN THE FILAMENT AND SOLID PLATE. THIS WAS THE FIRST CONVENTIONALLY ARRANGED TRIODE EVER MADE. IN SUBSEQUENT MODELS THE PERFORATED PLATE WAS REPLACED BY A FOLDED WIRE GRID TO LESSEN THE COST. NEEDLESS TO SAY THIS WAS THE BEST DESIGN OF ALL. PATENT NUMBER 841,387, COVERING THIS ARRANGEMENT WAS ISSUED JANUARY 15, 1907, AND IS ONE OF THE MOST VALUABLE PATENTS EVER ISSUED."

5 PAUL WATSON; "THE ELECTRON TUBE"
RADIO & TELEVISION NEWS, NOV. 1954.

.....CON'T. NEXT PAGE...

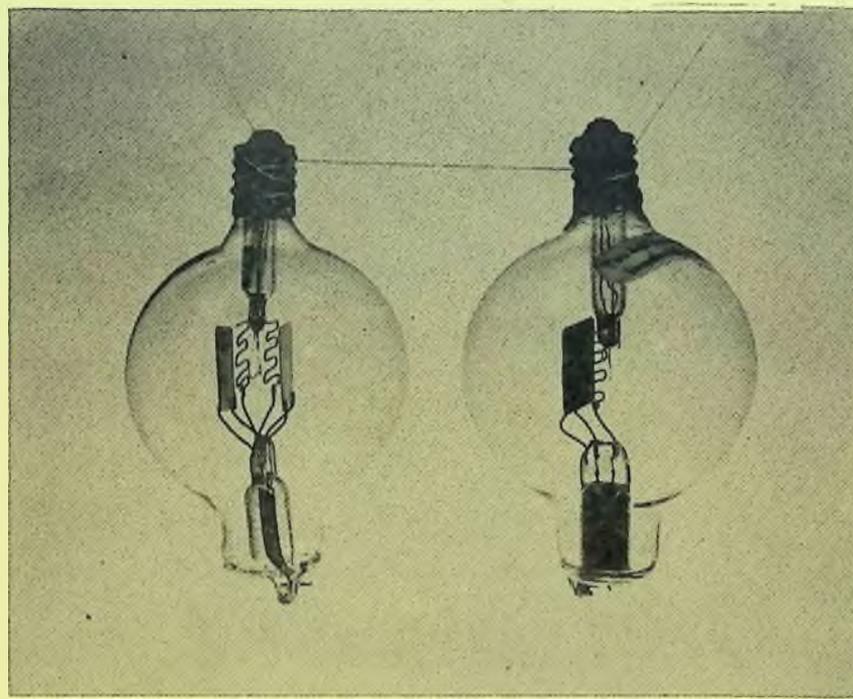
PAUL WATSON, W3BO, TUBE COLLECTIONS.....CON'T.....

OBSCURED BY THE TECHNICAL IMPLICATIONS OF THE AUDION IS A COMMERCIAL NOTE TO INDICATE THAT TUBE REBUILDING IS AS OLD AS TIME. COMMANDER WATSON COMMENTS: THE TUBULAR "AUDIONS" (BOTTOM ROW, FIGURE 1) WERE KNOWN AS TYPE 'T' AND WERE MADE FIRST IN 1915 WHEN THE SPHERICAL ENVELOPE WAS DISCONTINUED. IT ALSO PRESENTED A MAJOR CHANGE IN SALES POLICY, AS PRIOR TO THIS TIME IT WAS NECESSARY TO RETURN AN OLD BULB (TUBE) TO PURCHASE A NEW ONE. COMPETITORS HAD BEEN SELLING TUBULAR VACUUM TUBES BELOW THE ORIGINAL DE FOREST PRICE, HENCE HIS ENTRANCE INTO THIS FIELD SELLING AN "AUDION" WITH THE NON-RETURN POLICY.

DE FOREST'S WORK WITH THE AUDION WAS TO TAKE HIM FARTHER. IN THE CASCADED AMPLIFIERS HE HAD BUILT "HOWLING" CONDITIONS OCCURRED; TUBES PRODUCING THESE UNWANTED SOUNDS WE CALLED "SINGERS", AND FROM THESE WERE DEVELOPED THE "ULTRA-AUDION" TUBES, OR OSCILLATORS. HERE NOW WAS THE MEANS FOR DISPLACING THE ARC, THE ALTERNATOR AND THE SPARK GAP FOR SIGNAL TRANSMISSION. ALTHOUGH DE FOREST USED THE ULTRA-AUDION TO SIMPLIFY AND IMPROVE EXISTING HETERODYNES CIRCUITS HE DID LITTLE ELSE WITH ELECTRON TUBES. BUT HE HAD, OF COURSE, ALREADY DONE A GREAT DEAL.

AS A WIRELESS HOBBYIST, PAUL WAS INTERESTED IN THE WORK OF DR. DEFOREST. HE VISITED DE FOREST IN PHILADELPHIA AND SOON BEGAN TESTING THE LIFE OF DEFOREST TUBES IN HIS RECEIVER FOR THE INVENTOR. HE PREPARED WRITTEN REPORTS ON THE USE OF THE TUBES AND THE WORK LED TO A CLOSE FRIENDSHIP THAT CONTINUED UNTIL DEFOREST DIED.

PAUL STARTED HIS COLLECTING HOBBY ABOUT 1923 AND IN THE ENSUING 40 YEARS HE HAS DEVELOPED HIS REMARKABLE COLLECTION. WHAT DID PAUL DO IN THE NAVY? HE WAS A NAVAL CONSTRUCTOR AT THE PHILADELPHIA NAVY YARD AND HAD CONTROL OF THE CONSTRUCTION OF MORE THAN 100 SHIPS DURING WORLD WAR II.



See Fig. 1 - Enlarged view of third and second tubes, respectively from left top.

Fig. 3.

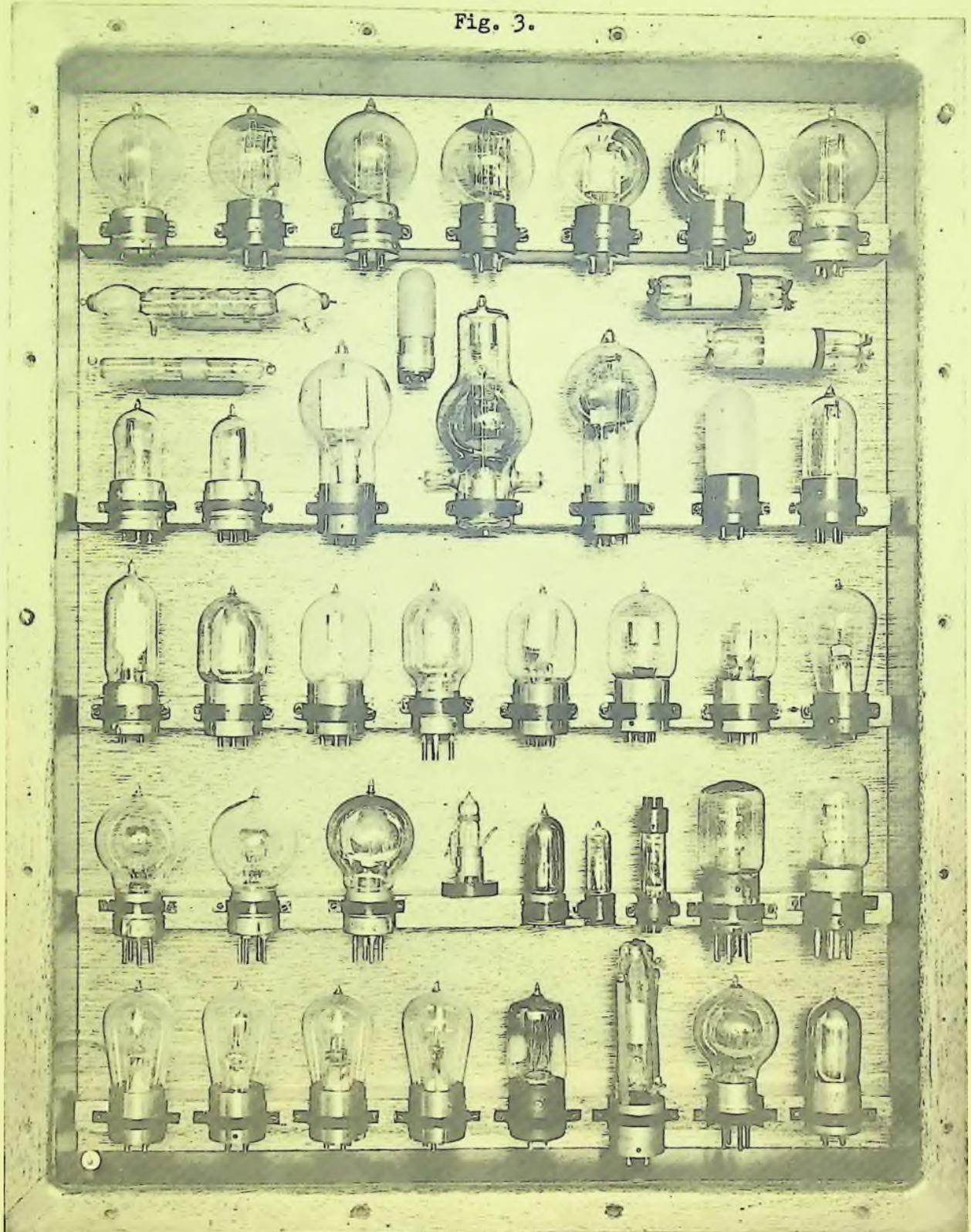


Fig. 3.

TOP ROW: EARLY W.E. TUBES (L. TO R.) WE-201-A; 205-D; VT-2; 104-D; 101-F; 102-F; 216-A. THE 201-A DATES FROM ABOUT 1915, HAS A 3 BUTTON "OLD NAVY" BASE. THE VT-2 (THIRD TUBE) MADE FOR U.S. GOVERNMENT IN WW-1 WAS VERY WIDELY USED IN 5 WATT TRANSMITTERS. REST OF FIRST ROW WERE USED AS TELEPHONE AMPLIFIERS. SECOND ROW: (FOUR HORIZONTAL AND 1 VERTICAL TUBE) TOP LEFT IS THE GEISSLER TUBE. 3 COLORS WHEN LIT (FORERUNNER OF NEON SIGNS). MADE IN BELGIUM ABOUT 1912 OR 1913; LIGHTS FROM A SPARK COIL. UNDER THE GEISSLER TUBE AT THE LEFT IS A "WEAGANT TUBE" MADE BY THE MARCONI INTERESTS (AMERICAN MARCONI OF WHICH ROY WEAGANT WAS CHIEF ENGINEER) ABOUT 1912 TO 1914; TRIGOE TUBE, CYLINDRICAL ENVELOPE, FILAMENT, SMALL CONICAL IN CENTER OF TUBE, GRID IS A FLAT DISC (ROUND) PLACED CROSSWISE IN THE TUBE JUST ABOVE THE POINT OF THE CONICAL FILAMENT. PLATE IS ELECTRO-PLATED ON THE OUTSIDE OF THE ENVELOPE A BAND ABOUT 5/8 INCH WIDE; NOMINALLY A TRIODE. CENTER TUBE IN THE 2ND ROW, AND THE 6TH TUBE IN THE 3RD ROW ARE SODIUM DETECTOR TUBES, SOMETIMES CALLED DONLE TUBES. IN THE SECOND ROW, VERTICAL IN THE MIDDLE IS "S-13" SODIUM, FOR USE WITH THE OLD UV-199 TUBES (3.3 FILAMENT VOLTS) AND IN THE 3RD ROW IS THE D-21 SODIUM TUBE FOR USE WITH 201 AND 201-A TUBE WITH 5 VOLT FILAMENTS. GAS FILLED DETECTORS, GLOWED ORANGE COLOR IN USE THROUGH FROSTED ENVELOPE. MADE IN EARLY 1920'S BY CONNECTICUT TELEPHONE & ELECTRIC CO. OF MERIDEN, CONN. THE TWO TUBES ON THE LEFT, MOUNTED HORIZONTAL, ARE THE TWO TYPES OF AUDIOTRON TUBES MADE BY E. T. CUNNINGHAM ON THE WEST COAST BEFORE 1915. VERY "SOFT" EXCELLENT DETECTORS, TWO TUNGSTEN FILAMENTS; IN WIDE AMATEUR USE BEFORE WW-1 ON THE WEST COAST. THESE ARE THE TUBES WHICH FORCED DEFOREST TO CHANGE TO THE MODEL "T" TUBULAR AUDIOTRON, MARCH 15, 1916, AND CAUSED CHANGE IN SALES POLICY. THIRD ROW: FIRST TWO TUBES ARE "VT-21" TUBES MADE BY DEFOREST FOR THE U.S. GOVT. IN WW-1. USED AS DETECTORS LARGELY - NOT SO HOT - INTERCHANGEABLE WITH THE STANDARD W.E. "VT-1" TUBE; "HARD" VACUUM IN SOME CASES; IRREGULAR PERFORMANCE. THIRD TUBE IS A DEFOREST THERMIONIC RECTIFIER DEVELOPED AFTER WW-1 FOR USE IN LOW POWERED TRANSMITTERS (TELEPHONE). FOURTH TUBE IS A DEFOREST TRANSMITTER "H" TRIODE (AFTER WW-1) DESIGNED FOR HF AND SOME VHF BANDS FOR AMATEUR USE; 50 WATT TUNGSTEN FILAMENT. RCA RELEASED 852 SHORTLY AFTERWARD TO COMPETE IN HF AND VHF (OF THAT DAY). FIFTH TUBE IS A DEFOREST "SINGER TYPE" TRIODE WITH ELEMENTS VERY SIMILAR TO THE "H" TUBE. USED ON A BASE TO FIT INTO LOW POWER DEFOREST RADIOPHONE SETS. SOME WERE SOLD FOR LOW POWER AM BC, AND OTHERS WERE USED BY AMATEURS. FOURTH ROW: FIRST TUBE IS FAMOUS "VT-1" W.E. TUBE, THE UNIVERSAL U.S. GOVT. RECEIVING TUBE OF WW-1; 5 VOLT OXIDE FIL., AND 100 GOLD TIPS ON THE FOUR PRONGS TO AVOID CONTACT TROUBLES, IMPROVED VERSION OF ORIGINAL WE-203-A TUBE. SECOND AND THIRD TUBES ARE MOOREHEADS - THE TYPE MADE DURING THE PATENT FREEZE, BY AGREEMENT BETWEEN AMERICAN MARCONI, DEFOREST AND MOOREHEAD - MADE IN SAN FRANCISCO; DISCONTINUED WHEN RCA WAS FORMED AND TOOK OVER THE FLEMING VALVE PATENTS FROM MARCONI. FOURTH TUBE IS A MOOREHEAD, BUT MOUNTED ON A BRITISH BASE, MADE FOR THE BRITISH DURING WW-1. FIFTH AND SIXTH TUBES ARE ELECTRON RELAY TUBES FOR AMATEUR USE. THE ELEMENTS ARE IDENTICAL WITH THOSE IN THE AUDIOTRONS SHOWN IN THE SEC. ROW; HOWEVER, THESE TUBES ARE MOUNTED ON REGULAR 4 PIN "SHAW" BASES MADE BY MOOREHEAD, AND E.T. CUNNINGHAM IN SAN FRANCISCO BEFORE WW-1. FIFTH ROW: FIRST THREE TUBES ARE "FOTOS" DESIGN MADE BY METAL OF FRANCE, BEFORE WW-1. VERY SIMILAR TO THE BRITISH ARMY "R" TUBE WHICH IS SHOWN IN THE 6TH ROW AS #7. ALL HAVE THE EUROPEAN STANDARD BASE OF THAT PERIOD - TRIODES; 5 VOLT TUNGSTEN FIL., MODERATE DEGREE OF VACUUM. THE 8TH AND 9TH TUBES (LAST TWO ON RIGHT) ARE TELEFUNKEN MADE FOR THE GERMAN ARMY IN WW-1. ELEMENT DETAILS ARE AN EXACT COPY (OR VICE VERSA) OF THE FRENCH TUBES IN THIS ROW. SIXTH (BOTTOM) ROW: FIRST FOUR TUBES ARE GEN. ELECTRIC (VT-14, CG-890, CG-1162 TB-1, MADE FOR THE GOVT BEFORE AND DURING WW-1; PREDECESSORS OF THE RCA LINE OF EARLY RECEIVING TUBES. TB-1 WAS A TWO ELEMENT TUBE USED TO CONTROL VOLTAGE ON THE WIND DRIVEN AIRCRAFT GENERATORS IN WW-1. REST ARE TRIODES, TUNGSTEN FILAMENT, VARIOUS VOLTAGES. FIFTH TUBE IS A "MODEL A" AUDIO AMPLIFIER TUBE MADE BY MAGNAVOX FOR USE IN THEIR 1920-24 AUDIO AMPLIFIERS. SIXTH TUBE IS A TUBULAR AUDIOTRON SUCH AS SHOWN IN THE SECOND ROW, BUT MOUNTED IN A 1920 ADAPTER SO IT COULD BE INSERTED IN A CONVENTIONAL 4-PRONG "SHAW" (SHORT PIN) SOCKET.

