

PROJECT 10073 RECORD CARD

1. DATE 25 March, 1960	2. LOCATION Dalton, Massachusetts		12. CONCLUSIONS <input type="checkbox"/> Was Balloon <input type="checkbox"/> Probably Balloon <input type="checkbox"/> Possibly Balloon
3. DATE-TIME GROUP Local <u>1030 P.M.</u> GMT _____	4. TYPE OF OBSERVATION <input checked="" type="checkbox"/> Ground-Visual <input type="checkbox"/> Ground-Radar <input type="checkbox"/> Air-Visual <input type="checkbox"/> Air-Intercept Radar		<input type="checkbox"/> Was Aircraft <input type="checkbox"/> Probably Aircraft <input type="checkbox"/> Possibly Aircraft
5. PHOTOS <input type="checkbox"/> Yes physical specimen <input checked="" type="checkbox"/> No	6. SOURCE Civilian		<input type="checkbox"/> Was Astronomical <input type="checkbox"/> Probably Astronomical <input type="checkbox"/> Possibly Astronomical
7. LENGTH OF OBSERVATION N/A	8. NUMBER OF OBJECTS one	9. COURSE down	<input checked="" type="checkbox"/> Other <u>ice</u> <input type="checkbox"/> Insufficient Data for Evaluation <input type="checkbox"/> Unknown
10. BRIEF SUMMARY OF SIGHTING A 30 lb. chunk of ice fell in Dalton, Mass. The area was surveyed by an ATIC investigator and there was no overhead object from which the ice could have fallen. The spatter pattern was a fairly even distribution over an area 28' x 28'. The ice was analysed and described as porous, or like rime ice.		11. COMMENTS ATIC has arrived at no conclusion as to the origin of the ice. Future cases may indicate a pattern which will lead to a conclusion.	

AFCIN-4E2 /Maj Friend/amc/69216/typed 17 June 60

21 JUN 1960

Ice Fall, Dalton, Mass.

[Redacted]
[Redacted]
Cambridge, Mass.

Dear Dr- [Redacted]

1. On 25 March 1960, an "ice fall" case, which occurred in Dalton, Massachusetts, was reported to ATIC. A summary of this incident is attached to this correspondence.
2. ATIC has come to no conclusion concerning the origin of the ice. However, future cases may indicate a pattern which will lead to a conclusion.
3. This report is forwarded upon the suggestion of Dr J. Allen Hynek, who indicated that it may be of value to you in your present work.

Sincerely,

N Post
NICHOLAS POST
Acting Deputy
Science and Components

- 2 Atch:
1. Cj [Redacted] Rpt #WHRC P60-7
 2. Ice Fall Summary

COORDINATION:

Robert Friend Major AFCIN 4E2 20 June 60
H E matter c/20/60

(ORIGINAL FILE COPY)

AFCIN-432/Maj Friend/anc/69216/typed 17 June 1960

21 JUN 1960

Ice Fall, Dalton, Mass.

NASA
1520 "H" Street, NW
Washington 25, D. C.


1. On 25 March 1960, an "ice fall" case which occurred in Dalton, Massachusetts was reported to AFIC. A summary of this incident is attached to this correspondence.
2. AFIC has come to no conclusion concerning the origin of the ice; however, future cases may indicate a pattern which will lead to a conclusion.
3. This report is forwarded to your agency due to your possible interest in these cases.

FOR THE COMMANDER:




Deputy
Science and Components

2 Atch:

1. Cy  Wpt #WIRC P60-7
2. Ice Fall Summary

COORDINATION:

Robert Friend Major AFCIN-432 20 June 1960
off E Martin c/p

OFFICIAL FILE COPY

AFCIN-112/Maj Friend/amc/69216/typed 17 June 60

21 JUN 1960

Ice Fall, Dalton, Mass.

Dr [REDACTED]
[REDACTED]

Convair Astronautics
San Diego 12, Calif.

