# PZC Minutes APRIL 8 2014

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The Planning and Zoning Commission of the Town of Avon held a meeting at Company #1 Firehouse, 25 Darling Drive, on Tuesday, April 8, 2014. Present were Linda Keith, Chair, David Cappello, Marianne Clark, Peter Mahoney, Christian Gackstatter, and Thomas Armstrong and Alternate Elaine Primeau; Mrs. Primeau sat for the meeting. Carol Griffin, Vice Chair, was present but did not sit. Absent was Alternate Jenna Ryan. Also present were Steven Kushner, Director of Planning and Community Development and Kari Olson, Town Attorney, Murtha Cullina LLP. Ms. Keith called the meeting to order at 7:30pm.

# APPROVAL OF MINUTES

Mrs. Primeau motioned to approve the minutes of the March 11, 2014, meeting. Mr. Armstrong noted a correction needed to Page 19 regarding fence height (37 feet should be 37 inches). Mr. Mahoney seconded the motion noting the correction; the motion received unanimous approval.

# **PUBLIC HEARING**

App. #4714 -DP3 LLC, owner/applicant, request for Special Exception under Section VII.C.4.a. of Avon Zoning Regulations to permit wall signs on 2 elevations, 300 West Main Street, Parcel 4540300, in a CR Zone

Mr. Kushner noted that Staff recommends approval of the proposed wall signs for more than one building elevation. The signs meet the requirements of the Zoning Regulations.

The public hearing for App. #4714 was closed.

App. #4708 -Meredith Corporation dba WFSB-TV, owner/applicant, request for Special Exception under Section IV.A.4.a.of Avon Zoning Regulations to replace communications tower and add Doppler Radar weather system, 375 Deercliff Road, Parcel 2090375, in an RU2A Zone

Also heard at this time but not part of the public hearing.

App. #4709 -Meredith Corporation dba WFSB-TV, owner/applicant, request for Site Plan Approval to replace communications tower and add Doppler Radar weather system, 375 Deercliff Road, Parcel 2090375, in an RU2A Zone

The public hearing was continued from March 11.

Present were Attorney Timothy Hollister, Shipman & Goodwin, LLP, representing Meredith Corporation and WFSB TV; Victor Zarrilli, Director of Engineering and Facilities, Meredith Corporation; Michael Rhodes, PE, Cavell Mertz & Associates; Attorney Glenn Dowd, resident of Robkins Road, representing the neighbors; Dr. David Carpenter, public health physician, Harvard Medical School; Arnold Chase, resident of West Hartford with knowledge of history of subject site; and Norman Kilcommons, licensed real estate appraiser.

Ms. Keith provided an overview noting that the applicant and the applicant's expert will speak first. The Commission's independent expert, Michael Rhodes of Cavell Mertz & Associates, will speak next. She explained that Town Ordinance #55 requires that the fees incurred as a result of the Commission's contracted expert be paid by the applicant; she further explained that the applicant had no participation in the selection of the Commission's expert. Ms. Keith indicated that the next speaker will be Attorney Glenn Dowd, a resident of Robkins Road and spokesperson for many of the homeowners in the subject area. Mr. Dowd will also introduce 3 experts, namely Dr. David Carpenter, an expert in public health who will discuss health impacts related to electromagnetic radiation; Arnold Chase, West Hartford resident, who will provide facts relating to the history of the site, as well as testimony on the operation of weather radar; and Norman Kilcommons, a licensed real estate appraiser, who will provide information relative to residential property values. Mr. Dowd will also present a Powerpoint presentation summarizing testimony from the aforementioned 3 experts and review the Avon Zoning Regulations. She noted that, at this point, the Commission members will be given an opportunity to ask

questions of the applicant. Ms. Keith asked that the Commission keep their questions/comments brief, in the interest of time. Lastly, the hearing will be opened up to the audience for questions and comments. She requested that testimony from each individual be limited to 5 minutes to allow time for everyone who wishes to speak.

Ms. Keith reported that the Commission's Administrative Policies state that meetings shall adjourn at 10:30pm. She concluded by noting that the goal is to conclude the public hearing tonight and reiterated her request that all speakers be aware of the time constraints.

Mr. Hollister stated that written responses to the questions posed to the applicant at the February 18 hearing have been filed with both the Commission and the Town Zoning Department. He noted his preference is to respond to any further technical questions in writing at the May 13 hearing. Mr. Hollister addressed the topics/items covered in the "Applicant's Response to Comments and Questions From February 18, 2014 Planning and Zoning Commission Hearing", dated March 25, 2014.

- 1. How much radio frequency exposure exists in a typical residential home, and how does this exposure compare with what would be created on the ground from the Doppler radar?
- 2.Are other Doppler Radar Systems located in proximity to residential neighborhoods or population centers?
- 3. What alternatives did Meredith explore with Bradley International Airport regarding keeping the Doppler Radar at its current location?
- 4. Will the Doppler Radar at homes along Deercliff Road interfere with electronic equipment such as computers, cell phones, generators, and garage doors?
- 5.WFSB's plan to make information regarding the Doppler Radar more available to the public by a Smartphone application.
- 6. What host community information and the receiving equipment that will be provided to the Town of Avon
- 7. What is the ability of the three regional NEXRAD systems (Albany, Long Island, Taunton) to detect storms and conditions in central Connecticut?
- 8. What are the "black-out areas" at Bradley International Airport, and how will they be addressed by the Doppler relocation?
- Mr. Hollister clarified that Tab "D" contains maps that show a 75-mile radius and apply to the last 2 bullet points on Page 4 under Item #8. (He clarified that Tab "D" is incorrectly referenced on Page 3 under Item #7).
- 9. What is the impact of the existing CL&P power lines along Deercliff Road on the Doppler Radar and vice versa?
- 10. Does the "return" signal of the Doppler Radar add to radio frequency exposure?
- 11. What safety features are built into the Doppler Radar system to ensure its orientation to the horizon?
- 12. How much radio frequency exposure is experienced at ground level from a Doppler tower as a constant source as opposed to its rotating pulse?

Mr. Hollister concluded by noting that the responses are fairly straightforward.

Michael Rhodes, PE and Senior Engineer with Cavell Mertz & Associates, noted he was retained by the Town of Avon to perform an independent review of the proposed Doppler Radar at 375 Deercliff Road with respect to non-ionizing electromagnetic radiation. He referenced his written report dated April 4, 2014, "Non-Ionizing Electromagnetic Radiation Analysis of Proposed Weather Radar Installation at 375 Deercliff Road, Avon, Connecticut". Mr. Rhodes summarized his report by noting that he looked at the existing FM and TV antennas that are close to the subject site. He explained that he independently obtained information about the operating parameters and antenna patterns and then used this information to evaluate a worst case level of RF energy located anywhere on the site. He stated that RF energy decreases as the square of the distance noting that he used the bottom/base of the tower as the closest area one could get to an FM or TV antenna. Using worst case methodology, the highest

contribution for the FM and TV anywhere on the subject site is less than 19% of the State of MA limit, which is the controlling limit. The AM station was also evaluated using an FCC specified method, which produced less of a predicted RF energy than the modeled method used in the report produced by du Treil, Lundin & Rackley, Inc. He explained that standing at approximately 100 feet from the base of the AM tower/station a person is at 10% of the maximum permissible exposure. Mr. Rhodes summarized by noting that taking everything into consideration, 10% from the AM tower and less than 19% from the FM and TV tower, a person is at 29% of the maximum permissible exposure. Mr. Rhodes referenced Mr. du Treil's report noting that the calculated/measured levels are much less than 29%. Mr. Rhodes reiterated that his methodology used a worst case scenario.