"I CAN'T BE BOTHERED" IN WHICH ONE RADIO AMATEUR TELLS HOW HE HAS KEPT HIS INTEREST IN THE GAME FOR OVER TWENTY YEARS WITHOUT BECOMING A SLAVE TO THE SLIDE-RULE.
 BY: R. B. BOURNE WIANA - REPRODUCED FROM JULY 1932 QST, BY PERMISSION.

AMATEUR RADIO IS ONE OF MY HOBBIES AND I WANT TO KEEP IT THAT. IT HAS HELD A MAJOR PLACE IN MY SPHERE OF ACTIVITIES FOR A GOOD MANY YEARS BUT, LIKE RADIO ITSELF, THE FIRMNESS WITH WHICH IT GRIPS ME AND ORDERS ME AROUND IS A VARIABLE, AND EVEN OSCILLATING, QUANTITY, IT HAS NEVER MADE ME ITS SLAVE, AT LEAST FOR VERY LONG, AND THEN ONLY BECAUSE I DIDN'T KNOW ANY BETTER. I DO CONFESS TO HAVING GONE THROUGH AND SURVIVED CERTAIN PERIODS WHEN LITTLE ELSE BUT "WIRELESS" ENTERED MY MIND. WHEN IN SUCH A TRANCE, I WAS OFTEN GUILTY OF SNEAKING AN ELECTRO IMPORTING COMPANY CATALOG INTO CHURCH AND BEING CARRIED GLAMOROUSLY AWAY TO PINNACLES OF IMAGINATION BY THE OILY LANGUAGE, IRRESISTIBLE ARGUMENTS AND CONVINCING ILLUSTRATIONS CONTAINED IN THAT FAMOUS YELLOW-COVERED "BIBLE".

WHY A COHERE COHERED AND WHAT IT COHERED SEEMED EASY ENOUGH TO UNDERSTAND. WHAT THE MAN SAID ABOUT DETECTORS SEEMED PLAUSIBLE. BUT I NEVER REALLY BELIEVED THAT ONE-HUNDRED-MILE TRANSFORMER COIL, ESPECIALLY AFTER SEEING ONE. I DISTINCTLY REMEMBER FROWNING UPON TELEPHONE RECEIVERS WOUND WITH GERMAN SILVER WIRE IN ORDER THAT THEY MIGHT TRUTHFULLY BEAR THE MAGIC LEGEND "3000 OHMS" BECAUSE I KNEW, FROM CERTAIN EXPERIENCES WITH TOY MOTORS, THAT RESISTANCE ITSELF WAS NOT WHAT MADE THEM WORK.

THE CALL OF SCIENCE.....THEN CAME A PERIOD OF SERIOUS STUDY. ROBISON'S MANUAL DISPLACED THE OLD CATALOGS AND A FIRM IDEA OF DECREMENT (NOW A SELDOM-HEARD WORD) PLANTED ITSELF-SO FIRM-INDEED, THAT WHEN SOME YEARS LATER, A PROFESSOR ASKED ME TO DEFINE LOGARITHMIC DECREMENT, I ALMOST ANSWERED "TWO TENTHS MAXIMUM!" AT THAT TIME, I TRIED TO BELIEVE THAT WIRELESS WAS AN EXACT SCIENCE AND THAT IF I WERE TO GET ANYWHERE, I WOULD HAVE TO BECOME AN EXACT SCIENTEE. THERE WERE SOME DRAWBACKS TO THIS. THE ULTIMATE EXPLANATION OF A LOT OF THINGS SOON BOGGED ME DOWN IN THE MIRE OF MATHEMATICS, WHICH, AT THAT TIME WAS LARGELY SOMETHING TO BE "PASSED" IN SCHOOL. I CAME TO EARTH AGAIN WHEN I REALIZED THAT I COULD AND DID COMMUNICATE WITH ANOTHER AMATEUR ACROSS TOWN WITHOUT THE AID OF ANY MATHEMATICS OF IMPORTANCE. I DIDN'T REALIZE THAT A THING COULD BE OBEYING PERFECTLY DEFINITE PHYSICAL LAWS EVEN THOUGH THE LAWS WERE NOT THOROUGHLY UNDERSTOOD, OR WERE, PER-CHANCE, EVEN UNKNOWN. IT SEEMED UNNECESSARY TO THINK VERY MUCH ABOUT THE ULTIMATE EXPLANATION OF THE GOINGS-ON SO LONG AS A CERTAIN FEEL CONCERNING THE THING WAS HAD. THIS STATE OF MIND MADE WIRELESS A PLEASURE TO ME, WITH ALWAYS THE THOUGHT IN THE BACKGROUND THAT THE MYSTERIES WOULD ULTIMATELY DISSOLVE, TO BE PLEASANTLY REPLACED BY DEEPER ONES. IN THE MEANTIME, I WOULDN'T WORRY TOO MUCH ABOUT THEM.

VECTORS AND THINGS.....So, UP TO THIS TIME, MATHEMATICS DID NOT SERIOUSLY ENTER THE PICTURE. I HAD A GOOD UNDERSTANDING OF RESONANCE PHENOMENA, THANKS TO CERTAIN ANALOGIES, BUT MY UNDERSTANDING WAS NOT A MATHEMATICAL ONE. I HAD NEVER HEARD OF A VECTOR DIAGRAM. IT JUST SEEMED THE MOST NATURAL THING IN THE WORLD FOR A CIRCUIT TO RESPOND MORE READILY TO SOME WAVELENGTHS THAN TO OTHERS. IMPEDANCE AND INDUCTANCE? I DIDN'T KNOW EXACTLY WHAT THESE PONDEROUS TERMS MEANT; I RATHER FELT THEIR IMPORT. I STILL DO. LATER STUDY OF ALTERNATING CURRENT PHENOMENA AND THEORY INTERPRETED THINGS IN A DIFFERENT LIGHT. I STILL REFUSED, NEVERTHELESS, TO ACCEPT THE MATHEMATICAL AS THE ONLY WAY OF THINKING. I NOW ADMIT THAT THERE ARE SOME THINGS WHICH I CAN EXPLAIN SATISFACTORILY ONLY WITH THE AID OF MATHEMATICS AND WITH MATHEMATICS ONLY. AND PLENTY WHICH I CAN'T EXPLAIN AWAY, NOHOW!

AS I PROGRESSED IN THE ART, SO THE ART ITSELF PROGRESSED AND, IT SEEMS, AT A MUCH FASTER RATE. FROM TIME TO TIME I FOUND MYSELF WOEFULLY BEHIND THE TIMES. TECHNICAL PAPERS BEGAN TO APPEAR ON MY HORIZON-PAPERS WHICH, TO ME DEFIED UNDERSTANDING. ONCE IN A WHILE SOME BRILLIANT AND INSPIRED AUTHOR WOULD COME ACROSS WITH "THE DOPE"; WITH DIAGRAMS I COULD UNDERSTAND-LITTLE OR NO MATH - A CLEAR WORD PICTURE OF WHAT WENT ON - WHAT TO DO IN ORDER TO MAKE IT PERK. TO ME, SUCH INFORMATION WAS VASTLY MORE IMPORTANT THAN CUMBERSOME TECHNICAL PAPERS. I SHAMELESSLY ADMIT TO HAVING PERPETRATED AT LEAST ONE PAPER WHICH PROBABLY SCARED OFF A LOT OF HAMS FROM THE REALIZATION THAT THE THING WOULD ACTUALLY WORK. ...CON'T NEXT PAGE.....

"I CAN'T BE BOTHERED" CONT.....

THE OGRES AND BOGIES.....AND SO IN RECENT YEARS I HAVE BUILT UP A CERTAIN PHILOSOPHY REGARDING THIS HOBBY OF MINE. IT IS MY ALLADIN'S LAMP, CARRYING ME TO FAR-OFF COUNTRIES (PROVIDED THE KENNELLY-HEAVIDIDE LAYER IS RIGHT!) MY SERVANT TO CALL WITH THE SNAP OF A SWITCH. WHY BE DEPRIVED OF THE PLEASURE HIDDEN IN AMATEUR RADIO BY ALLOWING ITS OGRES AND BOGIES TO HOLD THE WHIP HAND? A HOBBY MUSN'T BE TAKEN TOO SERIOUSLY. MATHEMATICS HAS ITS PLACE IN THE SCHEME OF THINGS BUT IT SHOULDN'T BE ALLOWED TO BECOME THE MASTER OF HOBBY. IF A FELLOW WANTS TO THINK IN TERMS OF MATHEMATICS WHEN HE WINDS A CHOKE COIL, LET HIM. MAYBE HE LIKES TO. AFTER AWHILE WE GET SO THAT WE JUST WIND IT AND IT WORKS, ALTHOUGH MAYBE NOT THE FIRST TIME. WE KNOW ABOUT HOW MANY TURNS OF COPPER TUBING ARE GOING TO BE REQUIRED FOR A GIVEN JOB. EVEN THE MATHEMATICIAN GETS THAT WAY SOONER OR LATER. WITNESS HIS SOLUTION OF DIFFERENTIAL EQUATIONS; WHAT DOES HE DO? WHY, HE WRITES DOWN THE EQUATION AND TAKES A GOOD LOOK AT IT. HE THEN SAYS TO HIMSELF, "IT STRIKES ME THAT THE SOLUTION OF THIS EQUATION SHOULD BE SO-AND SO^U". SO HE BOLDLY WRITES DOWN A GOOD LOOKING SOLUTION. DOES HE SOLVE FOR IT? HE DOES NOT, HE STIFLES ANY QUALMS HE MAY HAVE AND JUSTIFIES HIS RASH ACT BY PUTTING IN A PROVISIO. HE SAYS "SO-AND-SO IS A SOLUTION PROVIDED SUCH-AND-SUCH - IS THE CASE. " SIMPLE, ISN'T IT?"

LET'S MAKE A TANK COIL.....THIS IS JUST THE KIND OF THING I DO WHEN I WANT TO MAKE A TANK COIL HIT THE FORTY-METER BAND. OH, I DON'T PRETEND TO GO TO THE MAT WITH SOME FORMULA BORN IN THE BUREAU OF STANDARDS HAVING TO DO WITH THE INDUCTANCE OF SOLENOIDS. I JUST TAKE DOWN THE OLD ROLL OF COPPER TUBING, REEL OFF A GOODLY LENGTH AND WIND IT AROUND THE NOW WELL-POLISHED PIECE OF IRON PIPE. WHEN I THINK I HAVE ENOUGH TURNS-MY SOLUTION OF THE PROBLEM OR EQUATION - I CUT THE REST OF THE TUBING OFF AND FINISH UP THE MECHANICAL DETAILS. CAN THIS BE THE RIGHT NUMBER OF TURNS? IT IS THE RIGHT NUMBER OF TURNS, PROVIDED I USE THE RIGHT CAPACITY IN MY TANK CONDENSER. HERE IS MY PROVISIO. OF COURSE, EXPERIENCE IS NECESSARY. TO GET EXPERIENCE IN THIS LITTLE MATTER, JUST WIND A FEW COILS FOR CERTAIN PARTICULAR JOBS. IT IS SOMETHING YOU CAN'T HELP ACQUIRING UNLESS YOU ARE A THIRD-DEGREE MORON.

