

Tagish Lake recovery, 2000



Tagish Lake (C2-ung) samples, 2000



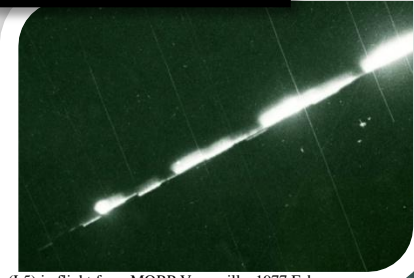
Meteorite Observation and Recovery Project (MORP), 1968-1985



MIAC logo



Innisfree meteorite

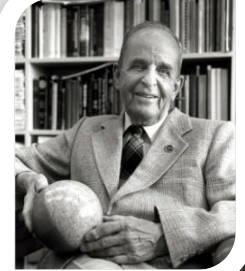


(L5) in flight from MORP Vegreville, 1977 February



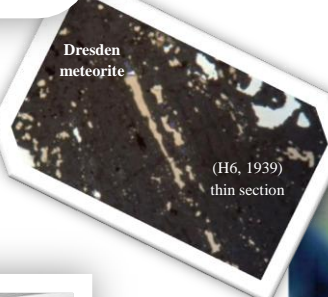
Springhill Meteor Observatory, 1986

Peter Mackenzie Millman,



1906-1990

Dresden meteorite

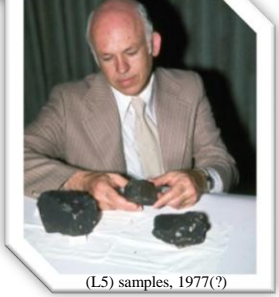


(H6, 1939) thin section

St-Robert (H 5) meteorite, 1994



Ian Halliday with Innisfree



(L5) samples, 1977(?)



MIAC Meeting 1998

ACOM & MIAC CALENDAR OF DOCUMENTS



RASC Archives

R.A. Rosenfeld

ver. 1.3

all images from the MIAC manual 2006, electronic version

CONTENTS

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Appendix: reprint of R.A. Rosenfeld, "Meteorite Archive: the Records of the NRC's Associate Committee on Meteorites (ACOM), and the CSA's Meteorites and Impacts Advisory Committee (MIAC)", in <i>Journal of the Royal Astronomical Society of Canada (JRASC)</i> 111, 1 (2017, February), 30-32	63-66

INTRODUCTION: This publication is a calendar of the contents of the Archives of the Associate Committee on Meteorites (ACOM) of the National Research Council of Canada (NRC), and the Meteorites and Impacts Advisory Committee (MIAC) of the Canadian Space Agency (CSA), hereafter referred to as the ACOM & MIAC Archive. It is approximately 2.5-linear feet in extent.

In the fields of diplomatic (the critical preparation and analysis of documents), and archival science, a calendar is a descriptive list of the documents comprising a *fonds*.¹ Within its entries for each document, a typical calendar may include the following types of information: genre of the text; the author(s) (*auctor/-es*); the recipient(s) (*destinarius/-i*); date of creation, or issue (nominal, as stated in the document, and real, as established externally, if the stated date is artificial); a summary of the subject matter, and any key points of interest; characterization of the physical document; the document's state of preservation; and bibliography, if relevant. A well-made calendar can function as both a finding aid, and as a secondary source for the writing of history itself.

The ACOM & MIAC Archive consists of the various classes of documents created in the course of the life of ACOM & MIAC. ACOM was established as one of the NRC associate committees in the wake of the Burderheim Fall (L6) in 1960 March 4, and lasted till the NRC's associate committees were defunded due to government policy changes in 1990-1991. A search for other effective patronage enabled the committee to continue under the aegis of the CSA as MIAC, which lasted with space agency funding till 2006-2007.

The core of the ACOM & MIAC Archive comprises the working files accumulated by Stephen Kissin during his active membership of both groups. Earlier materials were received from the period of Ian Halliday's membership. The first ACOM documents date from the time of the thirteenth ACOM meeting in 1970. The Archive also contains some pre-ACOM material from the 1950s, products of meteoritical work by those who would become principal figures in the early years of ACOM.²

The genres of the documents, and their range is not untypical for those produced by such scientific bodies. Correspondence (letters and emails), and committee and subcommittee reports loom large, but other genres are also represented, including various iterations of draft models of forms for reporting data, data tables, manuscript notes on presentations, printed education and public outreach (EPO) materials, media clippings, and trade ephemera. Many of the documents are rare because they were never disseminated widely, while others enjoy a scant rate of survival

¹ According to the *Vocabulaire international de la diplomatie*, ed. Maria Milagros Cárcel Ortí, 2nd ed. (València: Col·lecció Oberta, 1997), II. La Tradition des Actes, No. 26, p. 27: "An archival *fonds* is a group of documents of any kind which all administrative bodies, and all persons physical or moral, have automatically and organically generated through their functions and activities" (*Un fonds d'archives est l'ensemble des pièces de toute nature que tout corps administratif, toute personne physique ou morale a automatiquement et organiquement constitué en raison de ses fonctions ou de ses activités*; translation by the author).

² For more on the genesis of the Archive, see the appendix *infra*, pp. 63-66.

because they were not issued with permanence in mind. Particularly valuable are the many documents with manuscript annotations.

There are many valuable research topics in the history of Canadian meteoritics which can be pursued utilizing the ACOM & MIAC Archive. It remains very much an underexplored field. The work of compiling this calendar will be sufficiently rewarded if it results in more published work telling the story of meteoritics in Canada.³

R.A. Rosenfeld

2016 December 17

³ Some possible topics for investigation can be found in Rosenfeld 2017 (cited in note 2 *supra*), and pp. 65-66 *infra*. An example of the use of the ACOM & MIAC Archive is Howard Plotkin's account of the St-Robert (H5) meteorite recovery, in H. Plotkin, "MIAC's Fieldwork in the 1994 St-Robert, Québec Meteorite Fall: A Personal Account", in *JRASC* 111, 1 (2017, February), *forthcoming*.

ACKNOWLEDGMENTS: The author wishes to thank his colleagues of the RASC History Committee who agreed with the proposal that the RASC Archives could accommodate the ACOM & MIAC Archive. Steve Kissin (Lakehead University) deserves accolades for having the foresight to keep his ACOM & MIAC materials over the decades, and for realizing that they were of historical value. Howard Plotkin (Western University) is responsible for giving rational form and order to the Archive. Thanks are due to Howard and to Phil McCausland (Western University) for seeing the potential of the RASC Archives as the physical home of the ACOM & MIAC Archive, and for effecting its transport; the Rev'd Andrea Budgey (University of Trinity College, in the University of Toronto) helped with a further stage in getting the ACOM & MIAC Archives to their present home. Martha Jarrell donated some materials belonging to her late husband Rich Jarrell (York University) concerned with the Meanook & Newbrook meteor observatories. Other acknowledgements may be found in the appendix, pp. 64-66 *infra*.

This research has made use of NASA's Astrophysics Data System.

Any errors in the calendar are attributable solely to the author. He would be grateful to receive notice of them for future revisions to this work. He can be reached at:

randall.rosenfeld<at>utoronto.ca

Anyone wishing to consult the ACOM & MIAC Archive is invited to make prior arrangements with the RASC Archivist, who can be reached at: randall.rosenfeld<at>utoronto.ca

ACOM/MIAC Archive Calendar of Documents

Abee

A. Griffin, P.M. Millman, & I. Halliday, "The Fall of the Abee Meteorite and Its Probable Orbit", *JRASC* 86, 1 (1992 February), 5-14. Comment: offprint

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ACOM - 13th Meeting, Ottawa, 1970 January 26

Proceedings of the Thirteenth Meeting of the Associate Committee on Meteorites, Ottawa, January 1970. Comment: includes Appendix 1: Fireball Reports Received at Meteor Centre, NRC; Appendix 2: Canadian Meteorites Recovered in the Period 1960-1969; Appendix 3: Dominion Observatory - Public Education Activities of MORP; Appendix 4: Ad hoc Subcommittee to Consider Future of Meteorite Research in Canada

ACOM - 15th Meeting, Saskatoon, 1971 November 26

Proceedings of the Fifteenth Meeting of the Associate Committee on Meteorites, Saskatoon, November 1971. Comment: appears to lack title page

ACOM - 18th Meeting, 1975 November

R.H. MacNeil, Appendix 1: Report of the Education Subcommittee N.R.C. Associate Committee on Meteorites. Comment: the main report is missing

ACOM - 20th Meeting, Ottawa, 1976 November 26

Agenda 1976 November 26. Comment: report of meeting missing

ACOM - 22th Meeting, Ottawa, 1978 November 17

Agenda 1978 November 17. Comment: report of meeting missing

ACOM - 23th Meeting, Ottawa, 1979 November 23

Agenda 1979 November 23

Proceedings of the Twenty-Third Meeting of the Associate Committee on Meteorites, Ottawa, November, 1979. Comment: includes Appendix 1: Summary of Totals of Reports Received at Meteor Centre; Appendix 2: Catalogue of Probable Meteorites Observed by MORP

ACOM - 24th Meeting, Ottawa, 1980 November 21

Agenda 1980 November 21

Proceedings of the Twenty-Fourth Meeting of the Associate Committee on Meteorites, Ottawa, November, 1980. Comment: includes Appendix 1: Summary of Totals of Reports Received at Meteor Centre; Appendix 2: National Meteorite Collection of Canada Report of the Curator; Appendix 3: Catalogue of Probable Meteorites Observed by MORP

ACOM - 25th Meeting, Ottawa, 1981 November 20

Agenda 1981 November 20

Proceedings of the Twenty-Fifth Meeting of the Associate Committee on Meteorites, Ottawa, November, 1981

ACOM - 26th Meeting, Ottawa, 1982 November 19

Letter 1982 October 19, P.B. Robertson to S.A. Kissin issuing an invitation to the 26th ACOM Meeting, and announcing the inaugural ACOM-sponsored Distinguished Lectures on Meteorites series featuring J. Wood (Smithsonian Astrophysical Observatory), and an invitation to the fourth lecture at Carleton University 1982 November 18

