

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

In re: The Matter of the Proposed)	
Children’s Memorial Hospital)	Honorable Richard E. Neville (Ret.)
Rooftop Heliport to be Located)	Hearing Officer and
in Chicago, Illinois)	Administrative Law Judge
)	

CMH’S RESPONSE TO SOAR’S MOTIONS TO RESCHEDULE
PUBLIC HEARING AND OTHER RELATED MATTERS

Children’s Memorial Hospital (“CMH”), presents the following response to the following Motions filed by the Streeterville Organization of Active Residents (“SOAR”):

a) Motion to Reschedule Public Hearing; b) Motion to Compel; and, c) Motion to Order Deposition and Cross Examination of the Illinois Department of Transportation’s Expert Witnesses.

I. BACKGROUND

On August 4, 2008, CMH submitted its Application for Certification to operate a heliport from its new Streeterville location to the Illinois Department of Transportation, Division of Aeronautics (IDOT).¹ The Application comprehensively addressed all statutory and regulatory criteria. On August 18, 2008, the Federal Aviation Administration (FAA) issued its Notice of Federal Airspace Determination, documenting that, “Heliport operations can be operated safely at this heliport... .” CMH

¹ All documents referenced herein are part of the public record compiled in this matter and currently available to the public through the website maintained by the Illinois Department of Transportation.

has also complied with local zoning ordinances by obtaining approval for the proposed building, inclusive of the heliport, from the City of Chicago Plan Commission, Zoning Committee, and, ultimately, the full City Council. On April 14, 2009, Conditional Approval for the helipad was granted by IDOT which indicated that it was prepared to grant Approval to CMH, but would hold a hearing if requested to do so. Soon thereafter, in conformance with IDOT regulations, IDOT provided notice and then held public hearings on the pending Application between July 22 and July 25, 2009.

Certainly, all parties concerned had reason to believe that IDOT would be ready to make a final determination on the helipad application on July 25, 2009. CMH and SOAR were on notice that the public hearings that were conducted in July, 2009 would likely be our last opportunity to present any information to IDOT that we desired IDOT to consider in its evaluation of the Application. The public turned out in droves to offer anecdotal accounts and personal testimony regarding their hopes and fears related to the proposed helipad operations. CMH provided a wealth of information about the physical characteristics of the proposed helipad, the equipment and technology available to pilots, the data that had been compiled, the studies that had been conducted, and the policies and procedures that had been drafted to ensure the safe operation of the helipad. SOAR also provided lengthy testimony and materials. However, the common theme of SOAR's presentations were criticisms of the work performed by CMH without the benefit of any of any additional studies or data. The

hearings concluded on July 25, 2009 with CMH and SOAR fully expecting IDOT to rule on the helipad based on the record compiled to date.

IDOT spent approximately one year reviewing and analyzing the tremendous volume of material submitted both in support of the helipad and in opposition to it. However, rather than rule based upon the existing materials, in August, 2010, IDOT provided notice to CMH and SOAR that IDOT had decided to retain additional independent experts to further advise IDOT and conduct additional studies related to the Application. IDOT provided the names and credentials of the retained experts, it explained the nature of the work that these additional experts would be accomplishing, and IDOT indicated that the results of the additional work was expected in early 2011, followed by an additional public hearing related to the new studies.

Due to unforeseen circumstances, the hearing originally scheduled for early 2011 has been postponed to June 23 and June 24, 2011. These dates were selected following an open dialogue and collaboration between representatives for IDOT, SOAR, CMH, and Judge Neville, the ALJ assigned to this matter. When this date was selected, the parties discussed the timing of when IDOT's reports would be available. Obviously, all parties desired to have as much advance information as possible, however, no commitments were made and no orders were entered with specific deadlines on the availability of the expert reports. Ultimately, the reports were distributed by IDOT on May 27, 2011, four full weeks prior to the upcoming hearing.

Ultimately, the upcoming hearings will take place ten months after CMH, SOAR, and the general public was first advised that additional studies were being conducted on the urban winds and their impact on helicopter operations at the proposed site. Obviously, neither CMH nor SOAR could predict with any degree of certainty what the outcome of these studies would be. To the extent CMH or SOAR had any concerns about the reliability or quality of work that was to be conducted on behalf of IDOT and/or if CMH or SOAR otherwise thought it might be beneficial to supplement the record with their own information related to this subject, they had more than ample time to conduct their own studies to add to the record.