OR AN ANTENNA.....ANOTHER CLASS OF, IT SEEMS TO ME, MISLED HAMS ARE THOSE WHO ARE HIDEBOUND IN THEIR NOTIONS CONCERNING PHYSICAL DETAILS. SOME OF THESE FELLOWS ARE PRONE TO MEASURE THE LENGTH OF THEIR ANTENNA TO THE FRACTION OF AN INCH. WHY DO THEY DO IT? PROBABLY BECAUSE SOMEONE TOLD THEM IT WAS THE THING TO DO OR BECAUSE THEY ARE USING TRICK ANTENNA AND FEEDER ARRANGEMENTS FOR ONE REASON OR ANOTHER. SOME FOLKS LIKE TO MAKE THINGS COMPLICATED. I'VE ALWAYS FELT THAT COMPLEXITY BORE RATHER DIRECTLY ON POSSIBLE TROUBLE. IN THE CASE OF MY OWN ANTENNA, DON'T ASK ME ITS EXACT LENGTH. I DON'T KNOW IT TO THE NEAREST FIVE FEET. FURTHERMORE, I DON'T EVEN CARE. THE OSCILLATIONS ON A RADIATING ANTENNA BEING OF THE STANDING WAVE VARIETY, THERE WILL BE A NODAL POINT ABOUT A QUARTER-WAVE AWAY FROM THE REMOTE END. IT CAN'T BE ANYWHERE ELSE FOR THAT FREQUENCY. IT ONLY REMAINS TO CHOOSE AND USE THE PROPER TYPE OF COUPLING BETWEEN THE ANTENNA AND TRANSMITTER TO MAKE THE CURRENT AT THIS POINT (OR ANY OTHER FIXED POINT, FOR THAT MATTER) HAVE A REASONABLE VALUE. WHEN THE RIG IS TUNED PROPERLY AND THE VARIOUS CIRCUITS ARE FUNCTIONING AS THEY SHOULD, I KNOW IT. NOT BY EXACT INSTRUMENTS (THOUGH I ADMIT A PLATE MILLIAMETER IS HANDY) BUT LARGELY BY THE FEEL OF THE THING. PROBABLY A LOT OF FACTORS ENTER INTO THIS; THE GRUNT OF THE HOME-MADE PLATE TRANSFORMER, THE COLOR OR LACK OF IT IN THE PLATES OF THE TUBES, SPARKING AT THE KEYING RELAY AND OTHER EQUALLY SILLY AND DIZZY THINGS. EVEN WITH THE MULTI-STAGE CRYSTAL TRANSMITTERS, I DECLINE TO MAKE A HARD JOB OF IT. A FLOCK OF PLATE MILLIAMMETERS SHOWS, AMONG OTHER THINGS, HOW UNSTABLE RADIO CIRCUITS CAN BE. THEY ARE THEREFORE USEFUL IN DETECTING FAULTY DESIGN AND CRUMBY WORKMANSHIP. BUT THEN AGAIN A NEON TUBE AND A FLASHLIGHT BULB INSERTED IN A SINGLE TURN OF WIRE WILL WORK WONDERS IN LINING UP A SET, ONCE THE FREQUENCY IS DETERMINED.

SPEAKING OF FREQUENCY, A PRECISION FREQUENCY-METER IS A THING OF BEAUTY AND JOY TO USE, PROVIDING THE DEGREE OF ACCURACY IS KNOWN. WE ARE EXHORTED TO KEEP CHECKING ITS CALIBRATION, LEST SOMETHING SHIFT ON US UNBEKNOWNST. PERSONALLY, I HAVEN'T SUCH A THING, NEVER HAVING FELT THE URGE TO FLIRT DANGEROUSLY WITH THE EDGE OF A BAND. A CALIBRATED RECEIVER, WITH EASILY-MADE AND FREQUENT CHECKS, SERVES FOR

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I CAN'T BE BOTHERED CONT.....

ALL PRACTICAL PURPOSES AND HAS THUS FAR STEERED MY SIGNALS IN THE PATHS OF RIGHTEOUSNESS. (IF I HAVE OCCASIONALLY EMITTED SIGNALS OUTSIDE THE BANDS ASSIGNED TO AMATEURS, I BELIEVE THE ERRORS WERE GROSS ONES, SUCH AS CATCHING THE THIRD HARMONIC OF AN AMPLIFIER INSTEAD OF THE SECOND, AS INTENDED.)

SLAVE OR MASTER?.....AND SO IT GOES. WHEN I BECOME A SLAVE TO RADIO THEORY, THEN RADIO WILL CEASE TO BE THE HOBBY THAT IT HAS BEEN AND IS. I AM WILLING TO ACCEPT (WITH RESERVATIONS) THE RESULTS OF THE SERIOUSLY-MINDED EXPERTS IN THE LABORATORIES. LET THE EXPERTS WORRY OVER SUCH MATTERS AS EXACT 100% MODULATION. IT DOESN'T MEAN ANYTHING IMPORTANT TO ME BECAUSE LITERALLY, IT IS A THEORETICAL PANACEA ONLY TO BE OBTAINED WITH CAREFULLY-CONTROLLED LABORATORY SET-UPS, PRECISION SOURCES OF SOUND AT EXACT DISTANCES FROM EXPENSIVE MIKES, JEALOUS SCRUTINY APPLIED TO GENERALLY INACCURATE METERS, FAITH IN THE PUBLISHED THEORY AND IN THE CONSTANCY OF TUBES. I OBJECT TO IT BECAUSE IF THE HAM TALKS IN ANYTHING EXCEPT AN ELECTRICALLY DRIVEN TUNING-FORK VOICE, SHIFTS HIS POSITION OR EVEN ACTS NATURALLY, HE EITHER HAS LESS THAN 100% MODULATION OR - HORRIBLE THOUGHT - THAT BOGEY, DISTORTION.

PERSONALLY, I CAN'T BE BOTHERED.

ITINERARY OF A MARCONI OPERATOR 1911 to 1915

By: CHARLIE ELLSWORTH WITU

SCIENTISTS ARE NOW DEVELOPING A METHOD TO RECORD RADIO SIGNALS THAT HAVE BEEN STORED IN "SPACE" SINCE THE CONCEPTION OF WIRELESS COMMUNICATION. PORTIONS OF RADIO PROGRAMS BROADCASTED OVER TWENTY YEARS AGO, HAVE ALREADY BEEN RECORDED FROM OUTER-SPACE AND IDENTIFIED.

IN FUTURE DEVELOPMENTS, SCIENTISTS MIGHT BE STARTLED TO HEAR A VOICE FROM OUTER-SPACE BROADCASTING, " I AM NOW FALLING WITHOUT A PARACHUTE AT ABOUT 200 FEET PER SECOND, OVER ROOSEVELT FIELD, LONG ISLAND, NEW YORK, ON AUGUST 18TH, 1929.

WHILE THIS EVENT WAS TAKING PLACE SOME 7000 PERSONS WERE ON THE FIELD WATCHING FOR THE PARACHUTE-JUMPER "BUDDY BUSHMEYER" A PROFESSIONAL JUMPER ASSIGNED TO ROOSEVELT FIELD. LT. JIMMY DOOLITTLE HAD TAKEN "BUDDY" UP 7000 FEET TO MAKE A LIVE DROP OF SOME 4000 FEET, BEFORE OPENING HIS CHUTE. DURING HIS LIVE DROP, "BUSHMEYER" VOICE COULD BE HEARD OVER THE FIELD PUBLIC-ADDRESS SYSTEM AND THE NATIONAL BROADCASTING SYSTEM HAD A PICK-UP ON THE FIELD TO BROADCAST THE VOICE OF THE PARACHUTE JUMPER OVER THE COAST-TO-COAST NETWORK. "BUSHMEYER" WAS TO TELL THE RADIO AUDIENCE HOW IT FELT TO FALL THRU SPACE.

CHARLES ELLSWORTH EMPLOYED AT ROOSEVELT AS PART TIME PILOT AND AIRCRAFT RADIO CONSULTANT, HAD BUILT A SMALL TRANSMITTER OF 3 WATTS ON 150 METERS, WITH THE ANTENNA SEWED IN THE SHROUD LINES OF THE CHUTE. THIS SMALL TRANSMITTER WAS LICENSED BY THE "FCC" AND CALL LETTERS OF WIOXT, ASSIGNED TO CHARLEY ELLSWORTH.

THIS BROADCAST EVENT WAS A COMPLETE SUCCESS, THRU THE FINE COOPERATION OF O.B. HANSON AND MR. MORRIS OF NBC. "BUSHMEYER" RECEIVED HUNDREDS OF LETTERS FROM ALL OVER THE UNITED STATES. THIS WAS THE FIRST TIME IN HISTORY THAT A MANS VOICE WAS HEARD BY RADIO FALLING THRU SPACE. LT. JIMMY DOOLITTLE, ROOSEVELT FIELD PILOT, LATER BECAME A GENERAL IN THE U. S. AIR FORCE.

IT COULD BE SAID THAT I LEARNED THE CODE AT MY MOTHERS KNEE. AS A YOUNG GIRL IN CANSO, NOVA SCOTIA, MY MOTHER LEARNED THE CONTINENTAL CODE USED ON THE TRANS-ATLANTIC CABLES WHICH CAME ASHORE AT CANSO, NOVA SCOTIA. MOST OF THE TOWNSPEOPLE IN CANSO WORKED FOR THE CABLE COMPANY AND LEARNING THE CODE WAS AS COMMON AS LEARNING THEIR "ABC'S" IN SCHOOL. EARLY IN 1890, MY MOTHER MOVED TO GLOUCESTER, MASS., ALONG WITH HER SISTER WHO WAS ALSO A CABLE OPERATOR. THEY WORKED PART TIME AS CABLE OPERATORS AT THE CABLE STATION, ROCKFORD, MASS. JUST OUTSIDE OF GLOUCESTER. AFTER MARRYING MY FATHER, A SKIPPER SAILING OUT OF GLOUCESTER TO THE GRAND BANKS, MY MOTHER GAVE UP HER VOCATION AS CABLE OPERATOR. SHE TAUGHT ME THE CODE WHEN I WAS 8 YEARS OLD AND AS WE LIVED IN RIVERDALE, MASS. IN THE "RIGGS" HOUSE,

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I USED TO VISIT THE CABLE STATION AT ROCKPORT AND READ THE SOUNDERS, TO KEEP MY HAND IN. IN MAY 1911 AT THE AGE OF 16 YEARS, MY MOTHER AND I BOARDED THE PLANT LINE STEAMER, A.W.PERRY, FOR CHARLOTTETOWN, PRINCE EDWARD ISLAND TO BE NEAR MY FATHER, WHO WAS FISHING IN THE CANADIAN WATERS. IT WAS ON BOARD THIS VESSEL THAT I SAW MY FIRST WIRELESS STATION. THE WIRELESS OPERATOR WAS MY GOOD FRIEND, ARTHUR STOCKELLBURG WISS, WHO WAS VERY COURTEOUS AND EXPLAINED THE WORKINGS OF THE UNITED WIRELESS GEAR ON BOARD HIS SHIP. I WAS DEEPLY IMPRESSED AND DECIDED RIGHT THEN THAT I WOULD BE A WIRELESS OPERATOR AND GO TO SEA IN STYLE. AS ALL MY ANNCSTORS WERE SEA GOING THIS WOULD SATISFY MY DESIRE TO FOLLOW THEIR FOOT STEPS. AFTER WE SAILED THRU THE STRAITS OF CANSO AND NEAR CHARLOTTETOWN, "ART" FIRED UP THE TRANSMITTER AND GAVE HIS DOCKING TIME TO A AMATEUR RADIO STATION IN CHARLOTTETOWN, AS THERE WAS NO WIRELESS STATION IN CHARLOTTETOWN. THE AMATEUR OPERATOR WAS COL. KEITH ROGERS, WHO OPERATED THE FIRST HAM STATION ON PRINCE EDWARD ISLAND.

COL. KEITH ROGERS HAS LEFT US MANY YEARS AGO, BUT HE BUILT THE FIRST RADIO BROADCAST STATION ON PRINCE EDWARD ISLAND AND WAS A VERY CLOSE FRIEND OF MINE. ARTHUR STOCKELLBURG WISS, WAS REALLY THE PERSON WHO GOT ME INTERESTED IN WIRELESS FOR BETTER OR WORSE, AND ALTHOUGH WE NEVER MADE ANY MONEY, I STILL THANK "ART" FOR ALL THE GOOD TIMES AND EXPERIENCES IT BROUGHT ME. WHILE ON PRINCE EDWARD ISLAND THAT SUMMER I WAS OFFERED A JOB ON THE CANADIAN ICE BREAKER, "EARL GREY", TO MAKE A TRIP TO LABRADOR AND TAKE THE GOVERNOR GENERAL OF CANADA ON A SALMON FISHING TRIP WHO WAS THEN THE "EARL GREY". THE JOB WAS WASHING DISHES IN THE PASSENGER GALLEY. THE PAY WAS \$10.00 PER MONTH. AS THERE WAS NO DOCKING FACILITIES IN LABRADOR WE USED TO ANCHOR OFF SHORE AND THE GOVERNOR'S PARTY WOULD GO ASHORE IN MOTOR BOATS. AT NIGHT AFTER FINISHING MY CHORES IN THE GALLEY, I WOULD TAKE THE BREEZE..AND SHOOT THE BREEZE..WITH THE COAL PASSERS AND CREW ON THE AFTER HATCH. NONE OF US FLUNKYS WERE PERMITTED ABOVE THIS DECK, WHERE THE EARL GREY AND HIS GUESTS TOOK THEIR CONSTITUTIONALS. EVERY EVENING THE GOVERNOR GENERAL WOULD HAVE THE MARCONI OPERATOR "HENRY R. COOK", SEND WIRELESS MESSAGES TO BATTLE HARBOUR FOR FORWARDING TO "OTTAWA", GIVING OUR POSITION AND WHERE WE WOULD GO THE NEXT DAY AND OTHER INTERESTING INFORMATION. THE OPEN SPARK GAP IN THE WIRELESS ROOM COULD BE HEARD ALL OVER THE SHIP. AS A SORT OF SPECIAL INFORMATION SERVICE TO MY FRIENDS THE CREW, I WOULD READ THE TEXT OF THE MESSAGES TO THEM AND KEEP THEM UP TO DATE. SOME OF THE DECK OFFICERS HEARING OF THIS, JOINED OUR LISTENING PARTY.

