

Rabid Rudolph EXSUM
Operational period: 20180421- 1500-0340Z
Scope of exercise: AmRRON Eastern, Central and Pacific Division
Scenario: Pandemic event

Overview:

The Rabid Rudolph scenario was a compressed time line event for the purposes of instructing Net Control officers and providing for a realistic scenario in which they can conduct on air NCS operations and manage both voice HF SSB and HF digital operations for training purposes.

Scenario:

Rabid Rudolph begins as a multi-species wildlife die off in the mid-Atlantic region. This spreads into the domestic farm animal and poultry industry within that region. This activates a response from federal agencies to investigate the event and determine the cause and scope of the problem. During the initial analysis by federal agencies, it has been found that contaminated meat products have entered into the food chain by direct sale of meat products and by indirect contamination of animal food products by way of “meat byproducts” being included in cattle, pig and poultry feeds. This prompts a response by federal agencies in the way of a recall of meat products and animal feeds. When further contamination is evidenced in commercial cattle, pig and poultry operations, the federal authorities issue an eradication order to commercial operations.

Commercial cattle, pig and poultry operations petition for an injunction due to severe economic hardship. The commodities markets responds with a dramatic sell off and crash of the markets. The Securities and Exchange Commission respond by issuing a temporary moratorium on the markets. This further worsens the economic situation. The federal authorities begin eradication and cremation procedures in several western states. During this period, it becomes evident that the disease has spread into the human population; first in hunters who have consumed venison from the infected regions and then cases appear in individuals who have consumed other meat products. During the final phase of the exercise, infection appears in individuals from diverse areas with no known exposure to contaminated meats. The disease is found to be a mutated form of Chronic Wasting Disease (CWD), a prion based disease with pan-species infection capability. This is the point where the exercise ended.

Traffic management:

Exercise traffic was sent on multiple platforms. HF SSB voice was utilized for station check ins and AmRRON custom Stat Reps (county status report forms). HF digital was utilized for actual message traffic related to the scenario in total of 13 messages. This message traffic was divided as follows: Eastern Division – 4 messages, Central Division – 4 messages and Pacific Division – 5 messages. All message traffic was delivered within the targeted region.

ARIM/ARDOP was used as a test platform after completion of the exercise as a method of collating the traffic into a single document for publication as an EXSUM. This proved to be more problematic than expected and did not occur on a timely basis.

Problems / Solutions:

1. Band Conditions – 2 days prior to the exercise, the HF bands were impacted by a minor level II geomagnetic storm. This caused deep band fades during the exercise and difficulty passing exercise traffic throughout the 3 divisions.

Solution – Anticipate band conditions and compensate with a more comprehensive relay network to fill gaps in the network.

2. Antenna failures / poor performance – several stations experienced problems with high SWR's particularly when band conditions mandated a shift to a secondary frequency.

Solution – All antennas should be optimized for expected band utilization and mobile portable antennas should be checked in a field portable location prior to use and optimized for the frequencies to be used.

3. Departure from SOI – Band conditions mandated changes from established SOI frequencies and times. This cause operators to adjust without guidance from SOI.

Solution – Organizing committee should anticipate the need for alternate frequencies / bands and publish those in a coherent form on the SOI prior to the exercise.

4. Lack of time to complete mission – Some digital stations had difficulty taking all message traffic within the specified 30 minute time window they were assigned.

Solution – Unfortunately, due to the number of NCS trainees and the limited 12 hour time limit, it was necessary to limit time segments. In a “real world” scenario, these artificial time limits would not exist and should not be as problematic as in this exercise. It is noted that some stations were having difficulty configuring their digital station setups and this detracted from their actual on air time. It is recommended that all stations become intimately familiar with their radios, digital programs and equipment prior to employing it during an exercise.

5. Incomplete message compilation on ARIM/ARDOP – Band conditions remained marginal into the post exercise environment and ARQ contact between stations remained problematic.

Solution -This could be somewhat alleviated by having a wider distribution network of ARIM/ARDOP stations with emphasis on the establishment of more ARIM stations in the central portion of the country between the Canadian and Mexican border.

Rabid Rudolph completed the majority of the goals of the exercise with some deficiencies related to band conditions and time constraints. All instructors and trainees exceeded performance requirements for this exercise. Instructors were on task and addressed trainee issues in a professional manner without chastising or adverse comments to their trainees. Trainees expressed that they were satisfied with the performance of the instructors and expressed satisfaction that their goals were met and that they would participate in this type of exercise again.

Respectfully submitted,
RM-08