Dear Dr [REDACTED]

1. On 25 March 1960, the Aerospace Technical Intelligence Center received a report of an "ice fall" in Dalton, Massachusetts. A summary of this incident is attached to this correspondence.
2. As yet ATIC has no opinion concerning the origin of the ice.
3. This report is forwarded due to your interest in these cases as possible substantiation of your theory that the green fireball type meteors may be composed of frozen gases.

Sincerely,

N Post

NICHOLAS POST
Acting Deputy
Science and Components

2 Atch:

1. [REDACTED] Rpt #WWRC P60-7
2. Ice Fall Summary

COORDINATION:

Robert Friend Major AFCIN 112 20 June 60
A E Martin 6/20/60

This case contains
1, 8"x10" photograph.



Very light
Tapeoca sugar
Mixed but by a few more
Grain differences in country.

ms. 100

ms. 100

Ice Fall - Dalton, Massachusetts

On 25 March 1960, a 30 pound chunk of ice fell in Dalton, Massachusetts. The area was surveyed by an ATIC investigator, and there were no overhead objects from which the ice could have fallen. The splatter pattern was a fairly even distribution over an area 28' by 28'. The ice was described as rather porous, or like rime ice. A sample was taken from the center of one of the larger pieces in an attempt to preclude contamination from the local area. The sample was transported to ATIC in an air tight container. An analysis of the sample was accomplished by the physics laboratory of the Wright Air Development Division, and a copy of the report is attachment #1 to this document.



Glendon

OUT OF THE SKY Friday night came a 30-pound chunk of ice which dug a deep hole in the yard of Mr. and Mrs. Larry Roche of Dalton. Mr. Roche points to some of the shattered pieces he thinks fell from an airplane. Particles of sand were found in the broken pieces. A Cambridge scientist has asked Roches to save melted residue so he can analyze it.



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Glendon

7 April 1960

MEMO TO: Major Friend

SUBJECT: Report of Dalton, Mass. Ice Fall, 25 March 1960

1. At 10:30 P.M., EST, Friday, 25 March 1960, Mr and Mrs [REDACTED], [REDACTED], Dalton, Mass. reported the fall of many pounds of ice from the sky. This was reported on the radio, and I called Mr [REDACTED] and asked him to put a sample of the ice in the freezer. Later in the week Mr [REDACTED], a friend of mine, volunteered to make the trip from Boston to Dalton, Mass. (300 miles) round trip, to pick up the ice. He cut a chunk out of the center of the ice sample and the melted sample is herewith submitted.
2. The circumstances of the fall were these: Shortly before 10:30 the Roche's 15 year old son returned from an errand making copious tracks in the snow; within a few minutes there was a very loud noise outside that "shook the house". Everyone dashed outside thinking that there had been a bad automobile accident someplace. All that was found was the fallen ice which landed very close to the tracks in the snow made by the [REDACTED] boy just a few minutes earlier. This made a hole in the ground about one inch deep. The landing spot of the ice is pictured in inclosure, and also close-ups of the ice. It was determined that the ice could not have fallen from the roof or the trees. The landing pattern of the ice is shown in inclosed diagram.
3. The ice itself resembled tapioca snow and was considerably less dense than ordinary ice for it was quite coarse and a chunk the size of a man's head probably weighed not much more than a pound. By no consideration could the frozen snow-ice be thought the same as the surrounding snow and ice.
4. Exact weather conditions have not yet been determined, but witnesses stated that they could see stars. They also stated that their house does not lie under any scheduled airlines.
5. A sample of the water has been given to Dr [REDACTED] at Smithsonian for tritium analysis. It is suggested the present sample be subjected to analysis at Wright Field.

Dr J. Allen Hynek

NOTE: Water sample should be analyzed for type of water (coastal, rain, etc), mineral content, and organic content, and such other analysis as is deemed appropriate - also spectrographic analysis of residue in water.