SOME NIGHTS LATER CAPTAIN BROWN HEARD OF MY EVEDROPPING, IF IT COULD BE CALLED THAT, AND HAD CHIEF OFFICER "REID" BRING ME TO HIS CABIN. THE CAPTAIN TOOK A DIM VIEW OF MY ACTIVITIES, BUT ADMITTEDLY COULDN'T PUT ME ASHORE, THERE BEING NO PORTS HANDY, TO KEEP THE GOVERNORS GENERALS MESSAGES SECRET. OUTSIDE OF GIVING ME THE DEEP SIX, CAPTAIN BROWN COULD THINK OF NO OTHER SOLUTION THAN DETACHING ME FROM MY FRIENDS IN THE CREW. I WAS MOVED UP TO THE PROMENADE DECK AND ASSIGNED THE JOB OF POLISHING BRASS ON THE BRIDGE. MY PRIVILEGED STATUS INCLUDED A PASSENGER STATEROOM AND EATING MY CHOW IN THE OFFICERS MESS, AFTER THEY WERE FINISHED. I WAS WARNED ND TO COMMUNICATE WITH ANY OF THE CREW. IN RETURN FOR MY SILENCE, CHIEF OFFICER "REID" PROMISED TO HELP ME GET A JOB WITH CANADIAN MARCONI COMPANY, AND PUT MY TALENTS TO LEGITIMATE USE, WHEN THE SS EARL GREY REACHED MONTREAL.

WHEN WE FINISHED THE CRUISE ALONG THE LABRADOR COAST AND DOCKED IN MONTREAL TO DROP-OFF THE GOVERNOR-GENERAL AND HIS PARTY, THE CHIEF OFFICER, MR. REID, KEPT HIS PROMISE AND ARRANGED AN INTERVIEW FOR ME WITH THE TRAFFIC MANAGER OF CANADIAN MARCONI CO., A MR. G. H. PEARSON. ON AUGUST 1ST, 1911, I MADE MY FIRST APPLICATION FOR A JOB AS WIRELESS OPERATOR WITH THE CANADIAN MARCONI COMPANY AT THE AGE OF 16 YEARS. AFTER BEING SHOWN INTO MR. PEARSON'S OFFICE OF THE CANADIAN MARCONI CO. IN MONTREAL, CANADA, THE FIRST QUESTION ASKED WAS, COULD I READ THE WIRELESS CODE? AFTER TAPPING OUT A FEW LETTERS WITH HIS PENCIL ON HIS DESK, HE WAS SATISFIED THAT I COULD READ THE CODE. MR. PEARSON ADVISED ME, HE THOUGHT I WOULD BE TOO YOUNG

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TO MEET THE ISOLATED LIVING CONDITIONS ON SOME OF THEIR WIRELESS STATIONS, PARTICULARLY IN THE NORTH. WHEN HE SAW, I LOOKED DISAPPOINTED, HE THEN TOLD ME SHOULD WE HIRE YOU, YOU WILL BE THE YOUNGEST WIRELESS OPERATOR WE EVER EMPLOYED. I WAS THEN TOLD TO REPORT TO A MR. WHITESIDES, AT THEIR MONTREAL COASTAL STATION ON TARTE PIER, MAISONNEUVE, WITHIN THE CITY LIMITS OF MONTREAL, FOR A CODE TEST. AFTER A SHORT RIDE ON THE TROLLEY CAR, WE ARRIVED AT THE TARTE PIER STATION. A MR. ARGUE WAS ALSO PRESENT ON THE STATION WHEN I ARRIVED. MR. ARGUE WAS ALSO A WIRELESS OPERATOR, BUT HAD BEEN MADE A RIGGER, WHICH WAS THE TITLE FOR MAINTENANCE MEN IN THOSE DAYS. THEY WERE BOTH VERY COURTEOUS AND OF COURSE I WAS VERY NERVEOUS. THEY HAD A BIG BUZZER, LOW FREQUENCY WITH TWO DRY CELLS AND AND A KEY THAT SEEMED LIKE IT WAS A FOOT LONG. AFTER THE TEST, WHICH WAS ONLY IN ONE CODE, I WAS ASKED TO TAKE A WALK AROUND THE PIER WHILE MR. WHITESIDES CALLED THE MARCONI OFFICE. I WAS CALLED BACK IN AND TOLD THAT I WAS NOW A FULL FLEDGED WIRELESS OPERATOR AND WOULD BE STATIONED AT THE TARTE PIER STATION, MONTREAL AT \$35.00 A MONTH. I WAS ALSO TOLD WHERE I COULD GET ROOM AND BOARD NEAR BY FOR \$3.00 A WEEK. THE MONTREAL, MARCONI STATION CALL WAS "MTL" IN THOSE DAYS AND WAS EQUIPPED WITH A 2 KW STRAIGHT GAP SPARK TRANSMITTER. OUR RECEIVING EQUIPMENT CONSISTED OF A MAGNETIC DETECTOR, A PLUG IN ANTENNA TUNER AND PAIR HEAD PHONES. THE PRINCIPAL PURPOSE OF THIS STATION WAS TO COMMUNICATE WITH TRANS-ATLANTIC LINERS ARRIVING AND DEPARTING FROM MONTREAL, DURING THE SUMMER MONTHS WHEN NAVIGATION WAS OPEN.

OUR OTHER OFFICIAL POINT OF CONTACT WAS "THREE RIVERS" "MUA" WHERE A MR. FRASER WAS THE WIRELESS OPERATOR. WE WOULD, WHEN CONDITIONS WERE GOOD, CONTACT THE STATION IN "QUEBEC CITY" AND EXCHANGE WEATHER REPORTS.

WHEN ON THE EVENING WATCH AND UNDER WHAT WE CALLED FREAK CONDITIONS, WE WOULD CONTACT "HA" CAPE HATTERAS, "AX" ATLANTIC CITY, AND "HR" SOUTH FERRY, NEW YORK CITY. ALL ON SPARK EMISSION.

THE ST. LAWRENCE USUALLY CLOSED TO NAVIGATION AROUND THE MIDDLE OF NOVEMBER AND THE TRANS-ATLANTIC LINERS WOULD ALL DOCK IN HALIFAX AND NEW YORK DURING THE WINTER MONTHS. AFTER THE FIRST OF NOVEMBER THE MONTREAL, MARCONI STATION WAS PUT ON A PART TIME BASIS, WITH ONLY ONE OPERATOR AND OPEN DURING DAY LIGHT HOURS, WHEN THE GOVERNMENT ICE BREAKER WAS OPERATING. AS THE MARCONI STATION WAS ONLY AUTHORIZED ONE WIRELESS OPERATOR IN WINTER, I WAS ORDERED TRANSFERRED FROM MONTREAL TO GROSSE ISLE, QUEBEC. ON MY LAST DAY OF DUTY AT THE MONTREAL STATION ON NOVEMBER 15TH, 1911, I WAS DUE TO OPEN THE STATION AT 7 AM. THE LAST SHIP LEAVING MONTREAL WAS TO SAID THAT MORNING AT 7 AM FOR LIVERPOOL, ENGLAND. WHEN I ARRIVED ON THE PIER IT WAS SNOWING VERY HEAVY AND WHILE OPENING THE DOOR OF THE WIRELESS STATION I COULD HEAR A VOICE COMING THRU THE SNOW FROM THE RIVER, CALLING "WIRELESS STATION". IT WAS FROM THE BRIDGE OF THE STEAMER "TUNISIAN" CALL "MTN" WHICH HAD RAN AGROUND ON SHORE OFF TARTE PIER. THE "TUNISIAN" WIRELESS OPERATOR WANTED TO TALK WITH ME TO GET HELP BY TUG BOATS. THE STEAMSHIP "TUNISIAN" WAS ONLY ABOUT $\frac{1}{4}$ MILES FROM THE END OF THE PIER. I GOT ON THE WIRELESS AND TOOK THE MESSAGES FROM THE "TUNISIAN" AND DISPATCHED THE TUG BOATS, WHO PULLED HER OFF THE SAND BAR. THE WIRELESS OPERATOR ON THE SS "TUNISIAN", STANLEY BROWN, WHO IN LATER YEARS BECAME THE CHIEF RADIO OPERATOR OF THE CUNARD LINER "QUEEN MARY" WROTE MY EMPLOYERS THE CANADIAN MARCONI WIRELESS TEL. CO. A NICE LETTER OF THANKS. STANLEY BROWN AND I BECAME VERY CLOSE FRIENDS WHEN WE MET IN NEW YORK CITY MANY YEARS LATER. HE RETIRED FROM THE SEA AFTER 52 YEARS AS A SEA GOING WIRELESS OPERATOR.

AFTER ARRIVING IN QUEBEC CITY PQ AND REPORTING TO MR. CLEGG OF THE MARCONI CO. ARRANGEMENTS WERE MADE FOR THE CANADIAN GOVERNMENT ICE BREAK "LADY LAURIER" TO TAKE ME TO "GROSSE ISLE" AN ISLAND ABOUT 20 MILES SOUTH OF THE CITY OF QUEBEC AND LOCATED IN THE MIDDLE OF THE ST. LAWRENCE RIVER. THE ISLAND WAS ABOUT 1 MILE

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LONG. IN THE SUMMER SEASON WHEN NAVIGATION ON THE RIVER WAS OPEN, GROSSE ISLE WAS BEING USED AS A QUARANTINE STATION WHERE IMMIGRANTS COMING TO CANADA FOR RESIDENCE WERE TAKEN ON THE ISLAND FOR PHYSICAL EXAMINATIONS.

THE SMALL WIRELESS STATION WAS THE ONLY MEANS OF CONTACT WITH THE MAIN LAND. THE POPULATION IN WINTER TIME CONSISTED OF ABOUT 200 PERSONS. THE WIRELESS STATION WAS EQUIPPED WITH A TEN INCH SPARK COIL, MAGNETIC DETECTOR, KEY AND HEAD PHONES. A KEROSENE ENGINE WAS USED TO KEEP THE STORAGE BATTERIES CHARGED WHEN USING THE TEN INCH COIL, AS A TRANSMITTER. WEEKLY TRIPS TO THE MAINLAND FOR MAIL ETC. WAS MADE BY HAULING A SMALL BOAT WITH RUNNERS ON IT OVER THE ICE AND USED WHEN THERE WAS OPEN WATER, FOR SOME 12 MILES, EACH WAY.

AFTER SPENDING THE WINTER ON "GROSSE ISLE", WITH L. J. CHEVRON, I WAS RELIEVED ON APRIL 1ST, 1912, BY A JIM COLLINS, AND TRANSFERRED TO CAPE RAY, NEWFOUNDLAND, FOR TEMPORARY ASSIGNMENT AND FINAL TRANSFER TO POINT RICH, NEWFOUNDLAND. AFTER WALKING MOST OF THE WAY FROM THE NARROW GAUGE RAILROAD STATION, OVER A ROUGH ROAD, I FINALLY REPORTED IN TO MR. RENNIE, AT CAPE RAY "MCR", ON APRIL 6TH, 1912. OPERATOR "RENNIE" WAS TO GO TO PORT NELSON, HUDSON BAY WITH OPERATOR CRAIG, WHERE THE CANADIAN MARCONI CO. WAS BUILDING A WIRELESS STATION FOR THE RAILROAD TERMINAL. OPR. RENNIE'S TRANSFER WAS DEFERRED, DUE TO THE STEAMER "BONNEVENTURE", THAT WAS A SUPPLY BOAT FOR THE HUDSON BAY PROJECT, BEING IN DRY DOCK. MY TRANSFER THEN BECAME SURPLUS AND I WAS NOT NEEDED AT CAPE RAY STATION. HOWEVER, THE ROAD WAS IMPASSABLE FROM THE LIGHTHOUSE TO THE NARROW-GAGE RAILROAD STATION AND IT WAS DECIDED I WOULD REMAIN AT "MCR" AND STAND A WATCH UNTIL I COULD GET OUT. THIS ISOLATION AT CAPE RAY, NEWFOUNDLAND, AFFORDED ME A GRAND STAND SEAT, TO ALL THE WIRELESS COMMUNICATIONS OF THE R.M.S. "TITANIC" "MGY", DISASTER ON APRIL 14, 1912. THE STEAMER "TITANIC" POSITION WAS ONLY 428 MILES EAST SOUTHEAST OF CAPE RAY WHEN SHE TRANSMITTED "CQD". MANY WIRELESS OPERATORS ALL THE WAY FROM JUPTIER FLORIDA, US NAVAL RADIO STATION, TO CAPE RACE, NFLD. HEARD THE "TITANIC" CQD CALL WHEN SHE WAS USING HER 240 CYCLE 2 KW ROTARY SPARK TRANSMITTER. NO INDIVIDUAL WIRELESS OPERATOR COULD CLAIM SOLE PARTICIPATION IN WIRELESS COMMUNICATION OF THIS DISASTER, THERE WERE SO MANY INVOLVED. EVEN GENERAL DAVE SARNOFF OF THE WANAMAKERS STORE IN NEW YORK CITY "WHE" INTERCEPTED ALL THE TRAFFIC ON THIS DISASTER AS WELL AS MANY MORE. A LOT OF GOOD THINGS COULD BE SAID ABOUT THE HANDLING OF DISTRESS AND RESCUE TRAFFIC, AND A LOT OF SORDID THINGS COULD BE SAID AND IT IS BETTER TO LET IT BE BURIED WITH THE SHIP. ONE WIRELESS OPERATOR WHO SHOULD BE MENTIONED AS OUTSTANDING IN HIS OPERATING ABILITY WAS OPR. GRAY OIC OF CAPE RACE. HE SEEMED TO BE THE ONLY OPERATOR QUALIFIED TO HANDLE THE TREMENDOUS AMOUNT OF TRAFFIC AT THAT STATION.

BEFORE CONCLUDING THE "TITANIC" EPISODE WE SHOULD TAKE THIS OPPORTUNITY FOR THE INTEREST OF THOSE WHO STILL DISCUSS THE RADIO COMMUNICATION PART OF THIS DISASTER WITH IMMETHODICAL INFORMATION, AND FACTS. THEY SHOULD READ A ARTICLE WRITTEN IN THE "CHICAGO DAILY NEWS" ON APRIL 14TH, 1962, IN WHICH A MR. STONEMAN, OF THE LONDON TIMES WROTE, SEVERLY CRITICISING THE MARCONI WIRELESS OPERATORS ON THE COASTAL STATIONS INVOLVED IN THIS EVENT. THIS WAS TAKEN FROM THE RECORDS OF "LLOYD'S", IN LONDON.