Mr. Rhodes addressed the proposed radar and noted that the Meredith analysis evaluated all the points on the subject site. He explained that he also wanted to look at areas in the surrounding neighborhoods that might have higher levels that might have site and/or house elevations that are higher than the elevation of the proposed radar. He added that he also considered a worst case, for example, someone standing on the roof of one of the houses. He indicated that he looked at 6 feet above ground at 28 points (28 residences in the area) and also looked at 45 feet above ground. He noted that at 6 feet above ground the highest calculated exposure was .032% of the standard, reiterating the worst case analysis is 29%. At 45 feet above ground the highest calculation was .055% of the standard. He clarified that these numbers are generated from the radar antenna pointed directly at each point and not rotating. He noted that if you calculate, factor in the time period of rotation (1/360th), the reading at 45 feet above ground was .00015% of the standard. Mr. Rhodes concluded by noting that he has shown the worst case scenario and indicated that the proposed radar is going to be a very small percentage of the maximum permissible exposure of the controlling standards of the State of MA.

Attorney Glenn Dowd, resident of Robkins Road, indicated that he has been asked by many of his neighbors to prepare a presentation in opposition to the application. He introduced the first speaker, Dr. David Carpenter.

Dr. David Carpenter noted that he is a public health physician and graduate of Harvard Medical School. He stated that he worked for the Department of Defense at the Naval Medical Research Institute during the time that the Navy was beginning to consider the possible health hazards from radar. He noted that while he was not directly involved with the studies involving radar he added that he attended a number of lectures on the subject. He noted that he became the Director of the State Health Department Labs in Albany New York where he was directly involved with a health study involving the effects of high voltage power lines. Dr. Carpenter clarified that the frequency of power lines is different than the frequency of radar but noted that he administered the program relating to power lines for 7 years. He noted that he has been very involved with issues relating to the health effects of electromagnetic fields, both for power lines and radio frequency fields. He presented a PowerPoint slideshow explaining that radio frequency fields are part of the electromagnetic spectrum; visible light is the part understood by most. They are packets of energy that have no mass, vary in frequency and wave form, and come from radar, TV, radio, and WiFi. He noted that the frequencies for radar are similar to those used by microwave ovens; he commented that if you can bake potatoes in a microwave there is a possibility of some adverse health effects. He noted that power lines are low frequency; Xrays and gamma rays are high frequency and therefore break chemical bonds and cause mutations and cancer. He noted that years ago the Russians irradiated the US Embassy in Moscow with microwaves, causing much panic. There were no reports of excess cancer but many of the employees developed something called "microwave sickness", a syndrome with headaches, inability to sleep, and irritability. Dr. Carpenter indicated that this has been reconstructed and it does occur now. He noted that radar is a beam that is directed at the horizon and if you are in a direct line to the beam you will have significant exposure. He added that he visited the subject site earlier in the day noting that there are a large number of houses that would be in a direct line with the beam; the people in the houses will be exposed to radar radiation. He explained that a radar beam is not a laser but rather is more like a flashlight; it has a center core and

falls off with distance. The radar has a center beam with a 1 degree spread and noted that the safest place is right under the tower. Homes located in the center of the beam would be exposed but homes located off the center would also be exposed, albeit to a lesser degree. The proposed radar consists of short intense pulses; he noted that most of the reports show that radar is usually about 450K watts but added that the proposed radar would be at 6billion+ watts. He noted that the more intense the beam the more dangerous it is; all radiation, whether ionizing or non-ionizing, is a function of the intensity/duration of exposure. Dr. Carpenter noted that the proposed beam is extraordinarily intense. He commented that the pulses are brief, a mini fraction of a second; 7 seconds per hour of radio frequency radiation pulses would be realized. The standards set by the FCC, which the State of MA draws from, are done on the basis of aggregate exposure over time. They do not consider pulses or intensity of pulses. Dr. Carpenter commented that this is a critical issue such that there is a building body of evidence that indicates that the importance is not the aggregate exposure over time but rather is the brief pulses of very high intensity that have more adverse effects than constant exposure to a microwave signal. He explained that RF radiation is a controversial subject and added that he doesn't mean to say that all answers are known. He further explained that most of the known information comes from people who use cell phones held to their ear for long periods of time. He conveyed his opinion that the evidence is very strong that holding cell phones to one's head for long periods of time increases the risk of brain cancer; the risk is much higher for children. There is also evidence that whole body exposure increases the risk for leukemia; the greater the duration and intensity of exposure the greater the risk. He noted that complaints about "microwave sickness" have been received from homeowners with "smart meters". Dr. Carpenter noted that the FCC sets the standards for radio frequency radiation and added that the FCC has no biologists or physicians on staff; they are dominated by engineers and physicists who have the incorrect idea that the only possible hazard from radio frequency radiation is heat (i.e., like cooking in microwave ovens). He explained that the standards that are set are to prevent someone from cooking in the radar beam. Dr. Carpenter commented that to deny that there are any health effects at intensities below the standards is ludicrous, as the scientific evidence is overwhelming. He referred all interested parties to the "BioInitiative Report", noting that he was a co editor and that it is a web-based report that reviews all the studies done showing that there are effects of radio frequency radiation at intensities that do not cause tissue heating. He noted that it is his understanding that the FCC standard for the frequency of the proposed radar would be 1,000 microwatts per cm<sup>2</sup>. He noted that the BioInitiative Report suggests that the guideline to protect people from adverse health effects is .1 microwatt per cm2, which is 1/10,000th of the standard. Dr. Carpenter explained that what is being presented is that all of the exposures are below the standard but added that, in his judgment, it is totally irrelevant, as the standard is wrong and being set by people who are not paying attention to the evidence. He noted that the American Academy of Environmental Medicine (physicians) has indicated that there is sufficient evidence to demonstrate that sufficient harmful biological effects occur from non-thermal radio frequency exposure. Dr. Carpenter conveyed his understanding of the need for Doppler radar and noted that he does not oppose it but added that weather radar should not be located in residential areas and, particularly, not in areas where there are houses that would be right in the beam. He added that no persons, regardless of income status, should be exposed to this level of high intensity radio frequency fields right in align with their homes; it's unconscionable from a public health viewpoint. He noted that he cannot understand how the FCC could allow it and added that Doppler towers should be located at the top of the highest mountain, where there are no residents. He indicated his greatest concern is with the high intensity pulses and noted his prediction that residents that live near this facility will develop the "microwave sickness" syndrome and be at an elevated risk for cancer. Dr. Carpenter concluded his presentation by urging that an alternate site for the proposed facility be located, as the subject site is not the place for it. Mr. Dowd introduced the next speaker, Arnold Chase, noting that Mr. Chase is very familiar with the facilities at 375 Deercliff Road and has extensive experience with radar.

