

WWV Radio Station

NIST radio station WWV broadcasts time and frequency information 24 hours per day, 7 days per week to millions of listeners worldwide. WWV is located near Fort Collins, Colorado, about 100 kilometers north of Denver. The broadcast information includes time announcements, standard time intervals, standard frequencies, UT1 time corrections, a BCD time code, and geophysical alerts.

Notice: Beginning April 19, 2019, Radio Stations WWV and WWVH will be announcing upcoming and current Military Auxiliary Radio System (MARS) and US Department of Defense (DoD) exercises. Founded in 1925, MARS is an organization established by DoD that trains volunteer Amateur Radio operators to provide contingency high-frequency (HF) radio communications assistance in times of natural disasters and other urgent situations. MARS volunteers also assist DoD by providing humanitarian assistance and disaster relief, and morale and welfare communications. The MARS exercises will take place several times per year, on a regional and nationwide basis. The WWV and WWVH announcements will provide information to Amateur Radio participants regarding the purpose, dates, times and locations of the exercises and other information. WWV will air MARS announcements on the 10th minute of each hour, and WWVH will use the 50th minute. The announcements will air for about two weeks, prior to and during each

exercise. For more information about MARS, see: <http://www.usarmymars.org/home/history-of-mars> and <https://www.mars.af.mil/> . MARS exercise participants are directed to www.dodmars.org .

For both Amateur Radio Operators and Shortwave Listeners, Radio station WWV and WWVH operate on 2.500 MHz , 5.000 MHz, 10.000 MHz, 15.000 MHz and 20.000 MHz to allow for propagation reception conditions at all times. The voice announcement of “time” is given every 60 seconds between calibrated second TICS. So ALL voice announcements about any and all DOD MARS events/exercises is broadcast on WWV. So at 10 minutes past the hour AND 50 minutes after the hour, MARS announcements , as listed above, are broadcast.

MARS operation is about 99 % HF only communications with the amateur radio community, although they do have VHF for “local operation” that is similar to CAP operations, that is, just outside of the VHF amateur radio assigned frequencies. The same is true for the HF side as well, MARS members with HF operate just outside of the FCC assigned amateur radio frequencies and thus the reason for a MARS approved membership AND “modified” HF equipment allowed only with permission and proof of MARS membership to the MARS Central Command Division.

Again, the “exercises”, such as the MARS exercise coming up in July, involves a MARS member coming on frequency (FCC amateur assigned frequencies) to ask about your “status” from your area that is a simple:

1. Weather condition report
2. Condition of your utilities (water ok, electric power ok, etc).
3. Condition of your living quarters (ok or damage)

It is an exercise on gathering “information” and then the MARS operator takes that information and has a MARS “form” , similar to our ARRL Radio gram or the FEMA ICS213 form for reporting the data and passing it along through their Chain of Command.

Hope this helps with the data Dave WD9HBA provided you this morning concerning MARS exercises. As you may recall, there was a “split frequency” HF operation between MARS and Amateur Radio last year and it was on 40 meters :

Amateur TX frequency : 7.270 mHz LSB

MARS TX frequency : 7.545 mHz USB

So the ARO station sets up the HF rig for “split” to transmit on 7.270 mhz and receive on 7.545 mHz

Gene WA9TZL

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