IT SHOULD ALSO BE MENTIONED THAT NO ONE MARCONI OPERATOR, CAN CLAIM SOLE PARTICIPATION IN HANDLING THE RADIO COMMUNICATIONS OF THIS MARINE DISASTER ON SHORE. SOME 40 MARCONI OPERATORS ON ATLANTIC COASTAL STATIONS ALL COPIED THE "TITANIC" DISTRESS CALLS, EVEN AS FAR SOUTH AS FLORIDA. BUT NONE COULD DO ANYTHING ABOUT IT AT THAT TIME AS THERE WERE NO WIRELESS OPERATORS ON DUTY ON THE SHIPS THAT WERE CLOSE BY THE "TITANIC".

MAYBE SOME DAY SCIENTIST WILL HAVE DEVELOPED THEIR RESEARCH OF RECORDING, ALL RADIO TRANSMISSIONS, THAT THEY CLAIM ARE NOW STORED IN SPACE, SINCE THE CONCEPTION OF "RADIO", AND WITH THE RECORDINGS THEY HAVE ALREADY MADE, THE TRUE STORY OF THE "TITANIC" MAY THEN BE TOLD.

NEWS ABOUT MEMBERS



HALLICRAFTERS' FACTORY REPRESENTATIVES PRESENT BILL HALLIGAN, W9AC, WITH A WRIST WATCH AND SCROLL COMMEMORATING HIS 50 YEARS IN RADIO. FROM LEFT TO RIGHT: TIM COAKLEY, WIKKP, FROM BOSTON, MASSACHUSETTS, MR. HALLIGAN AND JERRY COLE, W9MK, FROM CHICAGO, ILLINOIS.

IN RECOGNITION OF HIS FIFTY YEARS IN ELECTRONICS AND HIS 64TH BIRTHDAY, WILLIAM J. HALLIGAN, W9AC, CHAIRMAN OF THE BOARD OF HALLICRAFTERS, A CHICAGO ELECTRONIC FIRM, WAS GIVEN A SURPRISE PARTY SPONSORED BY AMATEUR RADIO HAMS. APPROXIMATELY 75 PEOPLE ATTENDED THE PARTY. MANY OF THEM WERE ASSOCIATED WITH MR. HALLIGAN IN HIS EARLY DAYS OF RADIO AND THE FOUNDING OF HIS COMPANY.

HALLIGAN'S INTEREST IN ELECTRONICS FIRST BECAME EVIDENT AROUND 1913 WHEN HE AND SEVERAL OF HIS FRIENDS TRADED BOOKS ON THE SUBJECT OF WIRELESS AND GATHERED TOGETHER TO PRACTICE CODE. THE WELLFLEET, MASSACHUSETTS WEATHER STATION SIGNALS WERE USED TO GAIN CODE PROFICIENCY. AT THIS TIME HALLIGAN USED RECEIVERS OF HIS OWN DESIGN AND WOUND COILS ON CARDBOARD TUBES.

MR. HALLIGAN FOUNDED THE HALLICRAFTERS COMPANY IN 1933 WHEN HE RECOGNIZED SEVERAL BASIC NEEDS WITHIN THE THEN EMBRYO ELECTRONICS INDUSTRY. IN HIS ENDEAVOR TO SERVE THE RADIO AMATEUR, MR. HALLIGAN'S COMPANY DESIGNED THE HT-4 TRANSMITTER AND THE SX-28 RECEIVER. AT THE ONSET OF WORLD WAR II, THE ARMED FORCES WERE IN URGENT NEED OF A POWERFUL TRANSMITTER IN A SMALL RUGGED PACKAGE. THE HT-4 AND THE SX-28A BECAME THE FAMOUS SCR-299, SCR-399, AND THE BC-610. TRANSMITTERS PRIOR TO THE HT-4 WERE GENERALLY SIX FEET HIGH AND WEIGHED NEARLY TWO TONS.

THE COMPANY TODAY IS THE PRINCIPAL CONTRACTOR OF THE U.S. AIR FORCE PROGRAM ENTITLED QUICK REACTION CAPABILITY. IT IS ALSO A KEY SUPPLIER TO ALL MILITARY DEFENSE AGENCIES FOR ELECTRONIC COUNTERMEASURES, COMMUNICATIONS AND MANY HIGHLY CLASSIFIED PRODUCTS. THE COMPANY MANUFACTURES THE LOWERY ORGAN AND HAS RECENTLY MOVED INTO THE CITIZENS BAND FIELD AND FM TWO-WAY COMMUNICATIONS. IT HAS RETAINED ITS LEADERSHIP IN THE FIELDS OF AMATEUR RADIO AND SHORT WAVE LISTENING EQUIPMENT.



MR. GUNTHER, W2ALS, ELEVATED TO GRADE OF FELLOW

REL PRESIDENT FRANK A. GUNTHER HAS BEEN ACCORDED A DISTINCT HONOR IN BEING ELEVATED TO THE GRADE OF FELLOW BY THE IEEE, THE LARGEST PROFESSIONAL ENGINEERING SOCIETY IN THE WORLD.

MR. GUNTHER WAS AMONG 118 IEEE MEMBERS AROUND THE WORLD TO BE SO HONORED RECENTLY.

THE AWARDING OF FELLOWSHIPS WAS ANNOUNCED BY THE BOARD OF DIRECTORS OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS ON THE BASIS OF INDIVIDUAL "EMINENCE AND DISTINGUISHED SERVICE." THE GRADE OF FELLOW IS THE HIGHEST IN THE 150,000 MEMBER IEEE AND IS AWARDED ANNUALLY TO A SELECT NUMBER OF INVITED MEMBERS WHO HAVE ACHIEVED HIGH PROFESSIONAL STANDING.

AT THE ANNUAL FELLOW AWARDS DINNER OF THE NEW YORK SECTION OF THE IEEE ON JANUARY 8TH, AT THE SHERATON EAST HOTEL, MR. GUNTHER WAS PRESENTED WITH HIS NEW GRADE ALONG WITH 12 OTHER MEMBERS WHO BELONG TO THE LOCAL SECTION.

IN ADDITION TO THIS MOST RECENT HONOR, MR. GUNTHER IS A FELLOW AND PAST PRESIDENT OF THE RADIO CLUB OF AMERICA (THE OLDEST RADIO SOCIETY IN THE WORLD). A DIRECTOR AND PAST PRESIDENT OF THE ARMED FORCES COMMUNICATIONS AND ELECTRONICS ASSOCIATION, AN HONORARY DIRECTOR OF THE SINGLE SIDEBAND AMATEUR RADIO ASSOCIATION AND A DIRECTOR OF THE ARMSTRONG MEMORIAL RESEARCH FOUNDATION. HE ALSO HOLDS MEMBERSHIP IN THE QUARTER CENTURY WIRELESS ASSOCIATION, THE OLD OLD TIMERS CLUB, AND THE VETERAN WIRELESS OPERATORS ASSOCIATION.

MR. GUNTHER IS ALSO A MEMBER OF THE NATIONAL INDUSTRY ADVISORY COMMITTEE OF THE FCC, SERVING ON THE AMATEUR RADIO SERVICES SECTION.

STORIES

EARLY WIRELESS HERO IN WORLD WAR I

By ALBERT EDWIN SONN - W2GC

IT WAS A BITTER COLD NIGHT IN THE WINTER OF 1917, AND ICE FROZE ALL OVER LONG ISLAND SOUND WITH CAKES 18 INCHES IN THICKNESS. THE WEATHER WAS SLIGHTLY SNOWY AND A FAINT DAWN-BREAK LIGHT CAME UP OVER THE EASTERN HORIZON. EVERYTHING WAS QUIET AT THE RADIO STATION AT FORT TOTTEN, L.I. AND ONE COULD HEAR THE FOOTSTEPS OF AN OCCASIONAL RAT LOOKING FOR FOOD, AND IT WAS DIFFICULT TO KEEP WIDE AWAKE AND EVEN THE POT STOVE GOT GROGGY AND THE FIRE HAD DIED DOWN.

THE ARMY REQUIRED TWO WIRELESS OPERATORS TO BE ON DUTY 24 HOURS A DAY TO KEEP TRACK OF ANY STRAY CODE MESSAGES THAT PASSED BY OUR WAY NOW AND THEN. WE HAD TO REPORT EVERYTHING WE HEARD ON A LOG SHEET. BESIDES, WE WERE GIVEN STRICT ORDERS NOT TO GO ON THE AIR UNLESS INSTRUCTED BY THE CAPTAIN IN CHARGE OF OUR DETAIL. THE ASSISTANT OPERATOR GOT UP FROM HIS EASY CHAIR TO PUT A FEW COALS ON THE FIRE IN THE POT STOVE. I WAS HALF ASLEEP BUT ANY CODE COMING OVER THE EARPHONES WOULD RENEW MY HALF-AWAKE POSITION.

THE AIR WAVES WERE VERY QUIET AT THAT TIME OF THE MORNING AND AN OCCASIONAL BURST OF STATIC WOULD JOLT ONE INTO CONSCIOUSNESS FOR A FEW MOMENTS.

ABOUT 5 A.M. SOMEONE STARTED TESTING ON SPARK WHICH WAS RATHER ROUGH IN CHARACTERS AND UN-READABLE BUT IT LATER CLEARED UP A BIT AND SOMEONE WAS ACTUALLY SENDING. THINKING IT MAY HAVE COME FROM A SUB-MARINE OF WHICH THERE SEVERAL ALONG THE COAST, I PAID NO ATTENTION TO IT. PERHAPS I WAS HALF ASLEEP ANYWAY AND NEVER EXPECTED TO HEAR ANY STATIONS ON THE AIR WAVES AT THAT UNGODLY HOUR OF THE MORNING. BUT FINALLY THE TRANSMISSIONS BECAME INTELEGIBLE..IT WAS ACTUALLY COMING FROM SOMEWHERE. GLUING THE PHONES CLOSER TO MY HEAR I LISTENED INTENTLY. BY GOLLY IT WAS A DISTRESS CALL, QD, OR WHAT EVER IT WAS THOSE OLD DAYS. REALIZING THAT WE HAD BEEN GIVEN STRICT ORDERS NOT TO OPEN UP THE TRANSMITTER IN THE BASEMENT OF THE SHACK, I REALLY WAS STUMPED ON WHAT TO DO NEXT. I AWAKENED THE OTHER OPERATOR WHO WAS STILL IN DREAMLAND AND WITH A SNORT HE CAME TO LIFE AND WHATED TO KNOW WHAT IT WAS ALL ABOUT AND WHY HIS HALF-SLUMBER HAD BEEN DISTURBED.

"OH, GO TO SLEEP AGAIN, YOU'ER DREAMING," HE PIPED OUT AND WITH THAT HE FELL HALF ASLEEP AGAIN. I SHOOK HIM AGAIN AFTER HEARING THE CALL AGAIN. THE CALL WAS BECOMING MORE DISTINCT, SURE ENOUGH IT WAS A DISTRESS CALL NOW MORE DETERMINED THAN EVER. AGAIN I SHOOK MY ASSISTANT AND THIS TIME I LET HIM HEAR HIMSELF. DROWSLEY HE CAME TO LIFE ONCE MORE. "YOU ARE RIGHT, WHY DON'T YOU ANSWER IT?" "YOU KNOW THE WAR RULES," I SAID, "WE'LL GO INTO THE BRINK IF WE DO". WE TALKED IT OVER WHILE THE SHIP'S OPERATOR WAS TRYING TO RAISE NAH AT THE BROOKLYN NAVY YARD. WE THEN DECIDED THAT THE CALL WAS CALL WAS COMING FROM A LEGITIMATE SOURCE AND WE CALLED THE NAVY YARD BY TELEPHONE AND AFTER A LONG DELAY, GOT AN ANSWER. THE NAVY MAN TICHELED HIS CATSWISKER BUT NO SIGNALS.

"WHAT DID YOU HAVE TO DRINK LAST NIGHT," HE SAID "GO BACK TO BED AND FINISH YOUR NAP, AND DON'T DISTURB US AGAIN". HE CONCLUDED BY SAYING, "IF YOU THINK IT'S HOT, WHY NOT ANSWER IT." I WAS GETTING DISTURBED TO SAY THE LEAST.

THE SHIP WAS CALLING AGAIN. WE GOT HIS CALL LETTERS AND LOCKED THEM UP IN AN OLD BATTERED CALL BOOK WE FOUND AFTER MUCH SEARCHING. SURE ENOUGH THERE WAS THE CALL LISTED AS A SOUND STEAMER THE "NORTH STAR" ON ITS WAY DOWN FROM PORTLAND, MAINE, WE LEARNED AFTER.

ON WENT THE MASTER SWITCH TO OUR GENERATORS AND THE ONE WHICH WAS WORKING WHIRRED GLEEFULLY AS IF TO SAY, "GOOD WORK AFTER ALL THESE IDLE MONTHS, HOW CAN I SERVE YOU?" AFTER TESTING TO WARM UP THE QUENCHED GAP A BIT, I WENT ON THE AIR, CALLED THE SHIP AND THERE WAS A NERVOUS HANDLING OF BOTH KEYS.

....CON'T NEXT PAGE....

EARLY WIRELESS HERO IN WORLD WAR ICON'T.....

WE LEARNED FROM THE OPERATOR THAT THE SHIP'S STEWARD WAS INSTRUCTED BY THE CAPTAIN TO SEND THE DISTRESS CALL AS THE OLD SHIP WAS FAST IN THE ICE AND WAS ABOUT TO BE CRUSHED WITH POSSIBLE LEAKS. THE SOUND WAS ABOUT 200 FEET DEEP AT THAT POINT. WE ALSO LEARNED THAT THERE WERE PERHAPS 350 PASSENGERS ABOARD AND THEY WERE ALMOST OUT OF FUEL AND HAD NO PROVISIONS ABOARD TO FEED THE PASSENGERS WHO EXPECTED TO EAT IN NEW YORK CITY WHEN THE BOAT DOCKED LATER IN THE DAY.