Agenda 1982 November 19

Proceedings of the Twenty-Sixth Meeting of the Associate Committee on Meteorites, Ottawa, November, 1982. Comment: Ian Halliday's copy. Includes Appendix A: Objects Reported on the Fireball Program; Appendix B: Official Numbering System for Canadian Meteorites; Appendix C: Catalogue of Probable Meteorites Observed by MORP

MS notes on the meeting

Letter 1982 December 6, S.A. Kissin to P.B. Roberson accompanying expense statement and receipts for meeting. Comment: "carbon" copy typescript, expense statement and receipts missing

ACOM - 27th Meeting, Ottawa, 1983 October 28

Letter 1983 March 7, P.B. Robertson to S.A. Kissin announcing the death of ACOM member R. MacNeil, and requesting suggestions to fill his place. Comment: original typescript with recipient's(?) pencilled suggestions

Letter 1983 March 14, S.A. Kissin to W.R. Danner, nominating D.-W. Ray to ACOM. Comment: "carbon" copy typescript

Letter 1983 April 11, P.B. Robertson to S.A. Kissin, announcing death of J.-D. Carette

Letter 1983 July 29, P.B. Robertson to S.A. Kissin, announcing the death of J. Hodges (Regina)

Letter 1983 September 19, P.B. Robertson to S.A. Kissin, announcing place and time of meeting. Comment: original typescript with recipient's(?) pencilled annotations

Letter 1983 September 27, S.A. Kissin to P.B. Robertson, informing him of planned attendance at meeting. Comment: "carbon" copy typescript

Letter 1983 October 12, W.R. Danner to S.A. Kissin informing him of the approaching end of his term on ACOM, and inviting him to serve another three-year term

Letter 1983 October 18, S.A. Kissin to W.R. Danner, agreeing to serve another three-year term on ACOM

Letter 1983 November 1, S.A. Kissin to P.B. Roberson accompanying expense statement and receipts for meeting. Comment: "carbon" copy typescript, expense statement and receipts missing

Agenda 1983 October 28. Comment: photocopied typescript, with pencilled annotations. Photocopied graph stapled to agenda

Proceedings of the Twenty-Seventh Meeting of the Associate Committee on Meteorites, Ottawa, October, 1983. Comment: photocopied typescript, Ian Halliday's copy. Includes Appendix A: ACOM Membership; Appendix B: Intuitions Capable of Measuring Isotope Emissions in Fresh Meteorites

Memorandum 1983 November 28, from P.B. Robertson as covering letter for distribution of the Proceedings of the Twenty-Seventh Meeting of the ACOM

ACOM - 28th Meeting, Ottawa, 1984 October 26

Letter 1984 January 24, P.B. Robertson to S.A. Kissin, regarding site of meeting

Letter 1984 March 27, M. Brochu to S.A. Kissin, inviting him to serve another three-year term

Letter 1984 March 30, S.A. Kissin to M. Brochu, accepting the invitation to serve another three year term. Comment: "carbon" copy typescript

Memorandum 1984 September 28, from P.B. Robertson announcing the place and time of the meeting, and the speaker for the ACOM Distinguished Lecture Series, P. Pellas

Agenda 1984 October 26.

Proceedings of the Twenty-Eight Meeting of the Associate Committee on Meteorites, Ottawa, October, 1984. Comment: photocopied typescript, Ian Halliday's copy. Includes Appendix A: ACOM Membership; Appendix B: ACOM Finances; Appendix C: ACOM Media Guide; Appendix D: Summary of Totals of Reports Received at Meteor Centre; Appendix E: National Meteorite Collection of Canada Report of the Curator; Appendix F: Fireballs and Possible Impacts Northwestern Ontario

Letter 1984 November 15, P.B. Robertson to members of ACOM, serving as covering letter for distribution of the Proceedings of the Twenty-Eight Meeting of the ACOM

Memorandum 1984 December 6, from P.B. Robertson as covering letter for distribution of corrigenda and addenda of the Proceedings of the Twenty-Eight Meeting of the ACOM

ACOM - 29th Meeting, Ottawa, 1985 October 25

Letter 1985 September 24, P.B. Robertson to S.A. Kissin, regarding site of meeting

Letter 1985 October 3, S.A. Kissin to P.B. Robertson, giving notice that he will attend the meeting. Comment: "carbon" copy typescript

Proceedings of the Twenty-Ninth Meeting of the Associate Committee on Meteorites, Ottawa, October, 1985. Comment: photocopied typescript, Ian Halliday's copy. Includes Appendix A: ACOM Finances; Appendix B: Membership Renewals ACOM; Appendix C: ACOM Membership; Appendix D: Summary of Totals of Reports Received at Meteor Centre; Appendix E: National Meteorite Collection of Canada Report of the Curator; Appendix F: Covering Letter and Form to Survey Meteorite Collections in Canada

Letter 1985 November 21, P.B. Robertson to S.A. Kissin, serving as covering letter for distribution of the Proceedings of the Twenty-Ninth Meeting of the ACOM

ACOM - 30th Meeting, Ottawa, 1986 October 24

Proceedings of the Thirtieth Meeting of the Associate Committee on Meteorites, Ottawa, October, 1986. Comment: photocopied typescript, Ian Halliday's copy. Includes Appendix A: ACOM Finances

Letter 1986 November 5, author unknown to D. Smith, with comments on Smith's draft report. Comment: p. 2 missing

ACOM - 31st Meeting, Ottawa, 1987 October 23

Proceedings of the Thirty-First Meeting of the Associate Committee on Meteorites, Ottawa, October, 1987. Comment: photocopied typescript, Ian Halliday's copy. Includes Appendix A: Report on the Framed Certificates to the Original Finders of New Canadian Meteorites; Appendix B: ACOM Finances; Appendix C: NRC Minutes of the Meeting of the ACOM Subcommittee on Research; Appendix D: Summary of Totals of Reports Received at Meteor Centre; Appendix E: National Meteorite Collection of Canada Report of the Curator

ACOM - 32nd Meeting, Ottawa, 1988 October 21

Proceedings of the Thirty-Second Meeting of the Associate Committee on Meteorites, Ottawa, October, 1988. Comment: photocopied typescript, Ian Halliday's copy. Includes Appendix A: ACOM Finances; Appendix B: Proposal to ACOM for Search Program for Falls Identified by MORP; Appendix C: Summary of Totals of Reports Received at Meteor Centre; Appendix D: Report of ACOM Subcommittee on Research; Appendix E: National Meteorite Collection of Canada Report of the Curator

Appendix A: ACOM Education Subcommittee Report for 1988

ACOM - 33rd Meeting, Ottawa, 1989 October 27

Minutes/Proceedings of the Thirty-Third Meeting of the Associate Committee on Meteorites, Ottawa, October, 1989

Appendix G: ACOM Subcommittee on Research 1989 November 6

Appendix H; National Meteorite Collection of Canada Report of the Curator

Appendix I: Regional Report Quebec 1988-1989

Appendix J: University of Alberta Meteorite Collection - Recent Acquisitions

ACOM Membership List

ACOM - 34th Meeting, Ottawa, 1990 October 25

Email 1990 May 18, D.G.W. Smith to S.A. Kissin seeking clarification of the use of NRC ACOM funds for field work

Agenda 1990 October 25. Comment: photocopied typescript, report of meeting missing

National Meteorite Collection of Canada Report of the Curator

ACOM - 35th Meeting, Ottawa, 1991 October 18

Notice of Special Meeting 1991 May 28 following the meteoritical session at the Geological Association of Canada, Mineralogy Section meeting in Toronto

Email 1991 September 13, P. Brown to S.A. Kissin, thanking him for his role in obtaining ACOM funds for MORP related fieldwork

Notice 1991 September 27 of the 35th ACOM meeting and its venue. Also conveys the news that the funding of ACOM will be assumed by the Canadian Space Agency (CSA)

Email 1991 October 1, D. Lemay to S.A. Kissin, announcing his plans for attending the meeting

Email 1991 October 4, J.C. Rucklidge to S.A. Kissin, informing him that R.K. Herd will reserve a meeting room

Agenda 1991 October 18. Comment: photocopied typescript, with pencilled annotation

Canada Space Agency Minutes of the Thirty-Fifth Meeting of the Associate Committee on Meteorites, Ottawa, October, 1991. Comment: includes Attachment 1: part of *JASC* obituary for P.M. Millman; Attachment 2: Proposed New Terms of Reference for the Committee under the CSA - First Draft; Attachment 3: Report of ACOM Subcommittee on Research; Attachment 4: National Meteorite Collection of Canada Report of the Curator

MS notes on the draft Terms of Reference

Appendix B: Statement of Work (extract of current contract with the CSA through the DSS)

Appendix C: Treasury Board of Canada: Travel and Living Guidelines (extract of current contract with the CSA through the DSS). Comment: with marker annotations

Expense claim and receipts for meeting, S.A. Kissin, submitted to Lakehead University

Email 1991 October 21, J.C. Rucklidge to S.A. Kissin, with notes about the meeting, expenses, and future Committee directions

ACOM - Miscellaneous

Research Subcommittee, ACOM, Survey of Canadian Research on Meteorites and Related Phenomena, *ca.* early 1981. Comment: this probably formed part of the annual report for the 25th ACOM meeting at Ottawa, 1981 November 20. This survey is described as an update of a 1976 survey, which latter does not survive in this archive

Determination of Prices for Canadian Meteorites. Comment: pencil annotation

Official Numbering System for Canadian Meteorites, *ca.* 1981

Questionnaire and covering letter *ca.* 1984, from R. Hawkes for survey of "films/videotapes/slide sets on meteorites and related topics"

Covering letter and result of survey 1985 April 19, from P.B. Robertson on "films/videotapes/slide sets on meteorites and related topics"

Covering letter and questionnaire 1985 October 9, from R.L. Bishop to geology departments and museums in Nova Scotia and Newfoundland, for a survey of meteorites in Canadian collections

ACOM finances, 1979/1980 to 1984/1985. Comment: single sheet, information in tabular form

ACOM finances, 1979/1980 to 1985/1986. Comment: single sheet, information in tabular form

I. Halliday, Recognition of Canadian Meteorites by Decades (1930-1988), 1988 October

List of slides or illustrations of astromaterials, undated

Acraman Crater (south Australia)

