

The 1925 Arctic MacMillan/Byrd expedition has often been referred to as the first modern arctic expedition. It was conceived with three aims: to demonstrate how shortwave radio equipment could enable explorers to keep in touch over truly global distances, overcoming the magnetic and atmospheric conditions that made longwave transmissions impossible over long distances during daylight (and thus the



E. F. McDonald Jr. in 1925

entire Arctic summer) or from north of the Auroral Belt; to demonstrate the ability of airborne explorers to discover more, in Macmillan's words, "in a period of days than has been done by all the Arctic explorers with their dog teams in the past hundred years" (a pardonable exaggeration); and finally to use these new capabilities to conduct a reconnaissance of the million square miles of Arctic Ocean north of Alaska not traversed by anyone before, in order to discover, or rule out the existence of, new land in that region.

Radio communications were the triumph of the expedition, and their use was masterminded by Eugene (E.F.) McDonald Jr, president of Zenith Corporation and a naval reservist who was second in command of the expedition. Not only did the new equipment allow real-time voice communication between the ships - especially valuable when navigating the icepack of Mel-

ville Bay - it also allowed virtually unlimited contact between the expedition and their sponsors at home:

daily messages were exchanged with both the Navy and the National Geographic Society in Washington; several "concerts" of music performed by the crews and the local Inuit were broadcast to slightly bemused audiences gathered at Zenith's receiving station in Illinois; and McDonald was even able to carry on dealing with Zenith business through daily contact with his Chicago office. The expedition's radio transmissions were picked up by a detachment of the American fleet anchored in New Zealand, as well as many amateurs in Australia - factors that were strongly influential in the US Navy's decision to adopt shortwave radio as its standard of communication shortly thereafter.



In 1924, burgeoning Zenith moved to this factory at 2620 from Street.

Zenith's receiving station was located in

The Zenith building on Iron Street

With the success of Shortwave radio McDonald decided he wanted a floating laboratory of his own and set out to find one. In 1926 a 185-foot ship was laid down by the Newport News Shipbuilding and Drydock

Company from the parts of an abandoned new destroyer. It became the pleasure yacht Savanarola . Owned by Mrs. Richard M. Cadwalader of Fort Washington, Pennsylvania. It was acquired in 1927 by Mrs. Cadwalader's son, Mr. Richard M. Cadwalader, Jr., also of Fort Washington, and renamed the Sequoia.

In 1929 E. F. McDonald acquired the yacht and renamed it the Mizpah. He used it both as a Chicago residence and a floating laboratory on which to test the electronics company's new products. It was one of the largest yachts on the Great Lakes in its heyday. Shortly after purchasing the Mizpah Commander McDonald took her out for her first exploratory adventure. Having spent a good deal of time with Donald B. MacMillan during the 1925 expedition, McDonald turned to him for the Mizpah's first outing. In June of 1929 the Mizpah set out for a 3 month exploration of Newfoundland and Baffin land ((A) on the following map)

Little is known about this expedition other then four scientists from the University of Chicago joined the

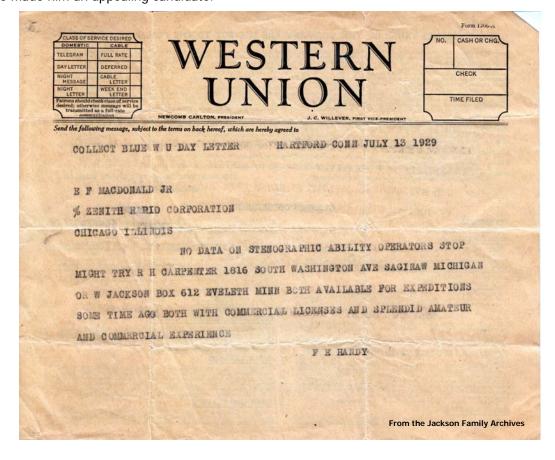
explorduring 3 month journey.



According to accounts given by William F Jackson (W9EGF) sometime during the journey the radio operator became sick and was having a difficult time maintaining contact with the rest of the world. Commander McDonald reached out to the ARRL (American Radio Relay League) to see if any qualified radio operators were available. F.E. Handy, Communications Manager for

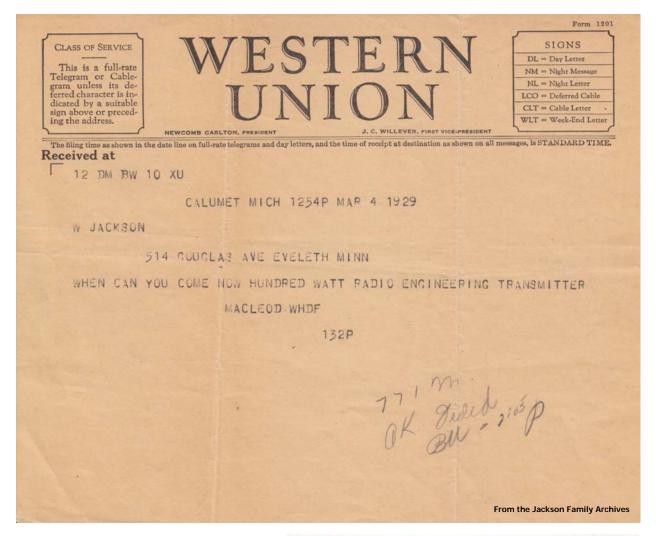
Commander Donald B. MacMillan has just started on a three
months' exploring trip in Newfoundland and Baffinland. The
yacht Mizpah, owned by Commander Eugene F. McDonald, Jr.,
will accompany Commander MacMillan. Four scientists from the
University of Chicago will join the
party at Sydney, N. S. Commander
MacMillan is shown above in cold
weather clothing.