THE NAVY YARD WAS ON THE PHONE AT THIS TIME. NO SIGNALS FROM THE STEAM SHIP COULD BE HEARD DOWN THERE ABOUT 15 MILES AWAY, SO THE OPERATOR BY THIS TIME WIDE AWAKE AFTER REPEATED PHONE CALLS, TOLD US TO HANDLE THE TRAFFIC AND THE NAVY WOULD FIRE UP A TUG TO ACT AS AN ICE BREAKER BUT IT WOULD TAKE THREE HOURS TO REACH THE SHIP. SO BY THIS TIME IT HAD BECOME BRIGHTER AND WE COULD SEE THE SHIP OFF IN THE DISTANCE. TWO OF US AT THE FORT MANAGED TO RUN DOWN TO THE DOCK NOT FAR AWAY AND STEP ON THE ICE WHICH WOULD SUPPORT US EASILY. WE WALKED A GOOD MILE AND A HALF OVER THE ICE TO THE SHIP. WE HOLLERED UP TO DECK HANDS AND SOON THE RADIO MAN CAME DOWN THE LADDER FOLLOWED BY THE SHIP'S CAPTAIN. WE ALL SHOOK HANDS AND WENT ABOARD. EVERYTHING WAS AS REPORTED AND THE PASSENGERS WERE MILLING ABOUT AND LOOKING OVER THE SIDES INTO THAT BROAD EXPANSE OF ICE WHICH WAS CRACKING WITH THE COLD TEMPERATURE 17° BELOW ZERO. MANY OF THEM THOUGHT OF GOING DOWN ANY MINUTE, OR SPRINGING A BAD LEAK FOR SUCH A FRAIL STEAMER WHICH WASN'T BUILT FOR SUCH A NEAR TRAGIC FATE.

IN ABOUT FOUR HOURS THE TUGS CAME AND HISSED AND PUSHED AWAY PART OF THE ICE TO LET THE STEAMER TAKE OVER ITSELF. FINALLY THEY REACHED THE DOCK, PASSENGERS TIRED AND HUNGRY AFTER THEIR SEVEN HOURS LEFT TO THE FATE OF NATURE AND ITS Destructive ELEMENTS.

WITH THE EVENTS THAT FOLLOWED MY WIRELESS RESCUE STORY THINGS DID NOT END THERE FOR US, EVEN THOUGH THE STEAMSHIP LINE DID SEND US A THANK YOU LETTER.

AS STATED BEFORE ARMY STATIONS WERE NOT SUPPOSED TO BE IN EXISTANCE DURING THE WAR DAYS. THE STATIONS WERE FOR TRAINING SCHOOLS BUT PART OF THE SCHOOLING CALLED FOR REGULAR WATCH AT THE STATION. STRICT REGULATIONS WERE IN EFFECT. WE WERE ONLY SUPPOSED TO LISTEN IN AND REPORT ALL THAT WE HEARD. NEVER GO ON THE AIR, WE WERE TOLD. BUT WITH THAT GENERATOR NEARBY AND A SWITCHBOARD LOADED DOWN WITH METERS, WHAT HAN COULD RESIST THE TEMPTATION TO FIRE UP THE OLD QUENCHED GAP. SO WE DID BREAK REGULATIONS, SO WHAT?

NEXT MORNING AFTER THIS HETIC DAY THE PHONE RANG. IT WAS MY CAPTAIN BROWN, AND HE SOUNDED RATHER NASTY. "DON'T YOU KNOW THE ARMY'S REGULATIONS? WHO TOLD YOU TO GO ON THE AIR YESTERDAY?" BEFORE I COULD SAY ANOTHER WORD, HE SNORTED, "YOU FELLOWS ARE IN A JAM AND I AS YOUR CAPTAIN ARE GETTING ALL SORTS OF COMMENTS FROM MY SUPERIORS AS TO MY MEN BREAKING ARMY RULES. REPORT TO MY OFFICE AT ONCE AND BRING THAT OTHER OPERATOR WITH YOU." HE BANGED DOWN THE PHONE.

WELL, WHAT NOW? I GOT HOLD OF MY OTHER MAN AND TOLD HIM THE STORY. HE WAS MORE SCARED THAN I WAS.

"DO YOU THINK THEY WILL PUT US TO WORK CRACKING STONES AND SPENDING OUR OTHER HOURS IN THE COLD DIRTY PRISON CELLS?" HE SAID. I DID NOT KNOW WHAT TO SAY, I WAS DUMB-FOUNDED TO SAY THE LEAST. I PICTURED ALL SORTS OF MEAN THINGS ABOUT TO HAPPEN INCLUDING BEING SHOT AT SUNRISE. MY OTHER OPERATOR WAS SHAKING, "WHAT'S GOING TO HAPPEN US US? I HAVE A WIFE AND THREE KIDS."

AND ALL THIS BECAUSE WE BROKE AN OLD WARTIME ARMY REGULATION. I HAD TO ALMOST PUSH HIM UP THE WALK TO THE HEADQUARTERS BUILDING. WE FINALLY MADE IT. INTO THE CAPTAIN'S OFFICE WE WENT BUT HE WASN'T THERE.

"INTO THE OTHER ROOM", SHOUTED AN ARMY PRIVATE. I KNEW THEN AND THERE WE HAD TO FACE A COURT-MARTIAL TRIAL. I JUST COULD FEEL IT IN MY BONES. "GO ON IN", I SAID TO MY OPERATOR, WHO WAS VERY HESITANT ABOUT MOVING ON. THERE IN A ROOM FILLED WITH TOP BRASS INCLUDING A NUMBER SENT DIRECT FROM WASHINGTON, FOR THIS WAS A SERIOUS MATTER TO SAY THE LEAST. THERE BEFORE A BIG TABLE SAT THE COURT MARTIAL

.....CON'T NEXT PAGE.....

EARLY WIRELESS HERO IN WORLD WAR I..... CON'T.....

MEMBERS, ALL WITH BRASS SHOULDER PADS AND WAR WINNING MEDALS. HERE WE WERE AN ARMY SERGEANT WHO HAD SEEN LITTLE OF ARMY LIFE AND DID NOT KNOW THE SERIOUSNESS OF ITS RULES, AND A CORPORAL WHO WAS AN OLD TIMER BUT A RADIO MAN.

TWO OF US FACING THESE BIG MEN! SO WE ALL WERE SEATED AND THE CHARGES READ OFF; "THESE ARMY MEN HAVE BROKEN THE RULES OF SECRECY WHICH THEY WERE INSTRUCTED TO OBEY", HE WENT ON, AND THEN CAME THE BIG POW-WOW AS MANY VOICES WENT ON TO STATE THE REGULATIONS, ETC. WE WERE ABOUT TO BE SENT TO THE JUG FOR LIFE WITHOUT ANY PRIVILEGES HERE AFTER UNTIL THE END OF THE WAR. WHAT AN EVENT TO LOOK FORWARD TO! WELL, WE HAD HAD IT AND WE WERE IN DISPAIRE. THEY GAVE US A CHANCE TO TALK BUT LITTLE GODD IT DID DO US. WE HAD BROKEN THE RULES AND ADMITTED IT. WE WERE ALL PREPARED TO FACE THE WORST.

SUDDENLY MY CAPTAIN SPOKE UP....."GENTLEMEN, NOT THAT I AM HERE TO OFFER MY ALIBIES FOR MY TWO GOOD MEN, I AM HERE TO SAY THAT I AM BACK OF THEM FULLY. I THINK THEY DESERVE ALL THE CREDIT IN THE WORLD. SUPPOSE THIS SHIP HAD SUNK WITH ALL THOSE 350 PASSENGERS ON BOARD. AND AFTER HAVING SENT THE DISTRESS SIGNAL IT MIGHT LEAK OUT THAT ARMY REGULATIONS FORBADE US TO GO ON THE AIR. IT WOULD HAVE BEEN A HORRIBLE EVENT, WHICH COULD HAVE BEEN PREVENTED IF THERE WERE NO SUCH REGULATIONS. ASIDE FROM THIS I THINK THESE MEN SHOULD HAVE A MEDAL FOR THEIR BRAVE WORK."

THIS DIDN'T SATISFY THE MAJORITY OF THE BRASS, BUT SOME WARMED UP TO THE CAPTAIN BROWNS' REMARKS. THERE WAS A LOT OF UNDER-CURRENT AND MUMBLING. THEN THE CAPTAIN BROUGHT IN THE "SILENT WITNESS" - THE LETTER SENT BY THE STEAMSHIP COMPANY COMMENDING UPON THE GREAT WORK OF THE ARMY RADIO MEN AND THE STATION WHICH WAS SUPPOSED TO BE OFF THE AIR, AT ALL TIMES.

THERE WAS MORE UNDER-CURRENT AND MUMBLINGS. ALL WAS SILENT FOR A FEW MOMENTS...

THEN WE HEARD THE COMMANDENT SPEAK: "GENTLEMEN, I THINK THESE MEN SHOULD BE RECOMMENDED FOR A PROMOTION, CASE DISMISSED".

AND TWO HAPPY RADIO OPERATORS GATHERED THEIR CAPS AND COATS AND WENT BACK TO THE FORT TOTTEN RADIO STATION, RESUMED THEIR DUTIES, NOW TWO LOYAL SERGEANTS, AWAITING THE NEXT DISTRESS CALLS, AND HOPING THAT THEY WOULD BE ON DUTY TO SERVE AS HEROES ONCE MORE BY PERFORMING A HUMAN DUTY WHICH CALLED FOR ACTION DESPITE RULES AND ARMY REGULATIONS. YES, THEY WERE TOLD TO BE ON THE LOOKOUT FOR DISTRESS CALLS BUT TO BE AWARE OF THE FOXY SUBMARINES WHO ALSO WERE RADIO EQUIPPED.

THE END W2GC AL SONN

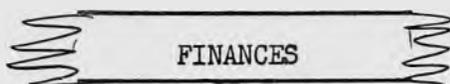
OOTC:

MARCH 13, 1964

MR. DAVID KAHN, WHO IS WRITING A BOOK ON THE HISTORY OF SECRET COMMUNICATION TO BE PUBLISHED BY MACMILLAN, HAS ASKED THE EDITOR OF SGT TO INQUIRE WHETHER ANY MEMBERS OF THE OOTC PLAYED A PIONEERING ROLE IN THE DEVELOPMENT OF SCRAMBLERS FOR RADIO-TELEPHONES..OR IN THE DEVELOPMENT OF RADIO SECRECY SYSTEMS OF ANY KIND, FOR THAT MATTER. IF YOU HAVE, OR EVEN IF YOU HAVE HAD JUST SOME INTERESTING PERSONAL EXPERIENCES WITH THESE DEVICES, OR WOULD YOU KNOW OF SOMEONE WHO HAS BEEN INVOLVED, HE WOULD APPRECIATE HEARING FROM YOU. HE WRITES THAT "MATERIAL OF THIS KIND LIVES ONLY IN HUMAN MEMORY, AND I WOULD LIKE TO PRESERVE AS MUCH OF IT AS POSSIBLE." HE HAS PROMISED THAT HE WILL REPLY PERSONALLY TO EVERY LETTER. HIS ADDRESS IS WINDSOR GATE, GREAT NECK, NEW YORK 11020.



Spark-Gap Times



FINANCES

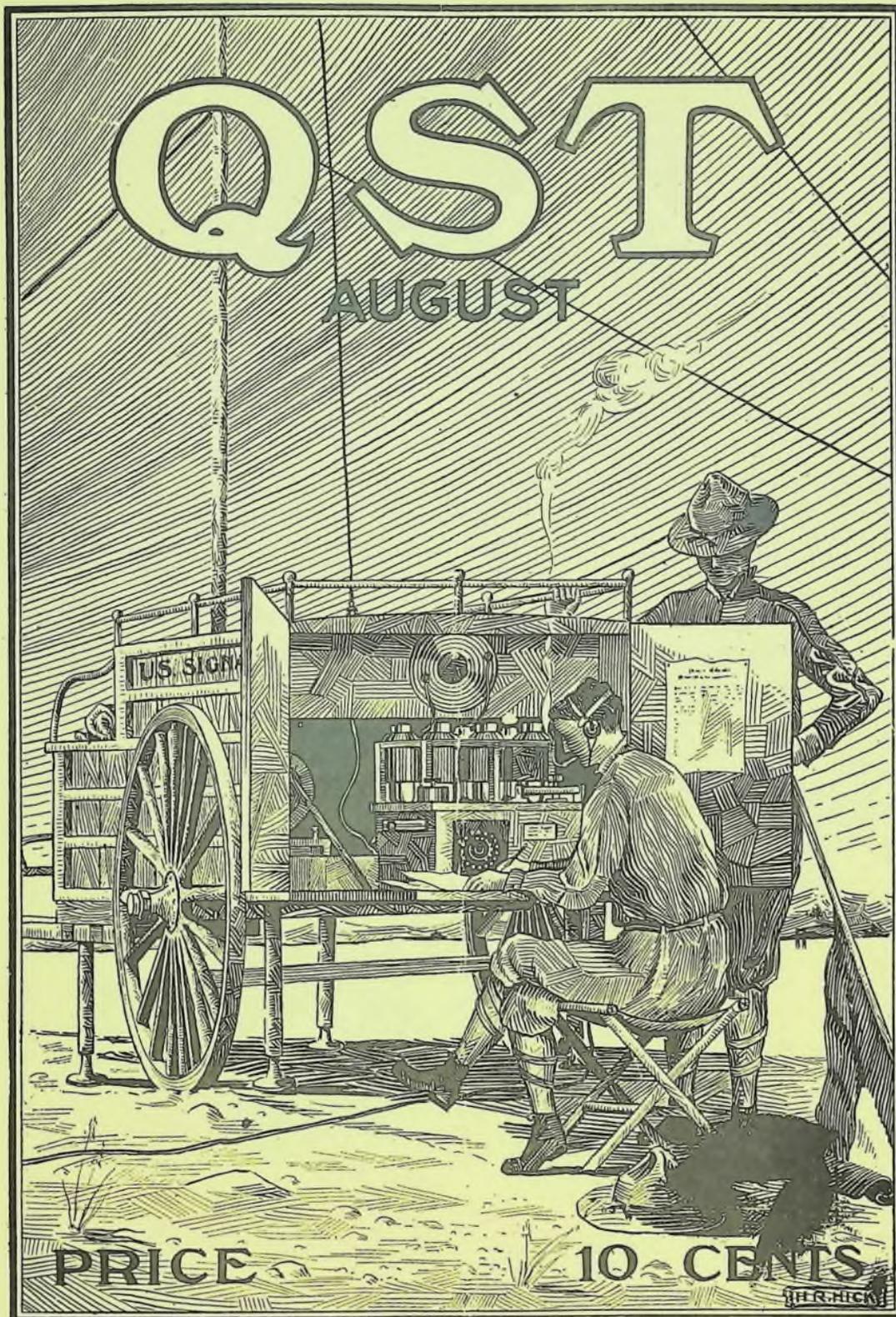
HERE IS APPROXIMATELY WHAT IT COSTS TO PUT OUT AN ISSUE OF SGT

9,755 Sheets of Paper @ \$ 3.32 /M	\$ 32.37
32 Paper Masters @ .10 each	3.20
3 Aluminum Plates @ .50	1.50
1 Tube Blue Ink	3.65
600 Covers	est 60.00
7 Negatives and Masking sheets	14.50
500 Mailing Envelopes	20.00
Bulk Shipment Chatta. to Baldwin, New York	5.49
Postage for mailing SGT to members	44.00
Typing 32 Paper Masters	25.00
Running time off-set press (7 hours)	70.00
Collating (3 hours)	6.00
Drilling and Stapling	6.00

TOTAL \$ 291.71



THE NOSTALGIC CORNER



August, 1916

QST

215

Who's Who in Amateur Wireless

Beginning with this issue we hope to publish each month two pictures of amateurs who have become known by call letters. This will draw us all closer together.