Characterization (geographical, topographical, geophysical, geochemical), and bibliography for Acraman Crater, 1992 June 24

Associate Committee Activities 1980-1981

NRC Associate Committees' Secretariat, *Activities of Associate Committees 1980-1981* (Ottawa: NRC, 1981)

Associate Committee Activities 1981-1982

NRC Associate Committees' Secretariat, *Activities of Associate Committees 1981-1982* (Ottawa: NRC, 1982)

Associate Committee Activities 1987

NRC, *Associate Committees 1987* (Ottawa[?]: NRC, 1987)

Bruderheim

Email 1996 September 10, M.A. Bouchard to S.A. Kissin, requesting an identification of a possible piece of Bruderheim (L6, 1960). Comment: of interest for correspondent comments on professional ethics. Slight pencil annotation

Butterfields Auction

Coloured flyer 2000 July, notice of upcoming auction of select meteorites from the "Macovich" collection 2000 August 27

Canadian Arctic Meteorite Project

Abstract, undated, L.C. Coleman, R.K. Herd, S.A. Kissin, J.C. Rucklidge, & D.G.W. Smith, "CAMP - The Canadian Arctic Meteorite Project and the 1986 Expedition to Devon Island"

Offprint R.G. Creswell & R.K. Herd, "Canadian Arctic Meteorite Project (CAMP): 1990", *Meteoritics* 27 (1992), 81-85

Email 1992 May 5, J.C. Rucklidge to ACOM members asking if any would like to take R.K. Herd's place on the 1992 expedition

Email 1993 January 19, R.K. Herd to S.A. Kissin regarding possible speakers for a GAC/MAC session at Waterloo; possible topics include the French arctic meteorite recovery results, Peekskill, or Catherwood

Canadian Geophysical Union

Manuscript notes (single page) 1992, contact information for J. Arkani-Hamed at McGill who proposed a Canadian Institute for Planetary Sciences (CIPS) 1991 May 10 at CGU meeting, with follow up(?) 1992 October 22-23 at the Canadian Geoscience Council

Letter 1993 April 15, V. Campbell to S.A. Kissin, confirming registration at the GCU conference at Banff 1993 May 8-11

Call for papers for a Planetary Science Symposium at the CGU meeting at Banff 1993 May 9-11, organized by J. Arkani-Hamed of McGill, and announcing a workshop to ponder the establishment of a Canadian Institute for Planetary Sciences (CIPS)

Accommodation form for the above meeting at the Banff Centre, for S.A. Kissin

Lakehead University (NSERC funds) conference reimbursement claim for the above meeting, submitted by S.A. Kissin 1993 April 28

Canadian Space Agency

2 Canadian Space Agency stickers 1996, and one with the pre-1996 logo (?)

RADARSAT brochure 1995 or later

RADARSAT Annual Review 1996-1997. Comment: glossy magazine-style format

Microgravity Sciences 1997 February. Comment: magazine-style format

Canadian Space Agency poster, undated

Canadian Space Station Program 1997 August. Comment: 25.5cm x 20.5 cm, glossy card

RADARSAT-1 First Image 1995. Comment: 21.6cm x 27.9cm, glossy-card stock

The Canadian Space Program: A New Horizon policy booklet, with covering letter 1994 July 15, addressed to participants in the "Long Term Space Plan II consultative process", and press release 1994 June 3

Partnership in Space: An Introduction to Canada's Special Relationship with the European Space Agency, joint ESA-CSA publication 1991 September. Comment: A1 format glossy magazine-style format

Canadian Space Agency backgrounder 1995 January 11. Comment: 21.6cm x 27.9cm press & public briefing document, textured paper stock

The Canadian Space Agency: An overview 1998 June. Comment: 21.6cm x 27.9cm glossy brochure

Canadian Space Agency backgrounder 1997 October 2. Comment: 21.6cm x 27.9cm press & public briefing document, textured paper stock

Canadian Space Agency backgrounder 1998 September. Comment: 21.6cm x 27.9cm press & public briefing document, brochure style

Canadian Space Agency, Regional Conference - Toronto, Participants List 1991 December 1991

Canadian Space Agency - Space Station Program 1991

Space Station User Development Program (Universities and Non-profit Research Institutions): Material Science. Request for Proposal 1991 December 30

Contract, Provision of Support for the Associate Committee on Meteorites (ACOM) from the CSA 1991 August 27, principal investigator S.A. Kissin

Casper, Michael (meteorite dealer)

Michael I. Casper, Meteorites, Inc., flyer of meteorites for sale 1996 November 15

Michael I. Casper, Meteorites, Inc., flyer of meteorites for sale, undated

Michael I. Casper, Meteorites, Inc., flyer of meteorites for sale 1997 June 1

Michael I. Casper, Meteorites, Inc., catalogue of meteorites for sale 1999 December 13.
Comment: glossy-magazine format

Comet Hale-Bopp (C/1995 O1)

E. L. Aguirre, "Comet Hale-Bopp at Its Peak", *Sky & Telescope* web article, downloaded 1997 February 14

Comet Shoemaker-Levy 9 (D/1993 F2)

D. Bergeron, FAAQ sponsored Comet Shoemaker-Levy 9 observing guide, and project to refine the orbital path of the comet through increasing the number of observations of position, undated

Compact Catalogue of Canadian Meteorites

G.C. Wilson, A Compact Catalogue of Canadian Meteorites 1999 February 21

G.C. Wilson, A Compact Catalogue of Canadian Meteorites 1999 April 15

G.C. Wilson, A Compact Catalogue of Canadian Meteorites 1999 June 7. Comment: includes post-it note with a few pencilled comments by author

Cultural Property Export & Import Act

Government of Canada, Department of Communications, Movable Cultural Property, *Regulations respecting the Export from Canada of Cultural Property*, undated. Comment: 21.6cm x 27.9cm booklet

Government of Canada, Department of Communications, *An Introduction to the Cultural Property Export and Import Act* 1980. Comment: a revised version of "a report prepared by Duncan Cameron for Arts and Culture Branch Department of Communications"

Government of Canada, Cultural Property Export and Import Act. 1974-75-76, c. 50, s. 1 (printed 1985)

Government of Canada, Department of Communications, Movable Cultural Property, *Canadian Cultural Property Export Control List* 1986 March. Comment: 21.6cm x 27.9cm booklet

Email 2000 May 23 D. Lemay to S.A. Kissin, forwarding response from K. Zedde of the PCH providing clarification of the Cultural Property Export and Import Act. Comment: the request for clarification arose from incidents arising from "the unpleasant situation which has developed" over the Tagish Lake fall (C2-ung, 2000)

Edmonton Space Sciences Centre

Prospectus and fundraising materials for a projected Edmonton Space Sciences Centre, ca. 1983?

Fireball Reports

A Guide to Terms Used in the Canadian Fireball Database, undated

MIAC Fireball Report Form, undated

Fireball report from Canadian Forces Base Bagotville 1981 May 26. Comment: photocopy received from the University of Laval

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P.M. Millman, Summary of Totals or Reports Received at Meteor Centre, to 1983 September 30

Letter 1984 September 20, J. Zawerucha & C. Miniely to B. Sellick, reporting their sighting of a fireball 1984 September 17

Letter 1984 October 4, from B. Sellick, Hillcrest High School, Thunder Bay, to J. Zawerucha & C. Miniely thanking them for "substantiating" a fireball report (1984 September 17), forwarded to S.A. Kissin

S.A. Kissin, Fireball sand Possible impact Structures, Northwestern Ontario, 1983/84. Comment: original typescript of report(?); includes excerpted article from the Thunder By Chronicle on the 1984 September 17 fireball, and extra type-written sheet with contact details, and azimuth

Notes from witnesses on the 1984 September 17 fireball. Comment: handwritten on note paper

Excerpts from *FIDAC news* 1, 2 (1993 April), International Meteor Organization, on the fireball(s) of 1993 February 11 seen over central Alberta, communicated by D.P. Hube. Comment: photocopies

MIAC 1993 Fireball Summary, 1993 January 21 fireball seen from Bloomfield, NB

"Large Fireball Sighted in Pacific Northwest: More Information Needed", *Oregon Geology* 1984 December, 147. Comment: concerns fireball of 1984 September 17. Photocopy

P.M. Millman, Summary of Totals or Reports Received at Meteor Centre, to 1985 September 30

Notes from witnesses on the 1985 January 3, and January 9 fireballs. Comment: handwritten on lined 8.5"X11" (21.6cm x 27.9cm) paper

URLs including those for the Canadian Fireball Reporting Centre, the seds meteorite page, the MIAC page, and a note that "CSA may introduce a 1-800 number for fireball reports, undated. Comment: handwritten

P.M. Millman, Summary of Totals or Reports Received at Meteor Centre, to 1988 September 30

R. Hawkes & D. Lemay, Changes to the Canadian Fireball Reporting System 1992 June 10.
Comment: Hawkes & Lemay paper transmitted in an email from D. Lemay to MIAC members
1992 June 24

R. Hawkes D. Lemay, "A Revised Canadian Fireball Reporting System", *JRASC* 87, 3 (1993
June), 140-150, offprint

Typescript of Hawkes & Lemay (1993; see above) issued with a Brief Guide Regarding Internet
Access to the Fireball Archive, the MIAC Fireball Report Form, and contacts for MIAC
members, undated

Memo (MIAC Fireball Report Oct. 92) 1992 October 21 from R. Hawkes to MIAC,MIAC
RASC fireball contacts, "other individuals who have agreed to serve as regional fireball
contacts", and RASC centres "which have not yet appointed a MIAC contact person"

Several fireball reports 1992 September 2 to early 1993 January. Comment: document appears
incomplete. Computer printout

Email 1993 January 27, D. Lemay to R.K. Herd (cc. MIAC), regarding fireball of 1993 January
26 seen from the Gaspé, and the Gulf of St. Lawrence

Email 1993 March 1, R. Hawkes & D. Lemay to MIAC distribution list, Fireball Report
Summary 1992. Comment: document incomplete

Email 1994 June 15, R. Hawkes to MIAC distribution list, regarding fireball of 1994 June 14
seen from Ontario and Quebec