P-6 8 APR 1960

SUBORDER

(See WADCR 83-16)

1. TO (Supporting Orgn) <i>WWRCPA</i>	2. DATE <i>8 APRIL 60</i>	3. FOR SERVICE IN SUPPORT OF: SYSTEM NO.	4. FILE OR LEDGER NO. INITIATING ORGN
5. DATE COMPLETION REQ <i>ASAP</i>	6. PRIORITY	PROJECT NO. <i>577101</i>	SUPPORTING ORGN <i>5892</i>
7. SECURITY CLASSIFICATION OF WORK REQUESTED <i>UNCL</i>	8. PRECEDENCE RATING	TASK NO.	
9. A/C TYPE, MODEL AND SERIAL NO.	TECH GROUPING	OTHER	
WADC FORM 55 <input type="checkbox"/> HAS <input checked="" type="checkbox"/> HAS NOT BEEN INITIATED.		TITLE <i>Analysis of ice water</i>	

10. DESCRIPTION OF WORK

Water sample should be analyzed for type of water (coastal, rain, etc), mineral content, organic content, and such other analysis as is deemed appropriate - the residue in the water should be given a spectrographic analysis

CONTINUED ON REVERSE SIDE

FOR USE OF RESPONSIBLE ORGANIZATION

11. INITIATOR <i>J. W. Boben</i> 69716 ORGN CODE <i>AFCINEXT 4E2</i>	12. SECTION CHIEF ORGN CODE EXT	13. CHIEF (Responsible Orgn or Rep)
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FOR USE OF SUPPORTING ORGANIZATION

14. ESTIMATED COMPLETION DATE <i>26 April 1960</i> MAN-HOURS <i>40</i>	15. PROJECT ENGINEER OR PLANNER <i>Wade H Jones</i> ORGN CODE <i>WWRCPA EXT 21219</i>	16. CHIEF (Supporting Orgn or Rep) <i>Solomon J. Prokeshaulder</i> Capt USAF
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CLOSING ACTION

17. REASON: <input checked="" type="checkbox"/> COMPLETED <input type="checkbox"/> CANCELLED	20. CHIEF (Supporting Orgn or Rep) <i>Solomon J. Prokeshaulder</i>	21. CHIEF (Responsible Orgn or Rep)
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WRIGHT AIR DEVELOPMENT CENTER
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

This report is not to be used in whole or in part for advertising or sales promotion purposes.

~~DIRECTOR OF RESEARCH AND DEVELOPMENT~~
MATERIALS CENTRAL

PHYSICS

LABORATORY

EVALUATION REPORT
ANALYSIS OF ICE WATER

REPORT NR: **WWHC P60-7**

DATE: **4 May 1960**

PROJECT NR: **577101**

TYPE EVALUATION:

MANUFACTURER:

SPEC NR:

SUBMITTED BY: **AFCIN-4E2**
James O. Bolien

ITEM SERIAL NR:

I. PURPOSE

To analyze a sample of thawed ice water and determine its composition.

II. FACTUAL DATA

1. The sample was received and assigned Physics Laboratory Suborder No. P-6.
2. The sample was analyzed by emission spectroscopy and x-ray diffraction analysis.
3. Emission spectrographic analysis indicated the water to have the following composition:

Filtered thawed ice water -

Minor - Magnesium

Traces - Silicon, manganese, aluminum, iron, nickel, copper, sodium, zinc, chromium and calcium

Large and small particles (residue) -

Principal - Calcium

Majors - Silicon, magnesium, aluminum and iron

Minors - Manganese, copper, sodium, zinc, titanium and chromium

Traces - Tin, lead and nickel

4. X-ray diffraction analysis indicated that the large and small particles are the same compound. The compound was identified as silicon dioxide (SiO_2), a natural mineral.

III. CONCLUSIONS

There was not enough of the thawed ice water to conduct any other analysis.

IV. RECOMMENDATIONS

None, data merely submitted.

PREPARED BY:

Wade H. Jones
WADE H. JONES, WWRCPA-2

PUBLICATION REVIEW

This report has been reviewed and is approved.

DISTRIBUTION:

WRECP (1 cy)
WWRCPA (3 cys)

Solomon F. Brokeshoulder
SOLOMON F. BROKESHOULDER, Capt, USAF
Chief, Organic Analysis Section
Physics Laboratory
Materials Central