Arnold Chase noted that he owns properties at 4, 6, and 150 Deercliff Road in Avon. He noted his understanding how the proposed radar could be technically confusing for the Commission but added that it's critical that certain facts from the past be in conformance with the Town's Regulations in order for this application to succeed. He indicated that he has expertise in radar systems and related areas making him the most qualified person in the room to answer everyone's questions. He clarified that his position is neutral, as he is neither for nor against the proposal and added that his intent is to provide facts. He explained that he designed and built a Doppler radar system in 1967 and has owned and operated 3 weather radar systems. His family has owned WTIC AM and FM and noted that he worked at those stations in the 1970s and 1980s. He noted that he has personally worked on the radar tower being discussed tonight and has overseen engineering departments at 5 TV stations and 8 radio stations and in 1988 founded the New England Weather Service. He noted that in 1993 he provided a Doppler radar feed to WFSB. He indicated that he used to own a radiation meter and is familiar with microwave emission levels and how they work; he added that microwaves operate at a different frequency than the proposed radar and further added that there are 4 different types of radars. He referenced electronic meter readers just discussed by Dr. Carpenter and explained that the pulses that come out of these meters are the same strength as a wireless earpiece (i.e., Bluetooth headphones) and are insignificant. He noted that the issue is location and asked whether the proposed site is suitable for a Doppler radar. Mr. Chase submitted a handout (Pages "A" thru "P") to the Commission and asked if the proposed radar is an application for a special exception or is it really a non-conforming use that is trying to find background and history to allow it to continue as a non-conforming use. He indicated that Section III of the Zoning Regulations (non-conforming uses and structures) was not referenced by the applicant; nonconforming uses that have been discontinued for a period of 6 months shall be resumed. He noted that there is misinformation in this application. Mr. Chase stated that for WFSB to claim that they have had a radar system/Doppler radar system operating continuously from approximately 1972 to 1999 is nonsense. He explained that Doppler weather radar was not available commercially until 1981; he noted that the application inventory references 1988 radar. He noted that Pages "A" and "B" note the original license for radar from 1971 to 1977 at 375 Deercliff Road. He referenced the original application noting that Attorney Hollister makes several statements indicating that the applicant meets the qualifications for continuous use. The original radar that was at this site was not owned by either WTIC or WFSB but rather was owned by the Travelers Weather Service. He referenced Page "G", which states that the main terminal was located at the Travelers Weather Service; Page "H" indicates that the antenna was a 6-foot dish. He noted that the Regulations do not allow the expansion of a nonconforming use; going from a 6-foot dish to a 14-foot dish is physically larger and substantially greater radiation. He explained that the dish size relates to just the antennas and the ray domes are larger; the original 6-foot dish had an 8-foot ray dome and the 14-foot dish has an 18-foot ray dome. Mr. Chase commented that the applicant claims that the proposed ray dome is 14 feet but noted that his diagrams will prove otherwise. He referenced Pages "I", "M", and "F", noting that the radar at the Traveler's Weather Service stopped working on October 12, 1976. He noted that the Travelers Insurance Company only owned the Travelers Weather Service at that point, as the TV station had been sold, so they no longer had access to an engineering staff and decided not to buy an expensive magnetron and therefore the radar was shut down permanently. Mr. Chase referenced Pages "N" and "O" noting that he is shown in the photos, taken late 1970s early 1980s, working on the WTIC FM tower. He referenced Page "O" noting that the photos show that there is no longer radar on the tower. He asked how it could be possible that radar was located on that tower from 1972 to 1999. He noted that the bottom photo on Page "M" is the radar located in his parents' garage; he noted that he had purchased the radar (Page "D") from the Talcott Mountain Science Center in 1981. Mr. Chase explained that he bought the radar to use for his future newscast in conjunction with his proposal to purchase a TV

He referenced Page "C" noting that the first time Doppler weather radar appeared in CT was after he

had created the New England Weather Service, starting in 1988. He noted that he bought Enterprise Electronics Doppler Radar. He explained that the transmitter was located at the Talcott Mountain Science Center, in Bloomfield. He further explained that he had made a deal to locate the radar at the Science Center because it was the best site, and not what is claimed in the subject application. He noted that his family decided to exit the broadcast business in 1989 and sold the TV stations but kept the New England Weather Service (N.E.W.S.) for use with WTIC radio (WTIC TV was sold). He indicated that WFSB contracted with New England Weather Service in 1993 to begin radar service. (Page "P" contains part of the contract between N.E.W.S. and WFSB.) Mr. Chase commented that Page "P" proves that the Doppler did not belong to WFSB, as claimed; the radar was not at their site and they didn't own it. He referenced Page "Q" noting that it is the official contract between Meredith Corp., Post-Newsweek Stations, and New England Weather Service. Mr. Chase indicated that he feels this information is critical to the finding of a continuation of a non-conforming use. He questioned why the applicant would claim to move the radar at Bradley Airport to a 1939 tower and then remove it and put up a new tower. He explained that they cannot just put up a new tower but they are allowed to replace an existing tower; he noted that there are several problems. The 1939 tower predated the first tower engineering specifications by 10 years; the tower (cut down in 1972) was designed for a 6-foot antenna and 8-foot ray dome and not a 14-foot antenna and 18-foot ray dome. He further noted that at that time, the tower was not loaded with other feed lines and antennas. He indicated that since 1972 there has been an engineering specification (EIA-TIA 222) that needs to be satisfied for loading requirements (wind, ice, and equipment weight/dead load) for towers. Mr. Chase noted that he would like to see proof that the existing 1939 tower can support the new radar under the loading requirements governed by law. He explained that he has expertise in this area noting that he has been responsible for overseeing the construction of numerous towers, including Connecticut's tallest tower located on Rattlesnake Mountain (which is owned by his family). He explained, for safety reasons, that if an 18foot ray dome is installed on top of the tower and the tower fails in the direction of the WTIC FM tower, it could take down the WTIC tower. He further explained that he has no doubt that a brand new tower built to modern codes could support the proposed radar but noted that the existing tower was not built or designed to support the proposed radar.

Mr. Chase addressed tower height and noted that the application claims that the height of the tower is not being increased; the radar is just bigger. He asked whether the intent of the Regulations is to only look at the tower and forget about everything on the tower (i.e, the TV antenna is 50 feet long). He indicated that the WTIC AM tower is 3 feet high and explained that the base insulator is technically the "tower". He explained that the entire structure is the antenna, as the antenna structure radiates. He noted that if the Regulations (i.e., nonconforming and special exception) say that you can make changes to the tower and only consider the tower itself and not the stuff on the tower or the total height, there is potential for a big problem; he asked that caution be taken. Mr. Chase noted that there is a difference between a purposeful-built structure versus a general structure; he referenced diagrams provided with the application and noted that the top of the tower has a metal plate with bolts designed for a specific antenna. The Regulations call for changes, if nonconforming, that must improve the aesthetics; the 1939 tower has an open look and can hide in the existing trees. He commented that the construction drawings indicate dimensions with 18 feet of height.

Mr. Hollister asked Mr. Chase if he is aware that the application proposes to rebuild the tower.

Mr. Chase asked for clarification; rebuild or replace the tower.

Mr. Hollister stated that the proposal is to replace.

Mr. Chase noted that replacing is very different than rebuilding. He referenced Mr. Hollister's letter of January 10 stating that the Doppler radar is being moved from its current location to an existing 110-foot tower at 375 Deercliff Road.

Mr. Hollister referred to the next sentence in his letter.

Mr. Chase acknowledged that letter says the tower would be reconstructed. He asked if it's a sham that

the applicant says they are moving radar to a tower that can't support it and further asked why anyone would move the radar to a tower and then take it off and change the tower. Why wouldn't you just change the tower?

Mr. Hollister indicated that Mr. Chase's comments are not what the applicant is proposing to do. Mr. Chase noted that he is pointing out inconsistencies as he sees them; he noted that there are numerous spots where the size of the ray dome is referenced at 14 feet. He spoke to Mr. Hollister noting that Mr. Hollister has confused in this application the size of the dish with the size of the ray dome. Mr. Chase read verbatim from an application document...."in summary a Doppler radar system is a satellite dish enclosed in a 14-foot diameter sphere called a ray dome." He asked whether the ray dome is 14 feet or 18 feet.

Mr. Hollister indicated that as far as he knows it is 14 feet.

Mr. Chase noted that diagrams have been submitted that show it at 18 feet and asked which is correct. Mr. Hollister noted that he is not an expert on this subject and added that Mr. Chase is totally misreading the application.

Mr. Chase commented that the documents speak for themselves. He referenced Drawing E1 noting that it says structure/tower for 18-foot ray dome. He noted discrepancies between some of the drawings and asked whether some of the tower photos are not true representations of what the tower looks like. He commented that the diagrams indicate, in engineering terms, that the proposed tower would be solid with a doubling of density from what is seen on the drawings.