Letter 1994 September 21, S.A. Kissin to Capt. W. Sinker, follow up letter regarding a meteor
seen from Terrace Bay ON 1994 September 10. The letter also informs the recipient that "...the
Herzberg Institute is no longer recording meteor sightings. The recording and investigation is
now entirely a volunteer activity of MIAC in association with RASC...We are interested in these
phenomena on a scientific basis both professionally in MIAC and on an amateur basis in RASC".
Comment: copy kept by the sender

Email 1995 March 7, from C. Aikman DAO to S.A. Kissin, forwarding information on the
fireball of 1995 February 20 seen over southern BC, with the recommendation that the
information be distributed to meteoriticists in the US

MIAC Canadian Fireball Reporting Centre Annual Report Oct. 1995

Email 1996 August 28, from R. Hawkes to MIAC distribution list, presenting a new system for
fireball report postings

Email 1997 August 18, from R. Hawkes to S.A. Kissin and a colleague, providing the rough
draft of the beginning of a paper, "Canadian fireball/meteor review"

GAC-MAC

Application to NSERC 1990 October 31, for a grant for a session at the Geological Association of Canada/Mineralogical Association of Canada/ Society of Economic Geologists joint meeting 1991 May 27-29 in Toronto, for a special session on Meteorites, Planets and Terrestrial Impacts. The grant would be used to cover the expenses for J.W. Head of Brown University

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FAX 1993 January 18, G. Roberts to S.A. Kissin, requesting potential speakers' names and topics for a special session on Meteorites and Impacts for the GAC-MAC meeting in 1994

Email 1993 January 20, from R. Grieve to S.A. Kissin, suggestions for potential speakers and topics for conference special session on Meteorites and Impacts

Email 1994 November 23, from G.C. Wilson to S.A. Kissin, forwarding an email of 1994 May 24 from Wilson to someone who could not attend the conference special session on Meteorites and Impacts, briefly describing the proceedings

Gladman, Brett

Email 2000 May 25, from A.R. Hildebrand to S.A. Kissin, transmitting notice regarding a colloquium presentation at the University of Calgary by B. Gladman, Observatoire de la Côte d'Azur

GSC Meteorite Poster

Geological Survey of Canada, *Meteorites*, undated, 84cm x 53.3cm coloured poster (matt finish), 4 copies

Halliday, Ian

Letter 1977 December 6, From H.R. Stacey, Curator, Geological Survey of Canada, to I. Halliday, informing him of new rules for the export & import of movable cultural property of "national cultural significance" including Canadian meteorites and tektites(!). Mentions Duncan Cameron's *An Introduction to the Cultural Property Export and Import Act* with approval.
Comment: photocopy

I. Halliday & A.A. Griffin, "A Study of the Relative Rates of Meteorite Falls on the Earth's Surface", *Meteoritics* 17, 1 (1982), 31-46. Comment: offprint

I. Halliday, A.A. Griffin, & A.T. Blackwell, "Meteorite Orbits from Observations by Camera Networks", *XVIIIth General Assembly - Highlights of Astronomy Vol. 6, As presented at the XVIIIth General Assembly of the IAU, Patras, Greece, August 17-26, 1982*, ed. R.M. West (Washington, DC: Association of Universities for Research in Astronomy, 1983), 399-404.
Comment: offprint

Letter 1988 July 18, from R.K. Herd to I. Halliday and members of the Research Subcommittee of ACOM, regarding the projected CAMP expedition for 1988

Communiqué 1989 July, NRC announcing the naming of minor planet 3944 Halliday (1981 WP1). Comment: photocopy. Someone has added the annotation that though NRC made much of Halliday's recovery of Innisfree using the MORP network in the communiqué, they had cut the MORP funding in 1985!

I. Halliday, A.T. Blackwell, & A.A. Griffin, "The Frequency of Meteorite Falls: Comments on Two Conflicting Solutions to the Problem", *Meteoritics* 26 (1991), 243-249. Comment: offprint

Hawkes, Bob

Survey of Research on Meteorites and Impact Phenomena ACOM forms, submitted by R. Hawkes, and covering letter 1987 May 21, R. Hawkes to S.A. Kissin

Herd, R.

Email 1996 August 13, R. Herd to MIAC members about their recent press appearances on, variously, Madoc (Iron, IIIAB, 1854), St-Robert (H5, 1994), and the Perseids

Higgins, Michael

Survey of Research on Meteorites and Impact Phenomena ACOM form, submitted by M. Higgins, and covering letter 1988 January 14, M. Higgins to S.A. Kissin

Hildebrand, Alan

FAX 1992 February 11, R. Grieve in support of A.R. Hildebrand to S.A. Kissin, seeking MIAC support to make up for a government funding "freeze" which would adversely affect planned fieldwork on the K/T Boundary in Chiapas, Mexico, and Petén, Guatemala

A.R. Hildebrand & W.V. Boynton, "Cretaceous Ground Zero", *Natural History* 6 (1991), 47-52.
Comment: photocopy

M. Connors, A.R. Hildebrand, et al., "Yucatán Karst Features and the Size of Chicxulub Crater",
Geophysical Journal International 127 (1996), F11-F14. Comment: offprint

Iron Creek

Letter 2004 June 10, W.B. McGillivray to S.A. Kissin, seeking the latter's opinion on the "scientific value", ownership, and desirability of display of the Iron Creek meteorite. Enclosed with the letter are:

- brief, non-technical description of the history and significance of the meteorite from the Provincial Museum of Alberta's standpoint
- description from A. Graham, A. Bevan, & R. Hutchison, *Catalogue of Meteorites* 4th ed. (London: British Museum, 1985)
- 3 colour photocopies of photographs of the meteorite from different aspects

Kissin, Stephen

Memo 1984 August 7, to ACOM members, announcing success for the third time in securing funding from the Canadian Geological Foundation for a "Meteorite Lecture Tour", with that year's speaker to be P. Pellas of the *Muséum national d'Histoire naturelle*. Also raises the necessity to look for ongoing regular funding in future

Project proposal to use Junior Rangers to temporarily drain the possible impact site of Kawene, Rainy River, ON, for study. Undated, but from internal evidence post fall of 1984. Comment: pencilled draft

Letter 1985 April 3, G.C. Patterson to J. Halasz requesting formal permission and resources to investigate the Kawene site as above. Two phone-call record slips are attached: one notes that R. Brothwell phoned to indicate that the Kawene site is documented to be the result of an explosives detonation; the other from "George" conveying the information that the fieldwork had been cancelled. Comment: the copy of the letter is on onion-skin paper. The second of the phone-call record slips has pencilled annotations on the verso

Letter undated (but from internal evidence pre 1986 July), from S.A. Kissin to ?. Comment: the second page of a letter. The first page and the announced attachment are not preserved

Email 1990 January 12, D.G.W. Smith to S.A. Kissin, inquiring about the status of papers on Petrukite and Ferrokesterite for MinIdent

Letter 1991 September 4, M. Ouellet to C.H. Nelson, informing him that she is leaving her position as science procurement officer, Science Branch, Science and Professional Services Directorate, Supply and Services Canada, and naming her successor W. Owens, and providing his contact information. Comment: photocopy

Notification of Decision *n.d.* (post 1990 October 31), NRC to S.A. Kissin, informing him that \$750 has been granted for a special session on Meteorites, Planets and Terrestrial Impacts, at the Geological Association of Canada/Mineralogical Association of Canada/ Society of Economic Geologists joint meeting 1991 May 27-29 in Toronto

S.A. Kissin, "Meteoritics and Planetary Science and the Canadian Space Program", position paper delivered in Toronto to the Ontario Regional Conference on the Long Range Space Plan, CSA, 1991 December 11. Gives a brief perspective on several historical successes of Canadian meteoritics, the problems recent structural changes in federal government scientific organization and public science funding have introduced into the discipline, and proposes a remedy.

Comment: MS draft in pencil on lined 8.5"x11" (21.6cm x 27.9cm) paper

S.A. Kissin, "Meteoritics and Planetary Science and the Canadian Space Program", position paper delivered in Toronto to the Ontario Regional Conference on the Long Range Space Plan, CSA, 1991 December 11. Comment: typed final version of the above

Letter 1992 January 27, D.G.W. Smith to S.A. Kissin, with brief mentions of CRYSTINDX, THETA, and the IMA survey. Smith praises Kissin for the efficiency of ACOM (MIAC) under his chairmanship, and optimism for the renewed committee mandate effected by the change of patrons from the NRC to the CSA

Email 1993 March 4, J.C. Rucklidge to R. Mitchell via S.A. Kissin, asking if he would review a paper

FAX 1993 March 31, University of Calgary Faculty of Continuing Education to S.A. Kissin, with a query about his registration (in regard to a conference?)

Email 1993 December 20, J.C. Rucklidge to S.A. Kissin, discussing proposed order of speakers for "special session program"

FAX transmission form 1994 March 21, S.A. Kissin to P. Tuzinski and R. Blake of the U.S. Bureau of Mines, requesting the use of their Ultraphot to image specimens of Fillmore and Manitouwabing

Letter of accreditation 1994 December 22, attesting to S.A. Kissin's MIAC affiliation, from G. Lindberg, VP Research & Applications, CSA. Comment: laminated

Program announcement 1995 March 18, for the Technical Session of the Rochester Mineralogical Symposium 1995 April 7, S.C. Chamberlain to those presenting papers or posters. Comment: includes a paper by MIAC members (and associates?) on the St-Robert Meteorite. Photocopy

Email from S.A. Kissin to A.R. Hildebrand 1995 May 26, regarding an unnamed specimen, and MIAC membership. Comment: it is interesting to note that at least one of the correspondents (and MIAC member) still refers to the body as ACOM

Email from S.J. Enticknap (NASA LPI) to poster presenters 1995 July 16, for the 58th Annual Meteoritical Society Meeting 1995 September 11-15 to be held at the LPI, functioning as a form letter of acceptance, and conveying some of the quotidian details regarding participation

Abstract of two papers presented at the 58th Annual Meteoritical Society Meeting 1995 September 11-15 at LPI. Comment: photocopy

Abstract of poster on the Lac Dodon and Penouille finds, by S.A. Kissin & R.K. Herd presented at the 58th Annual Meteoritical Society Meeting 1995 September 11-15 at LPI. Comment: photocopy

Email 1995 September 10, B. Bishop to S.A. Kissin, inviting him to speak to the "local astronomy group" (probably the Thunder Bay Centre of the RASC)

Email 1995 September 14, B. Bishop to S.A. Kissin, approving of his topic (see invitation above), and advising him of local arrangements

S.A. Kissin, R.K. Herd, & D. Pagé, "Deux nouvelles météorites ferreuses du Québec", typescript of paper 1997. Comment: with pencil(?) revisions; photocopy

S.A. Kissin, R.K. Herd, & D. Pagé, "Deux nouvelles météorites ferreuses du Québec", typescript of paper 1997. Comment: incorporating revisions; photocopy(?)