the ARRL, sent a telegram to Zenith with two names on it: R.H Carpenter of Saginaw Michigan and W.F. Jackson of Eveleth MN. Stating both candidates had "Splendid amateur and commercial experiences" Jackson had left a station in Illinois early in 1929 and returned home to Eveleth MN. Jackson had told the ARRL that he was available for hire if there were any inquiries. Having almost 10 years of radio experience made him an appealing candidate.



Handy did not know at that time that Bill Jackson had already accepted a new position as operator of a 100 Watt station in Upper Michigan

Early in 1929 Abraham "AB" Blum (W9EVG) of Calumet Michigan had been a regular radio contact for W9EFG. AB had informed Jackson that there was a newly licensed station in Calumet Michigan, WHDF 1370khz. They were looking for a licensed operator. They were in dire straights. Charlie MacLeod the owner sent W9EFG a telegram requesting his assistance.



Jackson replied that he could be there by Monday March 11th. MacLeod was "Very pleased" that Jackson was heading to Calumet. Jackson once there realized how important a reliable radio station would be to the area. Calumet was the end of the rail line and had very extreme winters. In fact he joked later in life that once he got off the train and saw all the snow still on the ground that he should get right back on the train and leave.



From the Jackson Family Archives

The alley behind the WHDF Studios in the winter

## RADIO STATION WHDF

THE COPPER COUNTRY BROADCASTING STATION

CALUMET, MICH.,

March 6, 1929

Mr. W. Jackson
514 Maple St.
Eveleth, Minn.

Dear Mr. Jackson:

Very pleased to know that you will be in Calumet on Monday. I will meet you and have arranged a room close to the Studio for you, with board at \$1.25 per day. I think it is a good place but will at least suffice until you get aclimated yourself.

WHDF has a new 100 watt crystal controlled transmitter and we have very good reports so far. Reached
Middletown, Iowa the other day, also Chicago, Detroit, Flint,
and the whole of the Upper Peninsula. The Station is owned
by the writer and fully paid for and should result in a verygood paying proposition.

Will meet you at 6:30 A.M. on Monday and hope your associations here will result to our mutual benefit.

Yours truly,

OM: RM

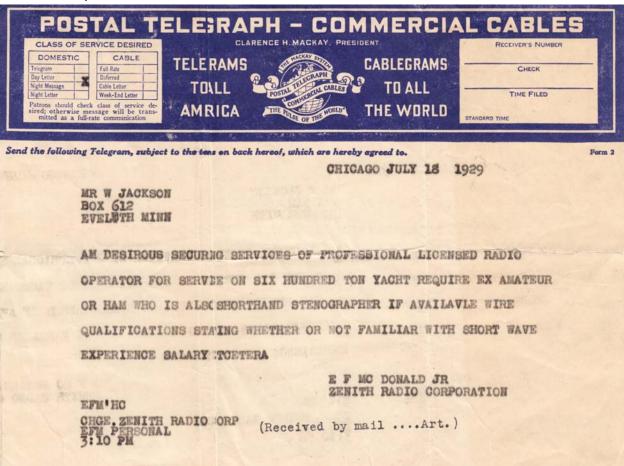
Radio Station WHDF

YOUR MESSAGE ON THE AIR GOES WHERE?

From the Jackson Family Archives

Macleod's Letter to Jackson confirming his Calumet visit.

Not knowing that Jackson nolonger was lookling for a radio position, McDonald sent him a telegram to offer him the postition



McDonald sent the telegram through his Chicago receiving station to Bill Jackson at his former Eveleth address. This was forwarded by mail to Bill Jackson by his brother Art Jackson.



From the Jackson Family Archives

Jackson in front of the WHDF transmitter in 1929



I talked to the Yacht owned by McDonald of Zenith Corp in 1929 by Morse code in 1929-His call was KFZT add I was W9EGF (Calumet, Mich) I had been offered a radio Operator job on this Yacht.

Bill Jackson W9EGF-W8EGF

From the Jackson Family Archives

From the Jackson Family Archives

This is a note typed by Jackson confirming his contact with KFZT. KFZT was the station ID for the Mizpah radio room.

Jackson wrote a letter to the ARRL on 8/2/29 to tell them that he had taken a position with WHDF he received this letter in response. .