Mr. Chase addressed location noting that the applicant claims that Deercliff Road is the best location for the radar. The location for the tower is 707.5 feet above sea level; adding 7 feet (the center of the 14-foot dish) would give a center of radiation of 714.5 feet. He noted that if you aim the dish north, Talcott Mountain is at 950 feet; if the beam is held at the horizon, the beam will attempt to plow through Talcott Mountain, unsuccessfully. Mr. Chase submitted a topographical map noting that it is the map he used when he did the engineering for the radar at the Talcott Mountain Science Center. He commented that if the claim is that WFSB is trying to see the weather approaching Bradley Airport, Talcott Mountain is in the way. He communicated his disagreement with some of the testimony heard tonight noting that the engineering section is full of major mistakes, including some that are off by 1,000 times. He pointed out that even with all the mistakes shown, the proposal meets the threshold for radar emissions. Mr. Chase asked whether the right questions are being asked and explained that radar emission is similar to a regular incandescent light bulb such that a light bulb could be on 24/7, forever, and would do no harm if you're not right next to it. If you put your hand an inch from the light bulb you will get burned; the location of the radar is important such that you cannot exceed a threshold. He noted that it has been represented that anything above the threshold will start heating up body parts. He explained that properly engineered radar, as was done at Talcott Mountain Science Center, results in no problem but located 300 feet away from a house is a problem for several reasons. Mr. Chase noted that radar makes noise and you can hear it on the ground but added that it is not known whether it would be heard at the property line. He indicated that the proposed radar is Baron 350 Model series noting that the specifications state that it is 6 RPM, not once per minute as represented. The radar can be operated in different modes, depending on weather needs, which increases the noise level. He noted that it has been represented that the pilots at Bradley Airport depend on this radar. He questioned whether the pilots are looking at this radar rather than radar provided at the Airport by the National Weather Service. Mr. Chase noted that he spoke with one of the CT Aeronautical officials today who indicated that WFSB has a live feed in the control tower but it is down in operations. He explained that when he owned New England Weather Service Bradley Airport was one of his clients and further explained that it's not the pilots or the control tower that need the information but rather it's the ground people who get the information. He commented that there is a range of a couple of hundred yards where the radar must calculate time, distance, and speed and therefore sends out multiple pulses; radars can put out thousands of pulses per second. He commented that the applicant represents that the blind spot is a

couple of hundred yards out over the runway and questioned why you need radar to tell you it's snowing when you're already there. Radar is used to gather information up in the sky. Dr. Kiersten Ek, 12 Henderson Drive, commented that she would like to put her children to sleep and not worry about radar pulses hitting their bedroom.

Mr. Chase addressed the operation frequency of the proposed radar. He noted that it has been represented that the radar would not affect garage door openers and similar items but explained that the proposed radar is C-band radar that operates in the 5 GHz band. He further explained that 5 GHz is the same band that is used by many wireless telephones, wireless access points, smart phones, baby monitors, wireless security cameras, wireless keyboards and mice, ipads, and more to come. He indicated that the FCC just recently greatly expanded the use of the 5 GHz band. He questioned quality of life and appropriateness of the proposed location and indicated that it is known, from past experience, that 5 GHz band radars and 5GHz band consumer electronics do not play well together. A situation will be created such that things will "drop out" and things will be jammed. Mr. Chase explained that the band is bi-directional such that the consumer goods, located 300 feet from the radar, can jam the radar and the band will explode. He noted that you want the radar away from nearby homes.

In response to Mr. Dowd's question, Mr. Chase addressed the expansion of a non-conforming use and noted that the original 6-foot dish radar had a peak output power of 250K watts with a total of 1.25B watts. The proposed radar has a peak output power of 350K watts feeding a 14-foot antenna, which puts out 6.76B watts of power. The Channel 3 digital antenna (main channel) puts out 1M watts; the proposed radar is the equivalent of a couple of thousand times every second banging out a pulse equal to 6,760 additional Channel 3 transmitters turning on at once. He noted that if the radar is properly located, it's fine. He noted that he is very familiar with the history and the real estate in the subject area, noting his subdivision known as "Sky View" in 2002. He noted that he has read the Zoning Regulations in connection with non-conforming uses and indicated that from everything he has seen, the intent of the Regulations is to ultimately change, over time, all non-conforming uses to conforming uses. He explained that the dates for the houses used in the application are not relevant to the facts. Back in the 1970s the Cliff House, a commercial operation, existed south of the subject site; today it is residential. He noted that to the north was part of the WTIC radio area, which was split off in 2002 when he took it from commercial to residential. Mr. Chase concluded by noting that all around the site has been a move towards residential, away from commercial, and asked whether we want to reverse this trend

Norm Kilcommons, appraiser for 30 years and owner of Property Consultants in Farmington, noted that he is a certified General Appraiser and can perform commercial and residential but noted that the majority of his work is residential. He noted that he has worked with and testified in court for the Towns of Avon and Canton on tax appeals. He explained that there are no properties similar to the subject scenario in Connecticut. The property (former Cliff House site divided into 3 lots) located furthest from the towers sold for an average of \$470/SF; the middle lot sold for \$416/SF; the closest house to the towers is under lease with an option to buy and is selling for \$399/SF. He noted that he has talked to agents who deal with high end properties in the Farmington Valley who have indicated that the aforementioned properties would have generated more money if they weren't abutting/had a view of the towers. He noted that on March 11, 2014, he noticed an article in the Hartford Courant which he summarized as...."WFSB TV has asked permission to install its Doppler weather radar system at the top of a 110-foot tower on a 21-acre parcel at 375 Deercliff Road. The station system was there from 1972 to 1995 and then moved to Bradley International Airport in Windsor Locks. Residents of the neighborhood on Avon Mountain have voiced their opposition to the plan. The Doppler radar emits electromagnetic radiation that is regulated by the Federal government because of its potential impact on people's health and while WFSB officials have said any effects would be minimal, residents are still worried". Mr. Kilcommons concluded by noting that given what exists in the neighborhood, the radar

will have a substantial effect on property values; he asked who would buy a house in the area if there are potential health risks.

Mr. Dowd submitted to the Commission an affidavit from Mr. Chase, summarizing his testimony. He also submitted an affidavit from Nick Cifaldi, a realtor with Berkshire Hathaway who listed the homes located where the former Cliff House existed. Mr. Dowd noted that

Mr. Cifaldi's conclusions are similar to those of Mr. Kilcommons with regard to property values. He noted that Mr. Cifaldi indicates that there have been numerous buyer objections to the radar. Mr. Dowd searched 405 Deercliff (former Cliff House site) on google "earth". He noted that the existing 110-foot tower is roughly at tree level and indicated that the "dome" will be clearly visible from the front porch of the 3 properties located where the Cliff House once stood. He showed views from other areas on Deercliff Road as well as Robkins Road, noting that the proposed radar installation is only several hundred feet away and an inappropriate location.

Mr. Dowd displayed a PowerPoint presentation and noted that both Norm Kilcommons and Nick Cifaldi, via affidavit, have indicated that the proposed radar will have a negative effect on property values in the area. There are 5 homes in the immediate vicinity that will be able to see the site from their front porch. He noted that he believes Dr. Carpenter's testimony is compelling; health information comes from doctors, not from engineers. He urged the Commission, prior to casting a vote, to drive up to Deercliff Road to view the site and the existing tower. He summarized Mr. Chase's testimony such that neither Meredith Corporation, nor their predecessors, owned the facility at Deercliff Road. There has not been radar operating at Deercliff Road since 1976 and the area was a very different place than it is today. Mr. Dowd noted the differences between the radar of 1976 and the proposed radar, which is 6.76B watts of energy/radiation firing over homes; non-ionizing electromagnetic radiation within a few hundred feet of a large residential area. He noted that both the applicant's report and the Commission's expert report from Cavell Mertz indicates that there will be an increase in ambient radiation at the nearest property line as a result of this radar installation. He referred to Mr. Chase's comment about noise noting that the noise would be 24/7 and worse if there is a weather event. He noted that there would be a 16% increase in the height of the unit; an 18-foot ray dome (ball) atop a 110-foot tower that will be rebuilt. The ray dome will be located above the tree line and visible to nearby homes and also visible from Fisher Meadows and other areas in the ridgeline. The new tower proposed is going to be far denser than the existing tower; the new tower would not blend in with the tree line.