S.A. Kissin, R.K. Herd, & D. Pagé, "Deux nouvelles météorites ferreuses du Québec", *JRASC* 91, 5 (1997 October), 211-215. Comment: offprint, FAX

"8 Kissin S.A. Herd R.K. Two New Iron Meteorites from the province of Quebec, Canada", *nd* (1997?). Comment: single 8.5"x11" printed sheet, with two tack holes at top; possibly identifying venue for an oral presentation

Library acquisition form for ISBN: 019511342X, 1999 May 29, Vivian Sharp to S.A. Kissin(?)

Form for purchasing a Leitz MPV SP (high resolution photometric system for measurement of the thicknesses of transparent, thin, single or double layer films), *nd*

Choice 1999 March, Science & Technology, Earth Science. Comment: photocopy of pp. 1292-1293

Choice 1999 May, Science & Technology, Earth Science. Comment: photocopy of pp. 1646-1648

Letter 1997 September 4, S. Plummer to S.A. Kissin, requesting identification of a geological specimen the sender believes to be coral. Comment: printed, with handwritten postscript

Letter 1999 February 24, U. Panu to S.A. Kissin, inviting the latter to be a judge at the Northwestern Ontario science Fair, 1999 April 20-21

Letter 1999 March 16, M. Franco (head of the *Caillou Noir* commercial meteorite enterprise) to S.A. Kissin, offering his services as a meteorite supplier

FAX 1999 November 29, O. Beattie (Kwaday Dän Sinchi Management Group, University of Alberta) to L. Wilson (Office of Research Services, Lakehead University), offering collaboration opportunities for work on mummified first-nations' remains (*ca.* 1450-1700—Canada's counterpart to Ötzi). Comment: accompanied by a very brief background document, and a very extensive statement of the ethical approach of the project

Email 1999 December 16, forwarded email of 1999 December 7, J.F. Gartner to S.A. Kissin, requesting Lakehead's Geology Department's participation in the Canadian Geoscience Councils web resource providing information on the earth science departments in Universities across Canada. Comment: a "mass-mailing" to earth science departmental contacts across the country with the same request

Weburn Review (SK) 2003 August(?), article on forthcoming public seminar by S.A. Kissin (2003 August 11) to familiarize the public with meteoritic material they may encounter, sponsored by the Prairie Meteorite Search. Comment: printed from the periodical's website

Brochure 2003(?), describing the Signal Hill Arts Centre, Weyburn SK

"Leeds"

Email 1996 November 18, H. Plotkin to S.A. Kissin, forwarding an email of R. Clarke to H. Plotkin 1996 November 15 from R. Clarke giving his opinion of various aspects of the "Leeds" (PQ) meteorite (actually a Toluca fragment; see Kissin, Plotkin & Bordeleau *JRASC* 93, 3 [1999 June], 135-139)

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Manitouwabing

Email 1992 December 23, J.C. Rucklidge to S.A.Kissin, "proof" for text of the MIAC report of notice of a publication modifying the Manitouwabing elemental abundances

Martian Meteorites

Notes on a lecture by P. Pellas 1984 October 5, "Do Some Meteorites Come from Mars".
Comment: Pellas (1924-1997, the distinguished curator of the French National collection of Meteorites) was the ACOM speaker for that year. MS notes (in the hand of S.A. Kissin?); biro on lined paper

Email 1996 August 8, "Peter" (UWO) to ACOM members, forwarding the text of the famous paper by D.S. McKay et al., "Search for Past Life on Mars: Possible Relic Biogenic Activity in Martian Meteorite ALH84001", *Science* vol. 273, no. 5277, issue 1996 August 16, 924-930

Undated notes (1996 August?), on McKay et al., 1996. Comment: MS notes (in the hand of S.A. Kissin?); biro on lined paper

Print out of page 2000 September 25, from
<http://craton.geol.brocku.ca./faculty/ff/nineplanets/meteorites.html>, reproducing a portion of Bill Clinton's words on ALH84001 from a 1996 August 7 press conference held on the South Lawn of the Whitehouse (full text available at: <http://www2.jpl.nasa.gov/snc/clinton.html>)

Meanook & Newbrook

1993, colour negatives and prints of the observatory and residence of either Meanook or Newbrook Observatories. Comment: photographs by R.A. Jarrell

B&W negatives and prints (copies?) showing the construction of one of the Baker Super Schmidt meteor cameras, and of the construction of one of both of the Canadian observatories, as well as multiple copies of R.A. Jarrell's colour prints. Comment: the B&W prints were probably produced sometime in the last four decades (ca. 1970-2010) from copies of original negatives. Nearly half the negatives are not matched by prints

Architect's general site plan of Newbrook Observatory installation (grounds, observatory, residence, enclosure, and surrounding unrelated "infrastructure", from *Newbrook Observatory Feasibility Study*, undated. Comment: photocopy of pp. 32-33 of the study

Architect's site plan of Newbrook Observatory installation (grounds, observatory, residence, and enclosure, from *Newbrook Observatory Feasibility Study*, undated. Comment: photocopy of pp. 36-337 of the study

Architect's ground plan of Newbrook Observatory, from *Newbrook Observatory Feasibility Study*, undated. Comment: photocopy of pp. 38-39 of the study

Architect's ground plan and second floor plans of Newbrook Observatory residence, from *Newbrook Observatory Feasibility Study*, undated. Comment: photocopy of pp. 44-46 of the study

Memo 1959 January 9, A.A. Griffin to I. Halliday, forwarding a fireball plot recording an observation by Vince (*nomen?*), which may be the record of the re-entry of a Delta 2 rocket. Comment: photocopy; the fireball plot is incompletely copied

8.5"x11" print undated, showing the Baker Super-Schmidt camera at either Meanook or Newbrook, with P. Millman and another NRC employee

8.5"x11" print undated, showing a cutaway drawing of the Baker Super-Schmidt camera as employed at the Meanook and Newbrook Observatories

8.5"x11" print undated, rotating shutter on tripod for meteor photography

8.5"x11" print undated, meteor spectra

8.5"x11" print undated, circumpolar star trails with meteor train

Meteorites, General

Newspaper clipping 1992 October 26, Reuters News Agency, reporting D. Steel speaking on the supposed threat of comet 109P/Swift-Tuttle. Comment: the newspaper is not recorded, but may be Australian. Photocopy on the same page as the Tofield item below

Newspaper clipping 1993 April 14, Edmonton Journal, reporting on a fireball seen over Tofield AB on 1993 February 10. D. Hube quoted on the event, and as the contact for any specimens discovered. Comment: photocopy on the same page as the 109P/Swift–Tuttle item above

Newspaper clipping 1993 June 21, The West Australian, obituary of A.J. (John) Carlisle of Kalgoorlie-Boulder, Western Australia, who played a key role in the discovery of many significant meteorites from the Nullarbor Plain

Pages from website 2000 September 25, from craton.geol.brocku.ca/ff/nineplanets/meteorites.html, "Meteorites and Impacts", aiming to provide an orientation to meteoritics. Comment: laser(?) printer copy

NRCAN topographic map, indicating the find site of the Lac Dodon (QC) meteorite (Iron, IAB complex). Comment: 8.5"x11" photocopy of portion of topographic map

Meteorwrongs

Email 1992 December 22, D. Lemay to MIAC colleagues, reporting the circumstances he has managed to glean of a possible fall at Tadoussac, and advising a cooperative approach to handling competing local academic interest in the object

Email 1993 January 5, D. Lemay to MIAC colleagues, reporting on his visit to a possible fall site

Email 1993 January 27, D. Lemay to S.A. Kissin, advising caution in mentioning the possible fall at Tadoussac outside MIAC circles, to avoid a bidding war before the mass can be secured for the National Meteorite Collection in Ottawa, should it prove authentic

Email 1996 November 3, A. Socias to New England Meteoritical Services, requesting the identification of a specimen he found. Comment: includes two images in colour

FAX 1999 February 2, Department of Geological Services University of Manitoba to S.A. Kissin, material related to a supposed fall at Lac du Bonnet MB. Comment: includes an article from the Lac du Bonnet-Springfield Leader, and two images of the supposed "crater"

MIAC CDs & Discs

MIAC Manual 2000, .doc, HD floppy disc

MIAC CD draft 2001 October, CD-R

MIAC CD 2002 February 21, CD-R

MIAC 2003 Dresden 2005 January 11, CD-R

MIAC-E[?]CMI CD 2006 Mai, CD-R

MIAC Fireball Report Form

32 forms. Comment: none filled out

MIAC, formation of

Document (*n.d.*), "Some Possible Solutions to the ACOM Problem", setting out possible strategies to keep ACOM going after NRC removed funding

Letter 1990 December 19, L. Kerwin to S.A. Kissin, expressing support for the continuance of ACOM, and signalling a move from informal to formal talks for the CSA to officially support ACOM (the new name MIAC is not yet used). The letter also expresses admiration for the late Peter Millman. Comment: Kerwin was then the founding President of the CSA, and a former President of the NRC

Letter 1991 February 4, S.A. Kissin to B. Wetter (CSA), sent on the suggestion of CSA President Kerwin, to establish a working relationship between the ACOM Chair (Kissin) and the CSA officer with responsibility for the file. Comment: copy

Letter 1991 February 19, R.E. Folinsbee (emeritus department of Geology, University of Alberta) to L. Kerwin, supporting the proposal for the CSA to assume patronage of ACOM after the NRC's withdrawal of support. Comment: Folinsbee outlines some of the successes of Canadian meteoritics, and the standing of ACOM in the republic of letters

FAX 1991 May 16, R. Hendry to S.A. Kissin, with a draft of the "contract" between the CSA and ACOM. Hendry suggests that the only way to arrange for funding at that time is to use the not wholly appropriate Department of Supply and Services contract process

Request for Proposal for a contract from the Department of Supply and Services 1991 June 21, S. Jacobs (DSS) on behalf of the CSA to S.A. Kissin representing ACOM

Letter 1991 August 14, S.A. Kissin to S. Jacobs, proposal ("contract") for the support of ACOM from the CSA through DSS. Includes ACOM amendments to the CSA drafted document (for which see FAX 1991 May 16, R. Hendry to S.A. Kissin above). Comment: amendments entered by hand. Photocopy

FAX 1991 September 20, M. Grey to S.A. Kissin, information in regard to that year's ACOM meeting in Ottawa

Research Grants and Contracts Project Information Form, Office of Research and Graduate Studies (Lakehead University?), 1991 October 8 (various earlier dates for duration of grant, etc., mentioned in form). Comment: this is for the administration of the inaugural year of ACOM funding from the CSA

MIAC Manual

D. Lemay, *with contributors*, 2002 edition. Comment: in blue 3-ring loose-leaf binder

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4.6- Ownership of meteorite, including MIAC's found.