We often are curious as to just what the other fellow looks like; here's a chance to see.

Editor.



DEAN A. LEWIS

We are very fortunate to begin this department with a picture of Dean A. Lewis. Mr. Lewis lives in Northampton, Mass. and his station 1ZL is the most heard of one in all the U. S.

Mr. Lewis is 21 years of age and for the past year has been attending the University of Michigan. While he was there other operators were in charge of 1ZL. Mr. Lewis operated 8XA and had no trouble in communicating with his own station in Northampton. He has been a holder of a First Grade Commercial License for two years and has been interested in radio work for about five.

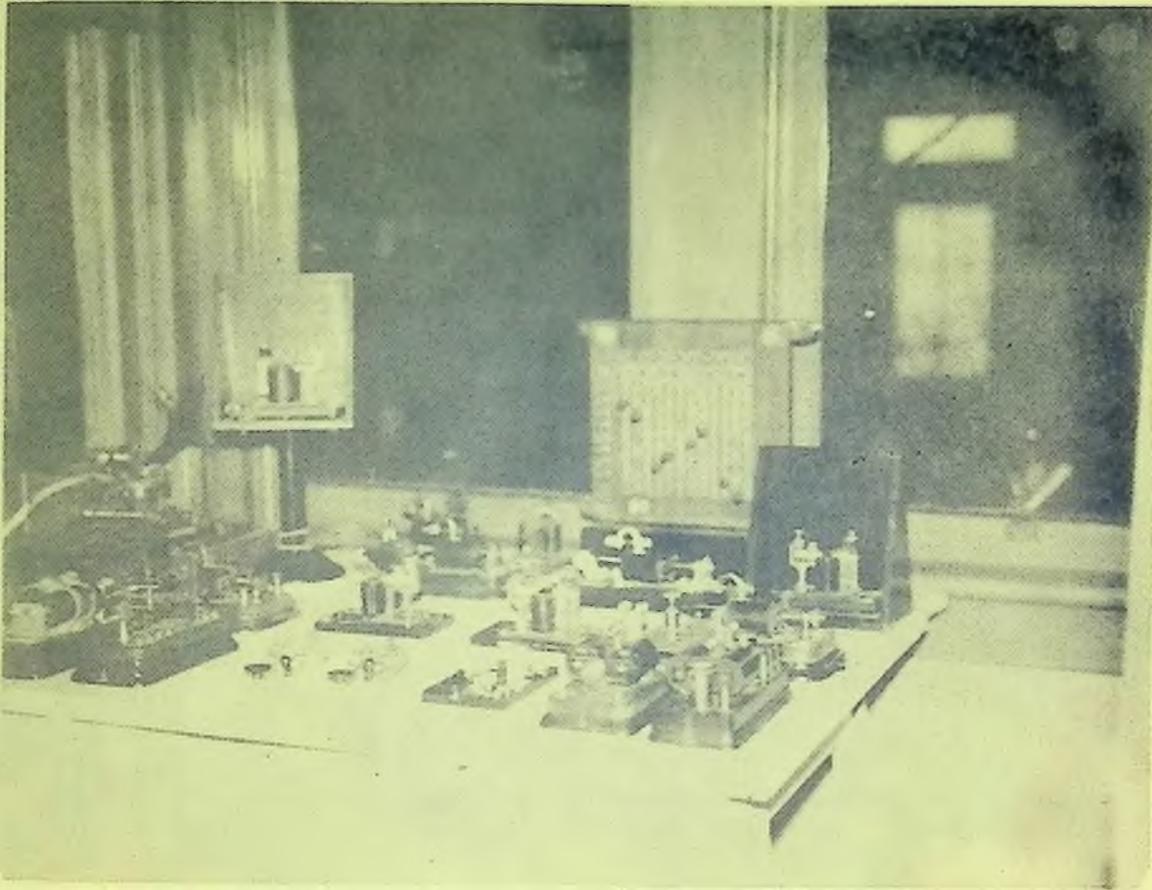
An operator on ship a little south of Key West heard 1ZL, some Record! Mr. Lewis has been in the League since its organization and last winter over 400 messages were handled through 1ZL. Aren't you glad to know him?



C. D. TUSKA

When the Editor suggested this Department to one amateur, he was told: "Put your own in first, then ask for mine!" There was little left to do, so here he is: Your Editor, C. D. Tuska lives in Hartford, Connecticut and operates 1ZT when he isn't working nights on QST.

The Editor is a student at Trinity College and certainly has to hustle to keep up his work as Secretary of The American Radio Relay League and QST. He is an Associate Member of The Institute of Radio Engineers, and last year was Instructor in Radio Telegraphy at the Y. M. C. A. in Hartford. He hopes you will pardon his irregular operating hours and remember he is a busy individual. Wireless has held his interest for nine years and for the past three he has held a First Grade Commercial License. The Editor feels he is getting to know all the readers and hopes you are becoming acquainted with him.



THE W3WRE/WB6BB0 TELEGRAPH COLLECTION

FOR SOME REASON THIS COLLECTION IS USUALLY ASSOCIATED WITH KEYS ALONE, BUT IT ACTUALLY EMBRACES ALL INSTRUMENTS OF TELEGRAPHY, AND IS, I BELIEVE THE LARGEST PRIVATE COLLECTION OF TELEGRAPH INSTRUMENTS IN THIS COUNTRY.

THE SOUNDERS RANGE FROM FOUR TO ONE THOUSAND OHMS, INCLUDING THOSE MADE BY BUNNELL, FOOTE-PIERSON, W.E. UNDER MANY PATENTS, MESCO, KARAS, G. M. PHELPS, AS WELL AS THE HAND MACHINED INSTRUMENTS FROM THE ALTOONA SHOPS OF THE P.R.R. THE OLDEST DATES ABOUT 1850, AND EMPLOYS A SINGLE, HORIZONTALLY MOUNTED MAGNET WITH A DUAL WINDING. THE MAGNET CORE IS ALSO THE SOUNDING BAR. THE OTHERS HAVE THE MORE FAMILIAR DESIGN, AND INCLUDE THE SEVERAL KINDS OF ADJUSTABLE "15-B", MAIN LINE TYPE, AS WELL AS THE GHEGAN. THERE ARE ALSO REPEATING SOUNDERS, OR "BUG TRAPS" FOR QUADRUPLIX.

THE RELAYS ARE BOTH TRANSMITTING, AS WELL AS RECEIVING, INCLUDING POLECHANGERS, ATHEARN REPEATERS, POLAR, AS WELL AS A NUMBER OF PONY RELAYS, AND MINIATURE HAND WOUND TYPES FOR FIRE ALARM BOXES. THEY RANGE FROM THE MAIN LINE RELAYS TO THE SMALLER VALUES FOR SHORT HAUL WORK.

THERE ARE ALSO COMBINATION INSTRUMENTS, THESE NATURALLY INCLUDE THE KEY AND SOUNDER COMBINATIONS, SOME QUITE OLD FROM THE 1870'S AND THE W.E. "SOUNDING BOX" RELAY AND KEY OVER THE STEINER PATENT OF 1886. THERE IS, OF COURSE, THE BARCLAY BOX RELAY, AS WELL AS THE LATER BARCLAY "SNARE DRUM" TYPE WITH THE KEY. ALSO A POCKET KEY AND SOUNDER TEST INSTRUMENT DATING INTO THE 1880'S. ONE OF THE MOST UNIQUE IS A COMBINED TELEPHONE AND HOWLER, FROM THE 1894 DOLBEAR PATENT, THAT WAS USED ON A TELEGRAPH LINE, AND COULD BE OPERATED SIMULTANEOUSLY WITH THE MORSE OPERATION.

..... CON'T. NEXT PAGE

THE W3WRE/WB6BBO TELEGRAPH COLLECTION CONT.....

THE RESONATORS RANGE FROM THE EARLY CURVED HOOD MODELS, THROUGH THE "PORTABLE", "TELEPHONE TYPE", AND OF COURSE, THE "ACME" ARM RESONATORS. THERE ARE ALSO METERS, RESISTANCE BOXES, MEASURING DEVICES, AS WELL AS ONE OF THE FEW "LISTENING STICKS" STILL IN EXISTENCE, OUTSIDE OF A PUBLIC MUSEUM. AND SEVERAL SWITCHBOARDS AND REGISTERS.

AMONG MY KEYS, THE OLDEST IS ALSO ABOUT 1850. THIS IS A STRAIGHT LEVER TYPE, WITHOUT ANY MOUNTING FRAME. ALL THE PARTS ARE MOUNTED DIRECTLY ON THE WOOD BASE. THE MOST OUTSTANDING ARE THE LOVELY G. M. PHELPS' "CAMELBACK" KEYS. THERE ARE EIGHTY IN ALL, INCLUDING SOME "SPARK" TYPES, AS WELL AS MILITARY KEYS OF WORLD WAR II. THE PRIZE OF THE COLLECTION IS A PHELPS "CAMELBACK" THAT IS FROM THE WESTERN UNION OFFICE IN JOHNSTOWN, PENNSYLVANIA, AT THE TIME OF THE 1889 FLOOD.

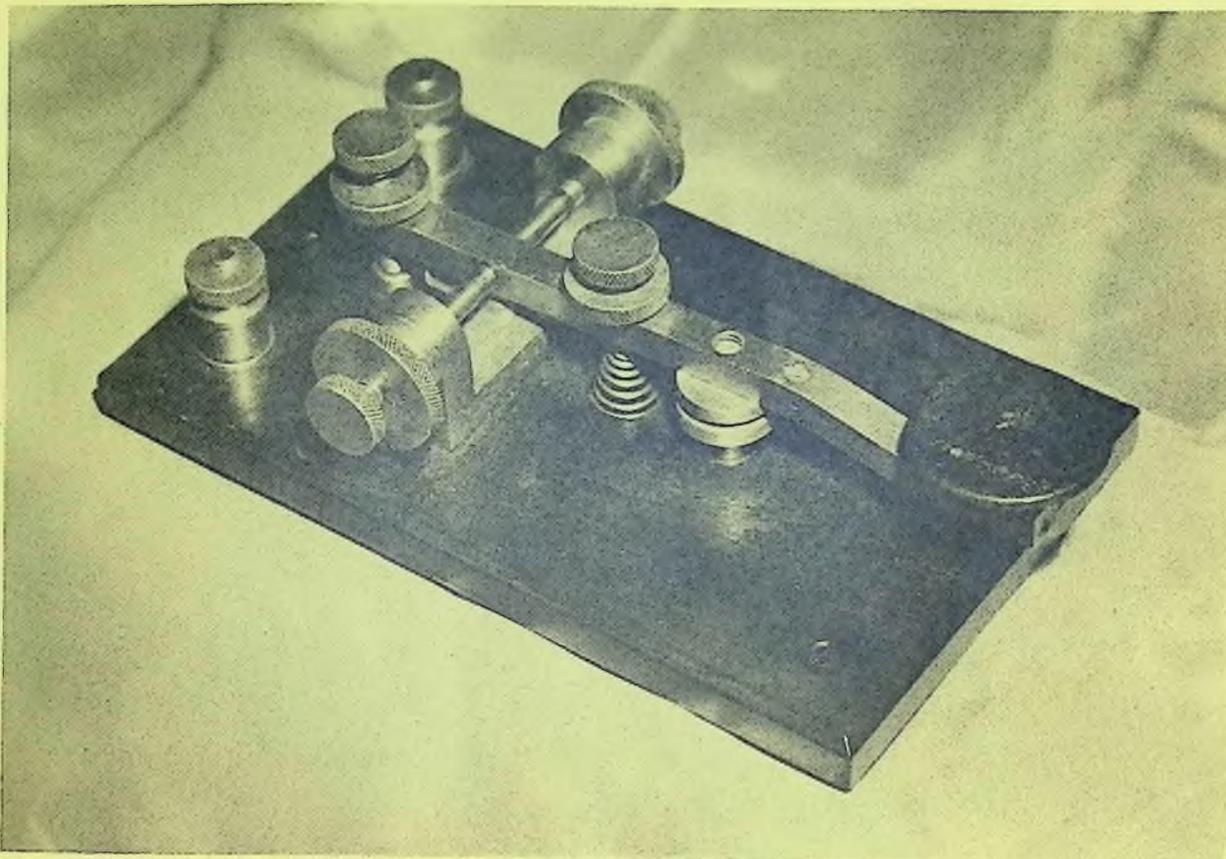
THE "BUGS" INCLUDE MOST OF THE MANY DESIGNS THAT FOLLOWED HORACE MARTIN'S INVENTION, AND HERE, THE PRIZE IS THE FIRST "VIBROPLEX" OF 1904, WHEN MARTIN CUSTOM-BUILT EACH ONE AS HE RECEIVED THE ORDER FOR IT. THERE ARE ALSO THE "VERTICAL" BUG, "DOUBLE-ACTION", AND THE FAMOUS "ALBRIGHT", OR "ILLEGAL" BUG.

SOME OF THE INSTRUMENTS WERE USED TO SET UP A "HALF-DUPLEX" TABLE, MUCH AS THE WIRELESS COLLECTORS HAVE THEIR WORKING SPARK RIGS.