Mr. Dowd reviewed the special exception criteria in the Zoning Regulations noting that the Commission can approve certain uses under very limited circumstances. The Regulations speak to a modification or replacement at the same site of an existing communications transmission station. He asked if the site is an existing station if there has not been a radar facility in operation for 38 years. He noted that the subject application cannot be granted, as it is not a continuation/modification of an existing use and added that there has been conclusive evidence provided by Mr. Chase. Mr. Dowd indicated that the Zoning Regulations contain some conditions that discourage increasing the height of a tower, such as:

The radiation level at the nearest property line must be reduced. Mr. Dowd noted that both reports indicate that, although not significant, there will be an increase in ambient radiation at the nearest property line.

The resulting impact on the ridgeline has to be minimized. Mr. Dowd noted that the radar will be visible from the ridgeline, as well as from the front porches of 5 nearby properties.

He asked why the radar is being proposed as a modification of an existing facility. He commented that we want a residential Town and don't want a negatively marked ridgeline; we don't want these types of applications. The Zoning Ordinance, thankfully, says that we don't want additional communication towers and other things after the amendment; he noted that these things didn't exist and the subject application is an attempt to do a two-step around the Regulations by claiming that there was something

there that wasn't. The application by Channel 3 has everything needed to deny it; they admit that radar has not been on the site since 1999-2000. A non-conforming use discontinued for 6 months means it cannot be resumed; there is 38 years of discontinued use. Mr. Dowd noted that there is an abandonment of the facility by Channel 3 that cannot be legally restarted under the Town's Regulations. He explained that above and beyond the abandonment issue, there are a series of conditions that need to be met before a special exception can be granted.

Mr. Dowd reviewed the special exception criteria:

### A. Suitable location for use

Mr. Dowd commented that there is no argument that a large Doppler radar facility emitting electromagnetic radiation is going to be in harmony with the orderly development of a residential area.

#### B. Suitable structures for use

Mr. Dowd noted that the height of the unit is going up 16% with an 18-foot large white ray dome on top, which will be visible from Fisher Meadows. Appraisers have indicated that a radar facility is going to have noticeable effects on property values.

C. Neighborhood compatibility

Mr. Dowd reiterated that radar would have a significant effect on property values.

I. Consistent with purposes

Mr. Dowd addressed public health and noted that there are numerous residents present tonight and others who wanted to be present but couldn't. He indicated that he feels

Dr. Carpenter's testimony is compelling. He commented that he doesn't understand how radar could not be harmful, regardless of what the FCC says.

Mr. Dowd thanked the Commission for their time and concluded by noting that he and the resident group have passion for this cause.

Mr. Hollister asked that the slides presented by Dr. Carpenter and Mr. Dowd be submitted for the record.

In response to Mrs. Clark's questions regarding the measurement of the "pulse", as it was indicated that it is more dangerous than steady RF, Dr. Carpenter explained that there is some evidence for this but added that he doesn't mean to overstate the evidence. He noted that in the whole range of electromagnetic fields, even in power line level fields, it is the transients that seem to be what trigger the adverse health effects. He indicated that the "pulses", regardless of the frequency, appear to have more health effects than just the steady waves but explained that the evidence is incomplete. Dr. Carpenter clarified that every time there is a "pulse" 6B+ watts are emitted. He confirmed that he can provide scientific references with regard to health issues such as cancer. He added that most of the data for cancer comes from people holding cell phones to their ear; it takes about 20 years to develop brain cancer from this exposure. The studies that have been done involve people who have used cell phones for 10 years or more, showing doubling and tripling of the rates of brain cancer; children have a threefold greater risk than adults. He indicated that there is some evidence for increased leukemia around extremely powerful AM radio stations but noted that he can't point to any studies for Doppler radar, as he doesn't think any have been done. He explained that you can't really study populations unless you have a lot of people close by (i.e., a lot of people living near a Doppler radar). Dr. Carpenter explained that old literature from the DOD reports a number of technicians around radar sites that had excessive exposure and developed symptoms of "microwave sickness". He clarified that this information was not from residential areas and the exposures were quite high.

Mr. Gackstatter addressed Dr. Carpenter and asked, given that we are 29% within the maximum permissible tower that is coming mainly from the AM/FM radio stations, how detrimental are those radio effects to the people that live there now. Dr. Carpenter explained that he can't really answer that question and noted that he made very clear that he thinks the standards are much too loose. He added

that he feels the exposures noted by Mr. Gackstatter are sufficient such that there is some increased risk of disease. He noted that the issue here is what is the risk of any additional increment and added that that is what he focused his attention on. Mr. Gackstatter commented that the Town's consultant indicated that if everyone in the neighborhood is standing on their roof the additional percentage is. 055. He noted that if it's safe to have the towers there now and we're adding less than ½ of 1% to the power that's coming out then why do we have the towers there now. Mr. Carpenter explained that he didn't say it was safe to have the towers there now. Mr. Gackstatter commented that if it isn't safe the towers should come out. In response to Mr. Gackstatter's question, Dr. Carpenter explained that the major negative effects are increased risk of cancer and an increased risk of electro-hypersensitivity, which is the term being used called "microwave sickness". He explained that while the concept has been reviewed by the WHO (World Health Organization) it is still controversial. There are other diseases with some suggestive evidence but, to date, the evidence is still much too weak to be conclusive. Dr. Carpenter explained that the issue before this Commission is the additional exposure that will be realized from the proposed radar above and beyond what people in the area are already experiencing from all the other sources that everyone has, such as cell phones, WiFi, pagers, etc. He stressed that it is not his intent to minimize the adverse effects of any source of exposure. In response to Mr. Gackstatter's comment, Dr. Carpenter confirmed that he doesn't agree with the .055 number, as it doesn't take into consideration the effect of very brief but extraordinarily high intensity pulses; the number is averaged over time, 5 seconds per hour. Mr. Gackstatter commented that Dr. Carpenter has indicated that the closer one is to the tower the safer they are. Dr. Carpenter confirmed that closer to the tower is safer unless you are in the direct line of the beam; if you are standing very close to the tower vou are not in the shadow of the beam.

In response to Mr. Gackstatter's question about the 5 GHz spectrum, Mr. Chase explained that in most cases the FCC regulates where spectrum frequencies can be used but in this case consumer uses are on what's called an unlicensed, secondary basis. Mr. Chase explained how the new band expansion works – for example, if you have a wireless security camera, it has to scan the frequency and if it detects radar operating it has to shut down some of its channels and move to other channels so it doesn't interfere with the radar; the radar is primary. He further explained that you either have a total disruption of the equipment or a narrowing of the band width (i.e., instead of operating on 20 channels you may operate on 4 channels). Mr. Gackstatter commented that his understanding is that the band expansion is going to affect people's household electronics. Mr. Chase clarified that it will only affect household electronics if you're close enough; like in the subject situation. He further clarified that the band expansion is going to affect both existing and new household electronics. All consumer goods operate at the milowatt level; there's a huge contrast in power levels and the frequency gets overloaded. In response to Mr. Gackstatter's question about whether people are in the beam of radar at the aperture or are they just in the radiation,

Mr. Rhodes referenced Dr. Carpenter's slide showing the radar beam and explained that the radar has about a 1° beam width that when pointed at the horizon has about a half a degree below that. He noted that even at 45 feet above ground there is no point that is within that half a degree. Mr. Rhodes explained that everybody is below the beam. Mr. Gackstatter commented that the homeowners are located close enough as to not be affected. Mr. Rhodes clarified that it's not the distance; homeowners are low enough so as not to be affected.