Judging from the minutes highlights, this has been the object of discussion for many years.

Ownership of meteorites in Québec

Ownership of meteorites , other

4.7- Canadians institutions experienced in and actively engaged in meteoritical research.

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6- Lists of Curators and meteorites collections in Canada

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6.2 Meteorite Collections in Canada, (Bordeleau)

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9.1 A brief guide to the link between fireballs and meteorites

9.2 A guide to terms used in the Canadian Fireball database

9.3 Lexique des termes utilisés dans la base de données « Canadienne sur les bolides »

9.4 Glossary of Meteorite and Impact Terms

9.5 Fireball Tracking: Some Nomenclature and Some Myths (Tatum)

9.6 Terminology in Meteoritic Astronomy, by P.M. Millman

10- Bibliography

10.1 Bibliography of Canadian Meteor (including fireballs) research

10.2 Bibliography of Canadian Meteorites and Meteorite Research, including impacts events and structures.

MIAC Meeting 1992 (Ottawa, 1992 October 23)

MIAC information sheet (*n.d.*)

Letter 1992 January 20, J.C. Rucklidge to S.A. Kissin, advising that MIAC should revise its terms of reference to better match CSA disciplines. The *auctor* also suggests to the *destinarius* that the name ACOM be changed to MIAC, and the rationale for doing so; the letter is produced on the *auctor's* draft design of MIAC letter head with logo. The letter includes as an annexe a draft ("Second Draft") of the "proposed new terms of reference". Comment: this letter can be considered a primary source of high value attesting to the circumstances of the name change

Email 1992 February 10, J.C. Rucklidge to MIAC members, providing the then membership list and contact details

Email 1992 March 24, J.C. Rucklidge to S.A. Kissin, on CSA funds and the CSA-MIAC contract. Possible use of the balance of funds for work in the Canadian Arctic. Comment: there are two copies of this email in the file

Email 1992 March 25, S.A. Kissin to D. Smith, informing him of the balance left under the current CSA contract, and inquiring if he has any expenses on MIAC business he would like to submit

Email 1992 March 26, J.C. Rucklidge to S.A. Kissin, reporting succinctly on administrative developments in the relationship with CSA, and raising the issue of the disbursement of remaining funds from the fiscal period ending

Email 1992 March 26, J.C. Rucklidge to S.A. Kissin, suggesting an easier accounting arrangement for remaining MIAC funds (following on the prior email)

Email 1992 March 27, J.C. Rucklidge to S.A. Kissin, more on obtaining the remaining funds from the fiscal period ending

Letter 1992 July 21, J.C. Rucklidge to MIAC members, announcing greater freedom in how the Committee may spend its funds, asking if any members wish to step down in the interests of committee renewal, calling into question the need to have an annual meeting where members are physically present, and suggesting that Committee funds might better be spent on research or some other activity to raise the national profile of MIAC

Agenda 1992 October 23. Comment: photocopy typescript. The venue is Observatory Hall, 3 Observatory Crescent, Ottawa

MIAC Research Subcommittee Report for 1992, nearly identical draft(?) of the report published in CSA Minutes of MIAC 1992 October 23 (see below)

CSA Minutes of MIAC 1992 October 23, Dominion Observatory. MIAC membership is greatly expanded over that of ACOM. Three-year stable funding is announced, under more flexible terms than ACOM enjoyed under NRC. MIAC will undertake the annual reporting of all activity in Canadian meteoritics (the implication is that formerly only Committee work was reported). Under "new directions" a Publicity Committee (subcommittee) was discussed, and struck. The ACOM Distinguished Lecture Series will not continue under MIAC (but see below). Includes Appendix 1: Terms of Reference of MIAC under CSA; Appendix 2: MIAC Research Subcommittee Report for 1992; Appendix 3: MIAC Fireball Report Form. Appendix 2 has a section on "Arctic Meteorite Search Status"

MS notes 1992 October 23, in the hand of S.A. Kissin(?), on possibilities for continuing the ACOM Distinguished Lecture Series under MIAC (see item immediately above). Comment: handwritten in pencil on lined 8.5"X11" (21.6cm x 27.9cm) paper

Email 1992 November 27, J.C. Rucklidge to MIAC members, regarding budget disbursements, and the Committee letterhead (note: matters not mutually related). Comment: hardcopy of this email is incomplete

MIAC Meeting 1993 (Ottawa, 1993 October 30)

Email 1993 March 23, J.C. Rucklidge to MIAC members, regarding possible uses of "surplus" MIAC funds. One idea is to fund a foreign graduate student at the University of Alberta in researching a possible site of impact in China for specimens. Another is to support the Canadian Arctic Meteorite Project (CAMP—the season is reported to be in jeopardy due to lack of logistical support)

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Letter 1993 April 6, J.C. Rucklidge to S.A. Kissin, discussing possibilities for the disbursement of the balance of funds left from the previous year's budget. The China project is rejected, and A.R. Hildebrand's research on the K/Pg Boundary (formerly the K/T Boundary) in southern Mexico (*Chicxulub Crater) is favoured for funding over R.K. Herd's advocacy of the Canadian Arctic Meteorite Project (CAMP) due to a difference in scale of funds requested. Among R. Hawkes' proposals is a prototype video camera based on the MORP model (funding is deemed insufficient to move forward on that initiative). Comment: an identical letter was sent to all MIAC members

Memo 1993 July 21, J.C. Rucklidge to S.A. Kissin, advising of the change of date of the annual MIAC meeting in Ottawa. Comment: an identical memo was sent to all MIAC members

Agenda 1993 October 30. Comment: photocopy typescript with annotations in pencil. The venue is Observatory Hall, 3 Observatory Crescent, Ottawa

Annual Report MIAC to CSA 1993 December 23. references the Peekskill bolide to induce CSA to increase funding, and obliquely hints that MORP should be revived (or something MORP-like implemented). Further urges expansion of CSA support to MIAC to enable: i) research into hazards to spacecraft posed by meteorite debris; ii) investigation of hazards to the biosphere of "large" terrestrial impacts; iii) sourcing hydrocarbon production from craters—a proposal "to locate buried impact craters in Canada's oil-producing provinces[!]" ; iv) the granting of security clearance for MIAC members to access military databases of objects making atmospheric entries (and/or the addition of a "member of the defence establishment" to MIAC); and v), the funding of a "distinguished public lecture series...administered by MIAC" (revival—and expansion—of the ACOM-sponsored Distinguished Lectures on Meteorites series). Request for clearance to issue press releases after MIAC meetings is also sought. Includes a sample press release. The report includes the CSA Minutes of MIAC meeting 1993 October 30, at the Dominion Observatory. Comment: includes reports of the Reporting Systems Subcommittee, Research Subcommittee, Publicity Subcommittee, a Perseid Meteor Shower Report (1993 August 10-11 by P. McCausland), regional reports, report on J. Arkani-Hamed's (McGill) proposal for a Canadian Institute for Planetary Sciences (CIPS) at the Canadian Geophysical Union (CGU) meeting 1993 May 9-11, as well as a copy of the proposal itself, Appendix RS-D Sample of HyperCard Based Public Fireball Database, and a Report on the Canadian Polar Commission, Canadian Antarctic Science Workshop—Current and Future Status

MS notes 1993 October 30, in the hand of S.A. Kissin(?), on the MIAC meeting. Comment: handwritten in biro and pencil on lined 8.5"X11" (21.6cm x 27.9cm) paper

Reporting Systems Subcommittee Report to MIAC covering the period 1992 September 1 to 1993 August 31

Schedule of sessions on Meteorites and Impacts I&II sponsored by MIAC (for the CGU?). Comment: Photocopied, cut-out and pasted onto unlined 8.5"X11" (21.6cm x 27.9cm) paper

MIAC Meeting 1994 (St. Hubert QC, 1994 October 22)

Email 1994 June 27, J.C. Rucklidge to S.A. Kissin, up-to-date list of MIAC members with contact information

FAX 1994 October 12, J.C. Rucklidge to S.A. Kissin, map showing the location of the Montreal Planetarium and the CSA Headquarters in St. Hubert (John H. Chapman Space Centre), the former the venue of the upcoming meeting of the MIAC Research Subcommittee, and the latter the venue for the annual MIAC meeting. Comment: this appears to be the first time the annual ACOM/MIAC meeting was held outside of Ottawa

Email 1994 October 17, J.C. Rucklidge to MIAC members, providing organizational details of the annual meeting, and a draft agenda

Agenda 1994 October 22. Comment: photocopy typescript. The venue is CSA Headquarters, 6767 route de l'Aeroport, St. Hubert QC

CSA minutes of MIAC 1994 October 22, CSA Headquarters, St. Hubert QC. Among topics discussed or reported were the need to conserve MIAC funds for meteor searches, the desirability of better regional and gender representation (not yet attainable), a recommendation that MIAC establish a fireball reporting hotline, to be based at and staffed (and funded?) by the CSA, the creation of guidelines to ensure MIAC preparedness for future falls, and pro-am meteoritic relations. Comment: appendixes B-F missing