As set out in the formal notice of the upcoming hearing, the scope of the hearing will be very limited. The notice states:

The purpose of the Hearing is to discuss the effect of wind and airwakes on helicopter operations at the proposed Lurie Children's Heliport. Due to extensive taken previously on the issues involving the heliport, the evidence submitted at the continuation will be limited to these safety issues.

Urban Airwake Report

On May 27, 2011 IDOT distributed, "Analysis of Urban Airwake Effects on Heliport Operations at the Chicago Children's Memorial Hospital, " prepared by Joseph F. Horn and the professional staff of Continuum Dynamics, Inc ("Urban Airwake Report"). The Urban Airwake Report is 91 pages long, with three additional pages of references, and eight more pages of an appendix describing the details of the

computational fluid dynamic model utilized in the study. The Urban Airwake Report is dense with charts, graphs, and data pertaining to analysis of the winds in the area of the helipad, descriptions of prior historical studies relied upon, computational fluid dynamic ("CFD") studies, modeling, and information gathered from the 19 test flights (including "extended hovers") conducted by these independent experts. In large part, the Urban Airwake Report relies upon the information and data gathered by CMH's consultants, RWDI, Landrum & Brown, and CMH's architectural team. Throughout the Urban Airwake Report, the independent experts describe their methodology as being conservative, challenging, and aggressively skewed to test the boundaries of the operating environment. In relevant part, the Urban Airwake Report provides:

- "Comprehensive simulation analysis did not predict any wind condition that would result in a severe upset of the aircraft or loss of control. As long as the approach is performed by an experienced and attentive pilot a conventional helicopter should have sufficient control margins to perform approach and landing maneuvers." (p.90).

- i "The simulation results tend to confirm the proposed operational wind limits of the heliport, i.e. 25 knot mean winds with a 15 knot gust spread." (p.90).
- i "Disturbances to urban airwake were not a major factor along the approach path." (p.80).
- i In test flights with winds of 15-20 mean knots: Wake turbulence was not significant; The helicopter stayed on course with relatively minimal pilot input; and Deviations and magnitude of the pilot controls required were greater in the conservative model than in the actual test flights. (p.67).
- i During the course of several test flights, the experts found that: The airwake and high frequency disturbances had a relatively small effect on the helicopter motion; The gusts over the heliport were relatively benign; The fluctuations in

wind speed were easily compensated for by the pilot, The airwake from the Hancock building and Water Tower Place did not create any large disturbances to the helicopter; and, the flight was relatively stable. (p. 72).

- i If the conditions become more challenging than anticipated, “there is no indication that the pilot could not abort and repeat the approach should workload become too high.” (p.90).

While the Urban Airwake Report unequivocally finds that the heliport environment does not present a threat to safe helicopter operations and the operating limitations proposed by CMH are acceptable, the report also suggests some additional studies. However, these recommendations must be viewed in context.

Additional Flight Tests: The Urban Airwake Report reports on the validation provided by significant agreement in the CFD, computer simulations, modeling, historical data, and test flights. The report states that the results of the test flights were universally better than what was predicted by the other methods employed to study the environment. However, due to ambient conditions during the test flights, the experts were unable to approach and depart from all of the desired directions. Thus, the experts did not achieve 100% validation, and this is the basis for suggesting additional test flights. To be clear however, the flights are not requested out of any perceived threat to safety. To the contrary, "Comprehensive simulation analysis did not predict any wind condition that would result in a severe upset of the aircraft or loss of control." (p.90).

Scaling back the operating limitations: The Urban Airwake Report defined the acceptable limits of helicopter controllability by measuring the extent of travel or slack

available in the flight controls. The experts did not encounter any conditions which exceeded the acceptable limits, but at 25 knots, the travel and pilot workload began to approach the acceptable limits. We note that the flights were conducted in a lighter, less powerful helicopter than will be used on the helipad, the flights were conducted by a pilot who was not oriented and experienced on the helipad, and the method for measuring the flight control inputs was admittedly imprecise. Thus, once again, the experts did not identify any unsafe condition. The recommendation to scale back the operating limitations is borne out of a concern to be as conservative as possible and to then reassess the operating limitations after further data is gathered.

AWOS Data: The AWOS (automated weather observation system) has not been installed or activated at this time. Thus, the Urban Airwake Study was unable to assess the utility of this device. Obviously, the experts were able to conduct their series of safe flights without this device and the device is obviously not necessary. The AWOS is intended to supplement the information available to pilots and can only add to the safety of the helipad. However, the experts offer a concern that under certain conditions the AWOS may not be able to report the full spectrum of conditions that will be relevant to the pilot. Thus, the Urban Airwake Study suggests that the AWOS information be studied and compared to actual conditions to best educate pilots on how to use (and how not to use) the AWOS data. Once again, however, the absence of the

AWOS information at this time does not indicate that the helipad is in any manner unsafe.