Mr. Cappello commented that it has to hit the ground eventually but maybe it's so far out it doesn't matter. Mr. Rhodes concurred that it's very far out when it hits the ground.

Mr. Gackstatter commented that it is his understanding that the beam that goes up has a little bit of a rise and is not on a horizontal angle and asked whether the beam would clear Talcott Mountain. Mr. Rhodes explained that he would have to know how the radar would be operated but noted that his report looked at worst case, that being horizontal; he added that it does go up from there. He further explained that if the beam is 1° wide, from horizontal down is a half degree. He referenced his

calculations in the study noting that all the points are much less, even at 45 feet high off the ground. Mr. Gackstatter asked how far away from the tower you need to be before half power actually hits the ground. Mr. Rhodes explained that it is much further out than the distance that didn't meet the standard, located straight in front of the antenna. Mr. Gackstatter noted that he would be interested in knowing the number and what the actual power is when the beam hits the ground. Mr. Rhodes indicated that he could get that information.

Mr. Dowd asked that the topography in the area where the radar is proposed be looked at; he clarified that he doesn't mean just the immediate area and asked that Deer Run and Parsons and Montevideo be looked at. Mr. Gackstatter noted his agreement adding that if the flat area is known then it can be understood how far out we need to look to see what's above the flat area.

Mr. Armstrong noted that he has some knowledge in connection with EMFs, specifically high power, and also noted that he is an attorney. He referenced Mr. Rhodes' information and asked whether the report has information solely about the exposure relative to the Doppler radar and not the composite of the other transmission towers. Mr. Rhodes confirmed that .032 is only for the Doppler radar. He explained that the 29% is the worst case generalization/cumulative effect for Doppler with the AM/FM TV. In response to Mr. Armstrong's question about the standards used in connection with the term "general population" (i.e., does it include children), Mr. Rhodes explained that standards in this regard are out of his area of expertise.

Mr. Armstrong commented that he knows of 3 criteria for effects of EMFS, namely distance, power, and frequency. Mr. Chase noted that modulation type is an additional criterion and explained that there can be a regular, continuous wave, where it's on all the time; frequency modulation means it shifts frequency; and then there's pulse.

In response to Mr. Armstrong's question regarding clarification between pulse and constant radiation relative to Dr. Carpenter's comments, Mr. Rhodes explained that the standards specify the average. He noted that he is not an expert on the health effects of radiation but noted that it is his understanding that the heating/thermal effects of cells is what relates to the cooling off period and the resulting average. Mr. Armstrong commented that it seemed as though Dr. Carpenter was saying that the pulsing of radar created more problems, in this instance, and the standards are based more on a constant rather than a pulsing situation. Mr. Rhodes explained that the standards are based on time averaging over a period of time; he added that he believes the Massachusetts Standard is based on a 30-minute time period. Mr. Rhodes added that his understanding is such that if you meet the standard, you meet the standard, whether it's a minute or 30 minutes.

Mr. Gackstatter asked whether the "average" has a pulse in it and noted that he believes the answer is yes because the average time contains the transient.

Dr. Carpenter confirmed that it is averaged over a period of time.

In response to Mr. Armstrong's question, Mr. Hollister confirmed that the applicant would be submitting written responses to Mr. Chase's comments regarding the non-conforming use. Mrs. Primeau indicated that she has no questions at this point due to the volume of information

received; she noted that she needs time to digest the material.

Mr. Cappello noted that there is no radar currently at 375 Deercliff Road but asked if there is currently radar at the Talcott Mountain Science Center. Mr. Chase confirmed that there is radar at the Talcott Mountain Science Center but noted that it is not operating at this time. The radar is a 12-foot dish with a ray dome of either 14 or 16 feet.

In response to Mr. Cappello's question, Mr. Zarrilli indicated that the applicant owns the radar currently located at Bradley Airport and noted that he believes the size is the same as the size being proposed in this application.

Ms. Keith asked for clarification/confirmation on the size of the radar being proposed.

Mr. Hollister stated that he will get the manufacturer's standards and definitive information will be provided.

Mr. Armstrong commented that he has reviewed the diagrams and noted that the existing tower in one of the drawings indicates the size at 111 feet, 10 inches. He asked that this information be reviewed and corrected.

In response to Mr. Cappello's question regarding clashing, Mr. Chase explained that the radar at the Talcott Mountain Science Center and the proposed radar at 375 Deercliff Road are on separate frequencies so there would not be a problem. He added that there are allocations for several channels because every network affiliate has their own radar.

In response to Mr. Gackstatter's questions/comments about the 5 GHz band and radar interfering with home electronics, Mr. Chase explained that units have multiple channels and are spread out, and many use what is called "spread spectrum", meaning they are all over the place. He further explained that a frequency, when it is modulating, is not a laser beam but, rather, it spreads out. A TV channel, for instance, has a center frequency but spreads out over 6 MHz creating side bands when modulating. He explained that there is something called "side loads" meaning that radar projects weaker beams along with the main beam. He noted that everything is a straight line (there's no such thing as a curved line) and when a dish antenna is put together (like the one being proposed) it is not perfect because it comes in pieces and they don't all line up properly which create distortions of the beam.

Mr. Cappello asked about the height of the radar at the Science Center noting that the height at 375 Deercliff is at approximately 715 feet.

Mr. Chase indicated that the Science Center has a little shorter tower but noted that the homes are much farther away and much lower; he noted that there's never been a problem there.

Ms. Keith referenced the 6B figures provided by Dr. Carpenter and asked if these figures, relative to peak/valleys/wattage, are in line with Mr. Rhodes figures. Mr. Rhodes confirmed that the 6B watts peak power is correct and that number is what was used in his report under the MA standard/guidelines. He explained that the MA standards are more stringent on the lower frequencies and are actually the same as the FCC uses and the same as the ANSI IEEE standard.

Ms. Keith opened the hearing for public comment.

Geoff Nevins, 408 Deercliff Road, asked Mr. Chase how the Doppler "effect" works. Mr. Chase explained that if you're in a train, the clanging of the bell goes higher as you approach it and lower as you go by it; due to the speed of sound, a particular frequency has a certain speed and if you take away from it or add to it that changes the frequency. The Doppler radar was designed because conventional radars would send out a beam and pick up side loads (i.e., trees and mountains, etc.). Doppler radar is able to determine things that don't change frequency and eliminates those things; only things that move, like rain or wind, are detected. The Doppler has a velocity mode and can determine wind speed by looking at the frequency; it sends out a pulse at a certain frequency and looks to see how it has changed when the pulse comes back. Mr. Chase noted that the "devil is in the details".

Mr. Nevins commented that if a beam goes out and hits snowflakes or rain drops and the beam is being reflected back towards the system, could it be assumed that these beams are getting scattered, such that the beams are not coming directly back in a straight line. Mr. Chase concurred, noting absolutely. Mr. Nevins commented that as the beams hit things they bounce around. He added that as rain falls near his house, the beam is not going just over his house but rather is hitting above the house and possibly coming down on the house. Mr. Chase agreed but clarified that the beam is greatly reduced. In response to Mr. Gackstatter's questions, Mr. Nevins confirmed that he knew about the existing towers in the area and considered the health risks when he bought his house, over ten years ago. He added that he talked to people in the area and did some of his own internet research; he noted that the basic information he found indicated that there was no harm but pointed out that this was 10 years ago and information and science has changed and gotten better. He indicated that the woman he bought the house from passed away from cancer but added that he doesn't know if there is a correlation. Mr. Nevins noted that sometimes people tend to overlook things when they want to buy a house but explained that he doesn't want to add to the load in the area.

Mr. Gackstatter asked Mr. Nevins if he knows exactly how many antennas are located on the property. Mr. Nevins indicated that he doesn't know how many antennas are on the property but noted that he can see the tall towers from his backyard and would like them to be taken down.