Report of MIAC Reporting Systems Subcommittee (Appendix A of MIAC minutes of 1994 October 22 meeting. Comment: notes the growth in fireball reports, and the strain on MIAC's volunteer resources, and recommends the hiring of part-time help to assist with processing, and "fully automating the reporting system...through a World Wide Web Mosaic", and the establishment of an official fireball hotline

MS notes 1994 October 22, in the hand of S.A. Kissin(?), on the MIAC meeting. Comment: handwritten in biro and pencil on lined 8.5"X11" (21.6cm x 27.9cm) paper

Sightings—Findings—and Other Space Debris in Saskatchewan 1994 October, M. Stauffer reporting to MIAC

MIAC Activities 1993-1994, P. Brown. Comment: report to MIAC of personal activity in meteoritics

MIAC Meeting 1995 (Montréal & St. Hubert QC, 1995 October 20-21)

Email 1995 March 26, A.R. Hildebrand to R. Hawkes, S.A. Kissin, and D. Pagé, regarding how to handle publicity for the Penouille find (Iron, IAB complex, 1984—this was before the name became official). Discusses timing of the release, and strategy to make it count in the ongoing relationship with the CSA (particularly in arguing for the establishment of a 1-800-fireball hotline). Expresses an opinion on the Montreal Planetarium's protocols; and the quality of MIAC internal relations

Email 1995 April 1, D. Pagé to S.A. Kissin, with contact information on the discoverer of the Penouille find, details about the electronic transmission, format, and coding, of the map showing the find spot, and jocular comments about a MIAC colleague

Email 1995 May 24, R. Hawkes to MIAC members, announcing the inauguration of the MIAC listserv (MIAC-L, the work of D. Pagé), with basic instructions and contact information, in expectation that this technology may prove a panacean remedy for the occasional ills of MIAC electronic communications; also included is a list of MIAC members

Email 1995 July 16, R. Hawkes to MIAC members, with proposed agenda for annual meeting in October, tentatively scheduled for the CSA headquarters. Dr. Richard "Dick" Spalding, US Sandia National Laboratory, may attend to observe MIAC at close range, for purposes of possibly establishing a MIAC-like group in the United States

Email 1995 August 12, R. Hawkes to MIAC members, requesting the preparation of brief written reports in a standard format, in place of oral reports. Including these as appendices to the annual report to CSA will "demonstrate the various key roles...we play"

Email 1995 October 5, R. Hawkes to MIAC members, reminder regarding written reports

Email 1995 October 5, R. Hawkes to MIAC members, agenda for annual meeting at the Montréal Planetarium (October 21) and the CSA headquarters (St. Hubert)

Email 1995 October 5, A.R. Hildebrand to MIAC members, agenda for the meeting of the research subcommittee, including titles of the formal presentations

Email 1995 October 6, R. Hawkes to MIAC members, current list of and email contacts for MIAC members

Email 1995 October 6, D. Pagé to MIAC members, regarding technical details of annual meeting

Email 1995 October 13, R. Hawkes to MIAC members, list of meteorite specimens on display at the Montréal Planetarium for the fall program "*Météorites, messagères de l'espace*", with contributions from the National Meteorite Collection, the Collection of the University of Alberta, and fourteen other collections

Email 1995 October 13, R. Herd to MIAC members, regarding his heading the new amalgamated MIAC Education & Publicity Subcommittee (E&P), and other E&P items. MIAC needs more resources in French (D. Lemay has done excellent work), and in aboriginal (First Nations') languages for distribution in the North

Email 1995 October 17, R. Hawkes to MIAC members, update on meeting arrangements. Dick Spalding won't be able to attend; asked Terence Dickinson invited to attend, but can't do so. Amateur D. Pagé of FAAQ has done some very good work for MIAC, and should be considered for full membership

Email 1995 October 18, R. Herd to MIAC members, with more (non-technical) information about the meteorite exhibition

Email 1995 October 19, A.R. Hildebrand to MIAC members, draft of guidelines for MIAC field searches compiled by the author and D. Lemay: "We attempt to emphasize the difference between MIAC and those who hunt for meteorites for commercial purposes". Some ethical issues are left undecided for discussion at the annual meeting

Email 1995 October 19, R. Hawkes to MIAC members, list of international meetings of interest

Email 1995 October 19, R. Hawkes to MIAC members, notice that 1994-1995 "Canadian fireball reports now on www"

Agenda, MIAC Research Subcommittee Program, 1995 October 19

Abstracts of MIAC Research Subcommittee Program papers, 1995 October 19. Comment: contains some biro annotations by S.A. Kissin(?)

Agenda 1995 October 21. Comment: photocopy typescript. The venue is CSA Headquarters, 6767 route de l'Aéroport, St. Hubert QC

CSA minutes of MIAC 1995 October 21, CSA Headquarters, St. Hubert QC. Among topics discussed or reported are CSA cutbacks putting support for MIAC at jeopardy (although it is also announced that the MIAC budget will be increased), the need for improved media reporting of fireballs and meteorites, and various ethical issues which could arise in field work, the influence of the trade in meteorites, the status of specimens of St-Robert (H5, 1994) and Penouille (Iron, IAB complex, 1984), JRASC as a possible venue for publication of MIAC annual meeting Research Subcommittee reports, and a proposal to the RASC National Council to create a meteoritics committee (A.R. Hildebrand). R. Herd expresses opposition to increasing MIAC membership. Comment: contains full committee reports

Undated memorandum 1995(?), A.R. Hildebrand(?) to D. Lemay, with different versions of the text of a proposed amendment to MIAC's policy on "Donation of MIAC found/owned meteorites". Comment: the shorter version of the amendment carries pencilled changes to the text, and the longer version bears the annotation: "Tabled"

The Climenhaga Observatory Near-Earth Space Surveillance Program - 1995, D.D. Balam and J.B. Tatum. Comment: the text of this typescript was published under a nearly identical title in *JRASC* 91, 2 (1997), 28-31

Reports from R. Hawkes, D. Pagé, P. Brown (regional report SW Ontario), S.A. Kissin (regional report NW Ontario), W.M. Moon (regional report Manitoba), M. Stauffer, J.B. Tatum (regional report BC) 1995 October 21(?)

International Meetings of Interest, R. Hawkes 1995 October 21(?)

Email 1995 November 7, D. Lemay to MIAC members, outlining a plan to begin increasing the public profile of MIAC, beginning with the compilation of a list of agencies who should be contacted once a year (the list is included with the email)

Email 1995 November 14, P. Brown to MIAC members, forwarding email from D. Steel (Anglo-Australian Observatory and University of Adelaide), requesting international support to keep the Australian NEO search program funded

MIAC membership list 1995 November 18

MIAC Meeting 1996 (Montréal & St. Hubert QC, 1996 October 18-19)

Email 1996 February 9, R. Hawkes to MIAC members, requesting votes on two proposals requesting MIAC funds by committee members: 1) J. Tatum's "unfunded, but world[-]class, asteroid detection and follow-up program" (amount requested not cited); and 2), R. Herd's

request for \$2,300 to purchase a second specimen of the St-Robert meteor for the National Meteorite Collection

Email 1996 August 7, D. Pagé to MIAC, informing members of hotel arrangements for the next meeting

Email 1996 August 23, M.A. Bouchard to MIAC, suggesting arrangements for a "public night" (*i.e.*, and education & public outreach [EPO] event) to be held October 16 at the Dow Planetarium in conjunction with the annual MIAC meeting, to broaden awareness of contemporary meteoritics, with an emphasis on SNC meteorites and early life forms. Speakers would be H. Vali (McGill), & H. Hoffmann (Université de Montréal), with R. Herd displaying some SNCs from the National Meteorite Collection. The event would be open to and advertised to the public, and invitations would be sent to the media. Press kits would be available for distribution at the event

Email 1996 August 28, D. Pagé to MIAC, concerning hotel arrangements for the next meeting

Email 1996 September 21, R. Hawkes to MIAC, with further details on the "public presentation evening" scheduled for October 16. MIAC and the Planétarium de Montréal would be the principal sponsors, with the CSA associated with the event through MIAC

Email 1996 October 4, R. Hawkes to MIAC, proposed agendas for the research presentations (speakers, titles, durations) 1996 October 18, and the Annual Business Meeting October 19 (chairs and others to leads discussions)

Registration form for MIAC meeting 1996 October 18-19, filled out by S.A. Kissin

Minutes of MIAC meeting 1996 October 18-19. Comment: the document was distributed 1997 November 3. Includes a discussion of the formation of a MIAC Archive

Comparative table of MIAC expenses 1992-1996 (with projections to 1998), 1996 October

MS notes on the meeting 1996 October 19. Comment: these are probably in the hand of S.A. Kissin(?)

MIAC Canadian Fireball Reporting Centre Annual Report 1996 October, being the report for the 1995 calendar year

Guidelines for "Etiquette, Attitude and Ethics During Meteorite Searches" 1996 October 19 by D. Lemay, with a facts sheet, list of expert examiners, advice on specimen handling, and a model form for field-work volunteers

International Relations Sub-Committee Report [for 1996] by P. Brown. Comment: meteoriticists in the U.S. are interested "in developing a MIAC-like system of contact people" for fireball reports , but institutional support is not yet forthcoming. Interest in pursuing a joint USNO and CSA initiative for a "minisat" or "microsat" with scanning IR satellite detector for detecting small near-Earth objects

Abstracts for the talks at the Friday Research Presentations 1996 October 18

Activity Report 1996 P. Lacombe

Activity Report 1996-1997 P. Brown

Manitoba Regional Report by 1995-1996 W.M. Moon

Activity Report 1996 October 16 S.A. Kissin

Email 1996 November 4, D. Lemay to MIAC, current membership list with contact information. Comment: D. Lemay raises the issue of providing MIAC members with letters of accreditation from the CSA

Guidelines for the Preparation of a Literature Review of Canadian Work on Impacts, NEOs, Meteorites, Fireballs, [&] Meteors, by R. Hawkes(?)