Status of Construction

Throughout the Application process, CMH has characterized the opening of the hospital as far off, giving all concerned plenty of time to analyze and consider the details of the proposed helipad. However, as time marches on, the hospital is actually nearing completion. The building exterior has achieved substantial completion. Grade and ground level site work (landscaping, paving, sidewalks, etc.) is on track for substantial completion by October 1, 2011. The interiors are moving toward substantial completion in sufficient time to meet the necessary inspections to obtain a certificate of occupancy on December 16, 2011. The hospital is expecting to obtain certification from the Illinois Department of Public Health in March, 2012, and assuming these targets are achieved, patients will be moved in to the facility and inpatient treatment will begin on June 9, 2012.

Due to the tentative status of the helipad application, completion of the helipad has been in limbo. Primarily, CMH has been mindful of its obligation to refrain from completing the helipad and/or to provide the false impression to any pilots that the helipad is in operation unless and until final approval has been granted and all systems are functional. Thus, while the physical structures and features of the helipad are all complete, several pieces of equipment remain to be installed and activated. CMH

estimates that it will take ninety to one hundred twenty days to complete all aspects of the helipad installation should approval be granted.

II. ARGUMENT

A. Further delays in the analysis of the pending application will threaten the hospital's ability to fulfill its mission.

The approval to operate a helipad at the Lurie Children's Hospital is sought specifically to enable CMH to provide necessary care to critically ill children. All credible data gathered to date demonstrates that the helipad can be operated safely. However, CMH has consistently committed to conduct additional flight testing once (if) approval is granted. CMH cannot perform its own internal flight testing unless and until approval is granted to operate the helipad. However, from CMH's perspective, this approval will only provide CMH with the authority to begin a rigorous program of evaluating and refining its procedures, the operating limitations, use of the available equipment, and development of orientation and educational materials for future users of the helipad. CMH desires to conduct its flight testing under a wide variety of flight conditions, throughout all seasons, and it is committed to completing the necessary testing before a single patient is transported to the helipad. Thus, with the testing protocol in mind, the time remaining before the helipad will be needed for patient care is fast approaching.

When the needs of patient care are compared with the objections from SOAR it is clear that the delay requested is unwarranted. SOAR and its experts have ample time to review the materials provided. They have had years to provide IDOT with the benefit of any and all data, studies, or information that they wish IDOT to consider. IDOT has gone above and beyond its statutory mandate in its mission of developing a full record of information that will be used to make its ruling on the pending application, and IDOT has never foreclosed SOAR or anyone else from supplementing their record with any information that might better enable IDOT to reach the proper decision. Particularly because the data and information relied upon by IDOT's experts is largely found in publicly available information and/or the set of data previously submitted by CMH and its experts, SOAR has only itself to blame for its failure to compile this information and provide its own analysis.

B. The Motion to Compel is Improper.

CMH is content to rely on IDOT to respond to the Motion to Compel. However, CMH states that it is unaware of any prior request for any of the information described in the Motion to Compel.

C. The Motion to Conduct Depositions and Cross-Examination of Witnesses is Improper.

The upcoming hearing is a continuation of prior proceedings. As such, prior rulings and agreements remain applicable. Therefore, CMH goes into the continued

hearing with the understanding that the purpose of the hearing is to facilitate the gathering of information, and IDOT has determined that this is best accomplished by providing a comfortable, non-confrontational atmosphere for the witnesses and professionals that have valuable information to share. Any information or points that one might hope to achieve in cross-examination can be developed by producing a separate witness to testify to the relevant concerns and/or to pose questions for the ALJ to consider and submit to the witnesses. This protocol was agreed upon for the prior hearings and should govern the proceedings going forward. CMH notes that the continued hearing is not an adversarial proceeding, and SOAR is not an aggrieved party. Thus, the cases cited by SOAR which express the benefits of cross-examination in other contexts has no application to the present matter.

Finally, for the same reasons expressed above, there is no basis for SOAR's request to conduct depositions. The limited depositions that were previously conducted in this matter were permitted to allow the parties to have equal access to the data and information relied upon by the professional witnesses. In the present circumstances, IDOT's experts principally rely upon information that is in the public domain, available to SOAR and its experts, and/or has already been produced. Any further explanation as to the foundation of the Urban Airwake Report will likely be provided and explained by IDOT's experts at the upcoming hearing (that is the point of the hearing, after all). However, to the extent the presentation by IDOT's experts falls short, the public hearing