In response to Mr. Gackstatter's question, Mr. Zarrilli stated that the WFSB tower, the WTIC FM tower, and the old radar tower are located on the property at 375 Deercliff Road. The CBS radio site, located directly north of the subject site, houses the 2 AM towers. There are 6 satellite dishes in the yard at 375 Deercliff Road.

In response to Mr. Gackstatter's comments/questions, Mr. Dowd indicated that everyone knew there were AM towers in the area; you'd be an idiot not to know, as you can see them there. He explained that the issue is the equivalent of 6,700 of the existing antennas being put in by the energy that is going to be generated by the proposed radar. He added that this is a very different kettle of fish than is being talked about. He referenced Dr. Carpenter's earlier comments where he referenced an average of regular AM waves. Mr. Dowd commented that a surface can withstand a great deal of force provided it's an average force; he noted that if you start hitting with pulses, in dramatic shots like what the proposed radar does, that is very different. He noted that he feels the questions are a little bit unfair, as the residents knew the towers/antennas existed but added that if there were 6,700 of those things there he indicated that he doubts people would have bought homes nearby. He further noted that if people had known there were 6.76B watts of energy he added that he doubts people would have bought nearby.

Brett Browchuk, 385 Deercliff Road, asked why this obnoxious issue is even being debated. He commented that this proposal should never be in a residential area; it's at the airport where it belongs. He added that it doesn't matter whether the homes are \$3M or \$300K; home values are not the issue. He commented that putting up a tower with a huge dome and unknown health issues should not even be discussed. He explained that, of course, he knew the towers existed; he saw the towers and the dishes. The noise issue is beyond comprehension; the thing would spin around like a flying saucer. He concluded by noting that he's going to trust that the right decision will be made for the all the residents of Avon.

Bill Michelle, 405 Deercliff Road, noted that he grew up with towers and power lines behind his house and noted that he entered into a contract when he bought his house because he has 2 young children. He commented that if a giant Doppler ball gets installed he's moving out; he noted that he doesn't want to hear the noise.

Vi Smalley, 330 Deercliff Road, indicated that she knew the towers were there but can't see any of the dishes across the street. She noted that she will see the proposed radar tower from her front porch; she communicated that the noise and health issues are bothersome and asked what effect this noise will have on the dogs in the area. She asked who on the eastern seaboard has Doppler radar in a neighborhood; she noted that she's never heard of it and added that that is probably why there are no studies. She indicated that she doesn't feel the radar belongs here and also that the application doesn't seem to fit or be allowed under the Regulations.

Lynn Erie, 3 Brocklesby Road, asked what the benefit of this proposal is to everyone who lives in the Town of Avon.

Kari Olson, Town Attorney, explained that the Commission is bound to apply the Zoning Regulations as written and adopted by the Town. She indicated that rather than suggesting that the Commission members have some independent discretion on these issues, it is important to understand that the Commission must apply the Regulations to the facts of this case. It is not within the Commission's purview to determine what economic benefit there might be to the Town. She noted that while property values are one criterion that must be considered, the Commission is duty bound to consider the requirements of the Regulations.

Marla Helene, 23 Robkins Road, commented that it seems that Talcott Mountain is in the way of Doppler getting a true weather reading and asked why this location is ideal.

Mr. Hollister indicated that Talcott Mountain is not in the way and noted that he would be submitting written responses to tonight's comments at the next hearing.

In response to Ms. Keith's question, Mr. Hollister confirmed that he will grant an extension of the public hearing to May 13 and will submit this information in writing. He clarified that written responses to tonight's comments will be submitted to the Town prior to the May 13 meeting; the information will be presented at the May 13 meeting.

Bob Clark, 175 Deercliff Road, asked if the information that has been provided by the Station in writing will be deliberated by the Commission. He noted that the audience has not been able to hear everything. Ms. Keith explained that all deliberation is open, just as the hearing tonight.

Ms Olson, Town Attorney, stated that all information is public; everything is available for viewing by everyone at the land use office at the Town Hall.

Mr. Hollister indicated that the information he described tonight in his opening remarks was submitted in writing to the Staff at Town Hall 10 days ago and also provided in electronic version. He explained that he did not take 90 minutes tonight to review the responses because he wanted to allow time for public comments.

Frank Kennedy, 14 Robkins Road, noted his understanding that new material will be presented for the next meeting and asked if the public will have a chance to review new material before the May 13 meeting. Ms. Olson explained that Attorney Hollister just confirmed that he would be providing all new information in advance of the May 13 meeting; this information will be available at the Town Hall for public review.

In response to comments from the public, Ms. Keith reiterated that the May 13 meeting will be open for public comment. She explained that at the end of the May 13 meeting the hearing will be closed and no further information can be received.

In response to Mr. Kushner's question, Mr. Hollister stated, for the record, that he would submit any new material in time, in advance of the May 13 meeting, such that everyone will have a reasonable opportunity to review. He explained that that information will not be submitted on May 12 but added that he will let Staff know when he is able to commit to a specific date. He noted that additional information finding is needed and communicated, for the record, that he would be requesting information from Mr. Dowd and Mr. Chase and others. He explained that part of the ability to respond will depend on how quickly the requests for information are responded to.

Mr. Kushner asked that any new information be submitted electronically, as well as in writing. Mr. Hollister confirmed that he would submit both in writing and electronically. Mr. Kushner noted that Staff could pass along any new information via email to anyone requesting it.

Ms. Olson advised the public that they cannot communicate with the Commission about this application via email, phone, in person, or otherwise. She explained that the integrity of the public hearing process needs to be kept intact by respecting the fact that individuals cannot be discussing this application in any other venue other than at a public meeting.

In response to a question from an unidentified audience member, Ms. Olson explained and confirmed that the Commission can only communicate with each other in a public meeting setting with a quorum (the majority of the members), an agenda, and a public notice.

Sherry Lang, 11 Sky View Drive, commented that the proposed Doppler radar is in her backyard and noted her concerns for all of the 8 families in her neighborhood. She noted that she finds the proposal very upsetting.

Mr. Gackstatter commented that he feels some expert testimony is needed relative to noise levels; noise levels at the device and at the property line. He added that comparisons to other types of noise levels and real-life examples (i.e., jet engines) should be included. He commented that while averages are important there should be information for when the radar is in scan mode and how often the radar is in scan mode.

An unidentified audience member noted that, for the most part, Deecliff Road is a quiet area; generally,

only nature can be heard. He noted that he probably doesn't live close enough to hear it but noted that if there was constant noise from radar it would probably irritate the neighbors.

Rona Gelber, 17 Robkins Road, noted that she bought her house because of the quiet nature of the area.

There being no further input, Mrs. Primeau motioned to continue the public hearing for App. #4708 to the next meeting, scheduled for May 13. The motion, seconded by Mr. Mahoney, received unanimous approval.

Mrs. Primeau motioned to table App. #4709 to the next meeting, scheduled for May 13. The motion, seconded by Mr. Mahoney, received unanimous approval.

The public hearing was closed.

# PLANNING AND ZONING COMMISSION MEETING

Mr. Cappello motioned to waive Administrative Procedure #6 and consider App. #4714. Ms. Keith seconded the motion that received unanimous approval.

App. #4714 -DP3 LLC, owner/applicant, request for Special Exception under Section VII.C.4.a. of Avon Zoning Regulations to permit wall signs on 2 elevations, 300 West Main Street, Parcel 4540300, in a CR Zone

Mrs. Primeau motioned to approved App. #4714. The motion, seconded by Mrs. Clark, received unanimous approval.

OTHER BUSINESS

Proposed regulation change for "heliports" – Town of West Hartford

Mr. Kushner explained that a referral, required by State Statute, was received from West Hartford; the West Hartford Town Council is considering an adoption to the Zoning Regulations to make it possible for a residential property owner in a residential zone to submit an application for special permit to ask to establish a heliport. He noted that a letter to West Hartford has been drafted noting that the Commission feels a heliport is an inappropriate use in a residential zone. Mr. Kushner indicated that Mr. Chase has asked for permission to provide certain facts to the Commission before the letter is sent to West Hartford. He explained that any letter the Commission sends is advisory in nature, as Avon has no control over what West Hartford decides to do with regard to an ordinance.