OTHER THAN INSTRUMENTS, I ALSO HAVE A COLLECTION OF MESSAGE BLANKS AND POLE LINE INSULATORS. ONE OF MY HIGHLY VALUED ITEMS IS A SET OF THE CARNEGIE DIAMOND METAL RECORDINGS MADE IN 1901 BY F. M. MCCLINTIC. ON THESE 78 RPM DISCS IS SOME OF THE MOST BEAUTIFUL MORSE THAT EVER CAME FROM A KEY. (OF COURSE, AS MY M.T.C. FRIENDS SAY: "THERE WAS ONLY ONE MCCLINTIC, THE GREATEST OF THEM ALL.")

ANYTHING THAT HAS TO DO WITH THE TELEGRAPH, AND THE FAMOUS "KINGS OF THE WIRE", IS MY PARTICULAR LOVE AR

YOU WILL NOTE FROM THE PHOTOGRAPH ON W3WRE MUSEUM: THIS TABLE USING THE FOUR-CIRCUIT SWITCHBOARD, IS A TYPICAL HALF-DUPLEX LAYOUT, WITH THE TRANSMITTING RELAYS AND POLECHANGERS TO THE LEFT AND THE RIGHT OF THE KEYS. THE POLE CHANGER KEY, AND THE REPEATING SOUNDERS ARE IN THE CENTER, AND THE RECEIVING SOUNDERS AND MAIN LINE RELAYS ARE TO THE REAR. IN THE FAR UPPER LEFT HAND CORNER IS THE FOOTE-PIERSON MORSE REGISTER.

A REAL OLD OLD TIMER

THIS KEY CONTROLLED THE FAMOUS OLD TWO KILOWATT ARC TRANSMITTER OF THE WANAMAKER STATION, 8TH AND BROADWAY.

NOTE THE HUSKY PLATINUM CONTACTS WHICH MEASURE $5/8$ INCH IN DIAMETER AND $1/8$ OF AN INCH THICK.

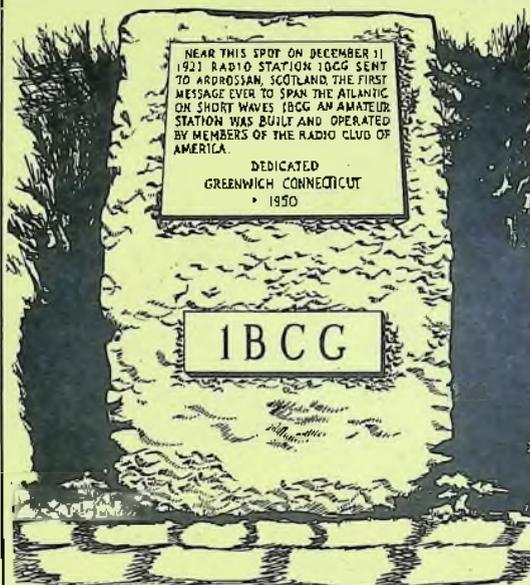
DAVE SARNOFF SPENT HIS NOW FAMOUS 18 HOUR STRETCH AT THIS KEY WHILE HANDLING TRAFFIC FROM THE SURVIVORS OF THE "TITANIC" SINKING IN 1912.

THE BERTH AT WHJ WAS FILLED BY WINQ AFTER WWI JUST BEFORE GOING INTO THE YACHTING GAME. DURING WHICH TIME THEY SWITCHED FROM ARC TO TUBES; SO-O-O, AS BROTHER CLAPP W4AU, WOULD SAY, THIS KEY WAS LIBERATED TO-GETHER WITH OTHER FINE COMPONENTS, WHICH ARE NOW INCORPORATED IN A $3/4$ KILOWATT HAM TRANSMITTER OF MODERN DESIGN A.M. (AMATEUR MADE) HI SKIPPER.

WINQ

MILESTONES IN TELECOMMUNICATIONS

By Elisha P. Cronkhite



THE COMMEMORATION MONUMENT AT GREENWICH, CONN.

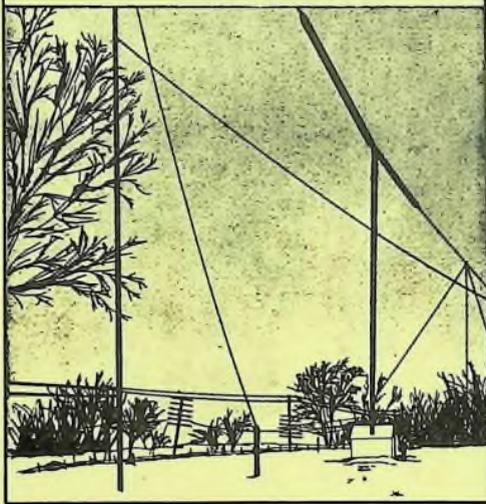
PAGE 45 FROM THE ORIGINAL LOG KEPT BY PAUL GODLEY IN ARDROSSAN, SCOTLAND, CARRIES THE NOW FAMOUS MESSAGE "NR.1," AS HE COPIED IT FROM STATION IBCG AT 2:52 A.M., GMT ON DECEMBER 12, 1921.

45

2:52 Am
"Nr. 1 de IBCG W-12
New York Date 4/12-21
To Paul Godley
Ardrossan Scotland
Hearty congratulations
Bangland
Ewan
Evan
Armstrong
Amy
Cronkhite."

Rec'd from IBCG finish-
ing at 3 Am.
He says "bi-two hour"

3:2 ZFH working 2 X Q
very steady x
3 1/2 IRZ in CW. Receiver
Also many wester end
powered by HP. etc.

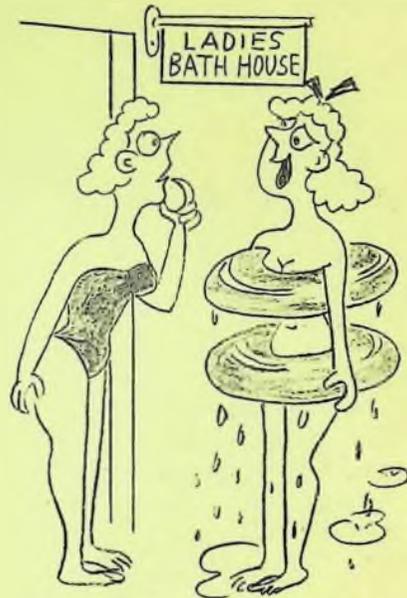


POINT OF ORIGINATION OF THE 12 WORD MESSAGE WHICH WAS THE FIRST EVER TO BE SENT ACROSS THE ATLANTIC OCEAN ON SHORT WAVES WAS AMATEUR RADIO STATION IBCG, BUILT AND OPERATED BY MEMBERS OF THE RADIO CLUB OF AMERICA. THE "T" TYPE CAGE ANTENNA, COUNTERPOISE AND OPERATING SHACK WERE LOCATED ON A FIELD OF THE ELISHA P. CRONKHITE ESTATE IN GREENWICH, CONNECTICUT. THE STATION WAS BUILT AND PUT INTO OPERATION BY 6 MEMBERS OF THE CLUB IN JUST 3 WEEKS' TIME AND IT WAS DISMANTLED 17 DAYS AFTER THE SUCCESSFUL TRANSMISSION.

FIRST SHORT WAVE MESSAGE TO SPAN THE ATLANTIC - DECEMBER 12, 1921

Spark-Gap Times

QRN, HETERADYNES, QRM.



"THANK GOODNESS JOE PARKED THE SERVICE TRUCK NEARBY!"



"DID YOU SEE THE BIG SPREAD ON YOU IN THE COMPANY MAGAZINE?"



"AREN'T YOU GOING TO KISS ME GOOD-NIGHT LIKE YOU ALWAYS DO, MR. KING?"

SILENT KEYS

MORTIMER O. SMITH, W6HSC.....SILENT KEY.....

THE MONTH OF FEBRUARY SAW ANOTHER VALUED MEMBER OF THE OLD OLD TIMERS CLUB CUT DOWN. "MORT" AS EVERYBODY CALLED HIM, CHECKED INTO THE 14295 NET VERY FREQUENTLY. HIS SIGNAL INTO THE EAST WAS USUALLY ABOUT FIVE DB OVER S9, A VERY GOOD SIGNAL. HE SEEMED TO TAKE CLINE'S, W4PPF AND IRVING'S WIFE, DEATHS VERY HARD. WE TALKED TO HIM ON THE NET ABOUT A WEEK BEFORE HIS PASSING.

RAY MEYERS, W6MLF AND HIS XYL WERE VISITING THE "MORT" SMITHS' ON THE DAY THAT IT HAPPENED. THEY LEFT THE SMITH RESIDENCE IN THE AFTERNOON FOR THE DRIVE BACK TO SAN GABRIEL. ON THEIR ARRIVAL HOME THE MEYERS' CALLED THE SMITHS' HOME TO TELL THEM THEY ARRIVED HOME SAFELY AND LEARNED THE SAD NEWS FROM "MORT'S" XYL, KATHERYN. "MORT" WAS RATHER TIRED WHEN THE MEYERS LEFT AND LAID DOWN TO REST. HE DID NOT GET UP. THE FOLLOWING ACCOUNT WAS IN THE ALTRADENA PAPER..

FUNERAL SERVICES FOR MORTIMER O. SMITH, 67, OF MILLER ROAD, VALLEY CENTER, WILL BE HELD AT 2 P.M. SATURDAY FROM THE MOUNTAIN VIEW CHAPEL, ALTADENA. THE ALHISER-WILSON MORTUARY WILL DIRECT. BURIAL WILL BE IN THE FAMILY SECTION AT THE MOUNTAIN VIEW CEMETERY. MR. SMITH DIED TUESDAY NIGHT AT HIS HOME FOLLOWING A HEART ATTACK.

A NATIVE OF NEW YORK, HE WAS BORN APRIL 22, 1896, AT BROOKLYN. HE MARRIED KATHRYN ROBERTS, SEPTEMBER 12TH, 1936, IN PASADENA. THEY CAME TO VALLEY CENTER LAST JUNE FROM NORTH HOLLYWOOD. HE HAD WORKED FOR THE NATIONAL BROADCASTING COMPANY AND RADIO CORPORATION OF AMERICA. HE WAS ALSO A "HAM" OPERATOR.

HIS MEMBERSHIPS INCLUDED; EMMANUEL LUTHERAN CHURCH OF NORTH HOLLYWOOD, QUARTERLY CENTURY WIRELESS ASSOCIATION, OLD OLD TIMERS CLUB, MABET, 50 CLUB, SONS OF THE AMERICAN REVOLUTION, AMERICAN LEGION POST 307 OF NORTH HOLLYWOOD, VETERANS OF WORLD WAR I, BARRACKS 395 OF VAN NUYS, CIC, ARMED FORCES COMMUNICATIONS AND ELECTRONICS ASSOCIATION, AMERICAN RADIO RELAY LEAGUE, INC., VETERANS WIRELESS OPERATORS ASSOCIATION, INC., AND DE FOREST PIONEERS, INC.

IN ADDITION TO HIS WIDOW, HE IS SURVIVED BY TWO SONS, STEPHEN OF LAKE ARROWHEAD, AND RICHARD OF VAN NUYS; A STEP-DAUGHTER, MRS. ROBERTA TYLERSMITH OF NORTH HOLLYWOOD; A BROTHER, ELWOOD OF FRESNO AND ONE GRANDCHILD.

Spark-Gap Times

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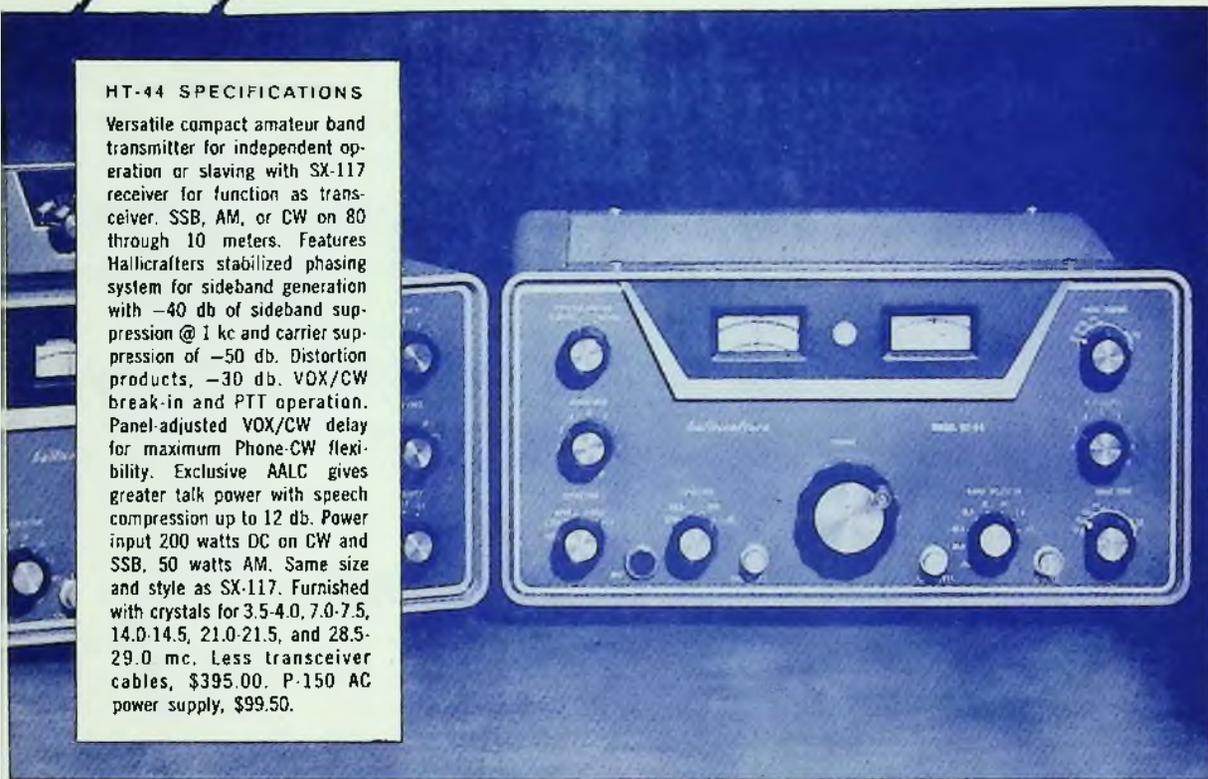
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