HIRAM PERCY MAXIM, PRESIDENT CHAS.H.STEWART, VICE-PRESIDENT

F. E. HANDY, COMMUNICATIONS MANAGER

A.A.HEBERT, TREASURER K.B.WARNER, SECRETARY



EXECUTIVE HEADQUARTERS
HARTFORD, CONNECTICUT, U.S.A.
August 5, 1929

QUIST, HARTFORD

OFFICIAL ORGAN: QST

KENNETH B.WARNER, EDITOR.

Mr. W. Jackson, WHDF-W9EGF Calumet, Michigan

Dear Jackson:

Many thanks for your letter of August 2nd telling us of your position at WHDF. Glad that you have a satisfactory and enjoyable job where the pay comes regularly and you have the leisure and opportunity to pound brass from your own station when off duty. FB;

The only names I gave McDomald were those of yourself and Mr. Carpenter and I do not know for sure just who was chosen for the position. McDonald wanted a fellow with stenographic ability in addition to radio operating ability if possible. Every good wish. 73.

Sincerely yours,

FEH\*DEM

Communications Manager

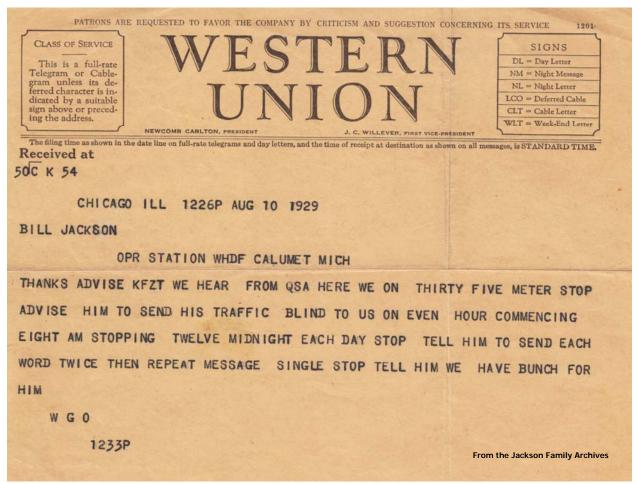
etation or MK

Busy fixing new now so not operating moment: From the Jackson Family Archives

Little did either Jackson or Handy know at that time, having KFZT make contact with W9EGF and his previous acceptance of a job in Calumet would impact the future of the President of the Zenith Radio Corp. Soon after this letter was written communications with the Mizpah dramatically changed.

## **Trouble Communicating on the High Seas**

Later that August the Mizpah lost the ability to receive messages from Zenith's Chicago base station. Jackson, having previously communicated with the ship, continued monitoring and contacting them. As any HAM operator would know, contacting a ship on an exciting Arctic adventure is a QSO you simply don't walk away from. Jackson was located 430 miles north of Chicago and surrounded by Lake Superior The conditions were just right to maintain contact. The Zenith offices could hear W9EGF's contact with the Mizpah and hear the Mizpah but they could not make contact the ship themselves. The land station, WGO in Chicago sent a message to Jackson via a telegram instructing him to send a message to the Mizpah



They want W9EGF (Jackson) to tell KFZT (The Mizpah) that they can receive enough of the Mizpahs signal "QSA" on the 35 meter band (approximately 8.5MHZ). They want the Mizpah to send the messages blind, without acknowledgement. Sending each word via Morse code twice and then the message a third time complete without repeating each word.

The exact nature of these relays or how long Jackson acted as a go-between will probably never be known, but family legend has it he helped McDonald relay stock portfolio sales during the impending market crash that took place over the next 30 days. What we do know is that according to newspaper accounts the Mizpah was back in Chicago by October 18 1929. That day it took part in a \$10,000 race from Chicago to Milwaukee. In the years to come McDonald and the Mizpah went on to circle the world experimenting with shortwave radio. The war department finally seized the Mizpah in 1942 for use in the war effort and was finally sunk off of Florida for use as a man made reef in 1968. Zenith went on to being a major manufacturer of radios and eventually color TVs, becoming the largest color TV manufacturer in 1971. McDonald passed away suddenly in 1958 leaving a legacy as a real pioneer in Shortwave radio communication.



W9EGF's Shortwave set used to contact the Mizpah. Hand built by W9EGF and located at WHDF's transmitter site.

## Yacht Crashes in \$10,000 Lake Race

Doris? Hits Obstruction Near Kenosha; 25 Escape Injury

KENOSHA, Wis. -(P)- The yacht Doris, competing with the yatch Mizpah in a \$10,000 race from Chicago to Milwaukee and return, was forced out shortly before noon today when it struck an obstruction in Lake Michigan, off Kenosha, and damaged its propeller The Doris put into the Kenosha e harbor while the Mizpah, commanded by Eugene McDonald, Chicago sportsman, continued on toward Milwaukee

Capt. Roy Allen of the Doris said the yachts were speeding along at 20 knots an hour off the Kenosha harbor when the Doris suddenly hit an ebstruction. Twenty-five persons aboard, all prominent in Chicago, were thrown from their feet, he said. None was injured, however,

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Capital Times Madison, Wisconsin Saturday, October 19, 1929,