Ms. Olson explained that the purpose of the referral is to give notice, such that if the Commission feels very strongly about the proposed ordinance they can attend the public hearings just like everyone else.

Ms. Keith indicated that it is her understanding that the Commission feels that heliports are not appropriate in residential areas. She noted that she would allow Mr. Chase to speak briefly.

Mr. Chase submitted 2 handouts to the Commission. He noted that this topic is not discussed frequently and referred to Page 6, indicating that this information includes the typical areas of concern. He addressed noise and noted that by State regulation anyone who has a safe amount of land can have a helicopter take off and land 18 times every year without any Town regulations. He explained that in West Hartford you cannot put up anything (i.e., a windsock) that is purposely built for a helicopter; no asphalt or safety equipment is permitted. He stated that he has proposed to the Town of West Hartford a facility that will be primarily (i.e., 99%) used for LifeStar and noted that it may never be used. He commented that he initially considered letting LifeStar use his property but decided without having any safety gear the potential for a crash at his property is no better than when spur of the moment landing locations are chosen (i.e., parking lots at schools) out of necessity. He explained that helicopters landing in not-approved sites take longer (several minutes) than landings at approved sites (30-45) seconds). He noted that Avon has no noise ordinance in residential zones (people can run a wood chipper 24/7) yet there is concern about a once in a "who-knows-when" situation. He addressed safety and noted that up until 10 days ago there hadn't been any injuries to the general public from helicopters or in the vicinity of heliports. He noted that the recent accident involved a roof-top heliport, which doesn't have the designs that a properly licensed heliport can.

In response to Mr. Mahoney's question, Mr. Chase noted that he doesn't personally need LifeStar on

his property but explained that when he was building his home there were 2 horrific crashes at the bottom of Avon Mountain. He noted that center medians were installed on Route 44 and wires started crisscrossing the road such that LifeStar was unable to land. Mr. Mahoney noted that Mr. Chase's location is 5 miles from a trauma center at UConn. Mr. Chase indicated that his location is not a Level #1 and noted that an accident on Route 44 would be transported to Hartford Hospital.

Mrs. Primeau commented that helicopters have landed at Towpath School and other places and noted that she doesn't understand the need/request. Mr. Chase noted his understanding that helicopters can land at the schools.

Ms. Keith noted that LifeStar is looking for the closest area available; she added that she has spoken with them. She noted that she's been at the middle school where a helicopter has landed in the field, coming from Route 44, as it was the fastest and most direct.

Mr. Chase noted his understanding of Ms. Keith's comments but indicated that it would be much faster to have LifeStar land at his location; it could save 2 to 3 minutes and the ascent time is much faster, as they can go at full speed. He also noted a savings in driving time for the persons involved in the rescue. Mr. Chase explained that he is not debating this and noted that 2 people from LifeStar are asking for this service. He noted that he does not have a helicopter license or a helicopter. He explained that the proposed ordinance is for 1 helicopter and dispelled rumors that he has friends and that 4 guests may arrive by helicopter. He noted that he has never used his property to land a helicopter and suggested that a discussion take place with LifeStar and the CT State Police, as they are the groups requesting it. Mr. Chase stated that he has no hidden agenda and no plans to use the heliport for himself.

In response to Mrs. Clark's question, Mr. Chase explained that it was calculated that the time savings would be approximately 3 to 3 ½ minutes, which makes a big difference in survival rates.

In response to Ms. Keith's question, Mr. Chase noted that he has not spoken to his neighbors, as the closest one is ¼ mile away. He noted that approach and take off would be completely over MDC property and the helicopter would not go over the first house until it is a mile away.

In response to Mr. Mahoney's question, Mr. Chase explained that the ordinance would not be restricted to just LifeStar; the ordinance would allow unlimited flights. He noted that, by right, he is allowed 18 flights per year and added that he would have no problem including that restriction.

Mr. Kushner noted that the number of flights appears to be the main issue and suggested that possibly a solution could be to restrict the number of flights beyond what is allowed even without a licensed heliport.

Ms. Keith communicated that frequency is not an issue for her and explained that she doesn't feel a heliport is an appropriate use in a residential area. She added that we don't know what the future development of the area might be, noting that the MDC could end up selling their property. In response to Mr. Gackstatter's question, Mr. Chase explained that no fuel would be stored on site. Mrs. Primeau commented that she feels this is an issue to be debated between Mr. Chase and West Hartford.

Mr. Chase addressed the meaning of residential and submitted a document regarding the R80 zone in West Hartford. He asked if Avon has any residential zone that is 90% industrial involved with treating 5M gallons of water per day with toxic chemicals. He noted that there are 27 homes in all 4,500 acres; it's really a hybrid.

After some discussion by the Commission, Mr. Kushner explained that there are 2 opportunities for comment; once now and once during the hearing process.

Ms. Olson indicated that at this point, the Commission just needs to decide whether or not they wish to send the letter drafted to West Hartford. She noted that a vote is in order.

The majority of the Commission voted to not send the letter, as currently drafted.

Mr. Kushner noted that West Hartford delayed their decision to provide Avon with an opportunity to provide comment.

Ms. Keith indicated that she feels some form of the letter should be sent, as West Hartford has asked for

our opinion.

Mr. Chase noted, as clarification, that West Hartford notified Avon as a courtesy and Avon asked West Hartford not to vote until Avon's comments have been received. He added that the Commission can also provide comments to the specific application for a heliport, if the ordinance is approved.

Ms. Keith stated that the letter will be modified and sent to West Hartford. She noted that Mrs. Primeau and Mr. Cappello are in agreement to modify the letter; the vote carried 4 to 3.

Mr. Cappello asked that a limit on the number of flights be noted in the letter. Ms. Keith concurred. Mrs. Clark noted her opposition to sending the letter.

2014 CRCOG Appointments Regional Planning Commission

Mrs. Primeau nominated Peter Mahoney as CRCOG representative. The nomination, seconded by Mrs. Clark, received unanimous approval.

Mrs. Primeau nominated David Cappello as Alternate CRCOG representative. The nomination, seconded by Mrs. Clark, received unanimous approval.

There being no further business, the meeting adjourned at 11:10pm.

Respectfully submitted,

Linda Sadlon, Clerk

# LEGAL NOTICE

TOWN OF AVON

At a meeting held on April 8, 2014, the Planning and Zoning Commission of the Town of Avon voted as follows:

App. #4714 -DP3 LLC, owner/applicant, request for Special Exception under Section VII.C.4.a. of Avon Zoning Regulations to permit wall signs on 2 elevations, 300 West Main Street, Parcel 4540300, in a CR Zone APPROVED

Dated at Avon this 9th day of April, 2014. Copy of this notice is on file in the Office of the Town Clerk, Avon Town Hall.

PLANNING AND ZONING COMMISSION

Linda Keith, Chair

Carol Griffin, Vice Chair

#### LEGAL NOTICE

TOWN OF AVON

The Planning and Zoning Commission of the Town of Avon will hold a Public Hearing on Tuesday, April 22, 2014, at 7:30 pm at the Avon Town Hall on the following:

App. #4715 -DP3 LLC, owner/applicant, request for Special Exception under Section VI.C.3.d. of Avon Zoning Regulations to permit meeting area/space on second floor of rear building, 300 West Main Street, Parcel 4540300, in a CR Zone

All interested persons may appear and be heard and written communications will be received.

Applications are available for inspection in Planning and Community Development at the Avon Town Hall. Dated at Avon this 7th day of April, 2014.

PLANNING AND ZONING COMMISSION

Linda Keith, Chair

Carol Griffin, Vice Chair