MIAC Meeting 1997 (St. Hubert QC, 1997 October 24-25)

Email 1997 February 7 R. Hawkes to MIAC, stating that no MIAC member will be going to a supposed "impact" site. Also some media items of interest from JPL's NEO (Near Earth Object) News

Email 1997 May 8, S.A. Kissin sending a communication 1996 July 11 from R. Hawkes about the 1996 MIAC meeting to himself

Email 1997 August 18, R. Hawkes to J. Tatum and S.A. Kissin, "Guidelines [for a] MIAC Research Review"

Email 1997 October 20, D. Lemay to MIAC, draft agenda for the annual business meeting on 1997 October 25. Comment: includes request for D. Lemay to be voted acting Chair during M. Higgins sabbatical

Email 1997 October 2, R. Herd to MIAC, with notice and details of the 1997 MIAC Public Lecture by R. Hawkes, "The Leonid Meteor Storm(s): Predictions, Spacecraft Hazards and Observational Plans", to be given in the auditorium of the NRC Building, 100 Sussex Drive, Ottawa, 1997 October 23

Email 1997 October 9. J. Huggins on behalf of S.A. Kissin to A.R. Hildebrand, abstract of presentation on the Toronto meteorite (Iron, IAB complex) by G.C. Wilson & S.A. Kissin for Paper Session of the MIAC Research Subcommittee

Minutes of MIAC Annual Meeting 1997 October 25 (emailed[?] copy 1999 November 2). Comment: D. Peterson CSA reports "a range of opinion within CSA about the value of MIAC to CSA". Among MIAC grants were one to run a EPO program in the Canadian North to establish an "reporting/analytical/information network", and another to support the sending of possible meteorites for identification between Kativik and the south

MIAC Canadian Fireball Reporting Centre Annual Report October 1997, R. Hawkes & D. Lemay. Comment: the authors note that NavCanada regularly faxes reports to MIAC. They recommend replacing the central national reporting centre with regional reporting centres, or at the very least bolstering the duties and competencies of the regional centres (J. Irwin in Kingston, R. Huziak & G. Sarty in Saskatchewan, and J. Tatum in Victoria are singled out as models). They notes that MIAC was the first body in the world to offer a web-based fireball reporting service. With the rise of competing reporting services, to avoid confusion and incomplete reporting they advocate the abandonment of the MIAC service in favour of the IMO service (judged the most stable, with the best archiving and reporting methods)

Email 1997 October 22, sent by R. Herd on behalf of A.R. Hildebrand, Research Subcommittee agenda and abstracts for 1997 October 24. Comment: includes a report (G. Wilson *et al.*) of a traverse of the Auyuittuq National Park, and a meteorite search of the Penny Ice Cap, Baffin Island with negative meteorite collection results, but the gaining of experience for similar meteoritic expeditions to arctic Canada. Report on CANAMET (51 finds & falls; G. Wilson). Also the resolution of the "Leeds" iron history (Kissin & Plotkin)

Research Subcommittee agenda and abstracts for 1997 October 24. Comment: handout from meeting (content identical but different format from above)

Manitoba Regional Report by 1996-1997 W.M. Moon. Comment: includes report of planned fieldwork on Melville Island in the Canadian arctic

Activity Report 1997 P. Lacombe, A. Bordeleau, and A. Grandchamps. Comment: includes measures for overseas (Paris) training of Planétarium de Montréal staff in meteorite conservation and preparation, and a report on the growth of the meteorite collection

MIAC Regional report, 1997 October 25(?), in the hand of S.A. Kissin(?). Comment: point-form, pencil on lined 8.5"X11" (21.6cm x 27.9cm) paper

MIAC Meeting 1998 (C.D. Howe Building, Ottawa 1998 October 23-24)

Formal Definition of Category of Associate Committee Member, 1998 October 15

Email 1998 October 20, R. Herd to MIAC, with details of accommodation and schedule

Email R. Herd to MIAC 1998 October 21, meeting updates

Agenda 1998 October 21, MIAC business meeting 1998 October 24. Comment: MS annotations in pencil

MIAC Abstracts of Papers Read at the Scientific Session, 23 October 1998. Comment: includes Kissin et al., "The Source of Meteoritic Iron in Thule Inuit & Dorset Culture Artifacts from the Canadian Arctic" (—analysis reveals Cape York [Iron, IIIAB] source]

Minutes of MIAC Annual Meeting 1998 October 24 (emailed[?] copy 1999 November 2). Comment: D. Lemay (RASC) appointed MIAC Chair, after serving as Acting Chair for 1.5 years. D. Lemay reports on and distributes copies of the first edition of the MIAC Manual. Note that E. Cloutis has received a grant from the National Geographic Society to conduct a prairie search for meteorites. An observer from the DND is present, and a motion is passed to "invite the Directorate of Space Development (D-space) of DND to provide a continuing member of MIAC". Appendixes are not preserved with the minutes
MIAC Expense Statement October 1998

MS notes on the meeting 1998 October 24. Comment: these are probably in the hand of S.A. Kissin(?). Pencil on lined 8.5"X11" (21.6cm x 27.9cm) paper

MS notes on the meeting 1998 October 25. Comment: these are probably in the hand of S.A. Kissin(?). Pencil on lined 8.5"X11" (21.6cm x 27.9cm) paper

Report Canadian Fireball Reporting Centre Oct. 1998, R. Hawkes & D. Lemay

Activity Report 1997-1998, M.A. Bouchard. Comment: in French. Includes work in Nunavik

Activity Report 1998, J.C. Rucklidge. Comment: includes accounts of the discovery and reporting of the Kitchener (L6) and Burstall (Iron, IAB complex) meteorites

Newfoundland & Labrador Regional Report 1998, G. Dymond

MIAC Meeting 1999 (University of Alberta, Edmonton 1999 October [22-]23)

Agenda MIAC business meeting 1999 October 23. Comment: includes formal definition of category of emeritus committee member

Agenda MIAC business meeting 1999 October 23. Comment: fuller version than above, but doesn't include emeritus definition document

MS notes on the meeting 1999 October 23. Comment: extensive; these are probably in the hand of S.A. Kissin(?). Blue & red ink on lined 8.5"X11" (21.6cm x 27.9cm) paper

MS list of appendixes distributed for 1999 October 23 meeting. Comment: these are probably in the hand of S.A. Kissin(?). Red, green ink, & pencil on lined 8.5"X11" (21.6cm x 27.9cm) paper

Appendix A: MIAC Expense Statement October 1999

Appendix B: Report MIAC Fireball Reporting Centre October 1999, R. Hawkes & D. Lemay

Report on the meteorite collection of the Planétarium de Montréal [October 1999, A. Bordeleau?]. Comment: unsigned

Appendix D: Ownership of Meteorite[s] in Newfoundland 1999 October 20, G. Dymond

Appendix F: Regional Report 1999 October 20, R. Hawkes

Minutes of MIAC Annual Meeting 1999 October 23. Comment: includes formal definition of category of emeritus committee member

Activity Report 1999, Planétarium de Montréal, P. Lacombe & A. Bordeleau

MIAC Listserver Administrator Annual Report October 1999, D. Pagé

Manitoba Regional Report 1998-1999, W.M. Moon. Comment: E. Cloutis' prairie search for meteorites has concluded with a nil result, & the final report has been sent to the National Geographic Society

Quebec Regional Report 1999, D. Pagé

Ontario Regional Report 1999, J.C. Rucklidge

Email 1999 October 27, R. Hawkes to S.A. Kissin, W.M. Moon additions to Meteorites/Impacts section of the MIAC bibliography

MIAC Meeting 2000 (Dept. of Geology, University of Toronto, 2000 October 27-28)

Email 2000 March 13, R. Hawkes to S.A. Kissin, gist of a MIAC motion urging the CSA to fund (\$50,000) a search for NEOs with the Plaskett Telescope

Email 2000 March 13, D. Lemay to S.A. Kissin, with the text of the MIAC motion urging the CSA to fund (\$50,000) a search for NEOs with the Plaskett Telescope. If acted upon the funding would be to employ David Balam & Chris Aikman

Email 2000 March 23. R. Hawkes to S.A. Kissin, with the text of the MIAC motion urging the CSA to fund (\$50,000) a search for NEOs with the Plaskett Telescope

MIAC Terms of Reference, 2000 April 3. Comment: includes notes by D. Peterson, MIAC member & CSA liaison

Email 2000 June 12, D. Lemay to MIAC, covering email for 1999 Minutes of Annual Business Meeting

Email 2000 June 15, D. Lemay to MIAC, agenda for conference call among MIAC members 2000 June 20. Comment: includes terms of reference for and membership of the CSA's Space Exploration Advisory Committee (SEAC), and poses the question whether there exists duplication between MIAC & SEAC

Draft of minutes of MIAC conference call 2000 June 20. Comment: includes discussion of potential overlap with SEAC. Includes discussion of the fallout from how Tagish Lake (C2-ung) was recovered. Pencil on lined 8.5"X11" (21.6cm x 27.9cm) paper

Draft of minutes of MIAC conference call 2000 June 20. Comment: includes discussion of potential overlap with SEAC. Pencil on lined 8.5"X11" (21.6cm x 27.9cm) paper

Minutes of MIAC conference call 2000 June 20. Comment: includes discussion of potential overlap with SEAC. Includes discussion of the fallout from how Tagish Lake (C2-ung) was recovered

Email 2000 June 28, D. Lemay to MIAC, reporting on his presentation on MIAC to SEAC (2000 June 23-24). Comment: the mode of the recovery of Tagish Lake (C2-ung) has affected CSA perceptions of MIAC

Printout of PowerPoint slides 2000 June 28, D. Lemay for his presentation on MIAC to SEAC (2000 June 23-24)

Email 2000 September 12, D. Lemay to MIAC, arrangements for Annual Meeting

Agenda and abstracts for Research Session 2000 October 27

Agenda for MIAC Annual Business Meeting 2000 October 28. Comment: marked "special version" for MIAC Chair & Secretary (in pencil)

Agenda for MIAC Annual Business Meeting 2000 October 28. Comment: version as distributed to members

Report on Meteorite Collections in Canada, A. Bordeleau, P. Lacombe, & A. Grandchamps (Planétarium de Montréal). Comment: includes the National Collection, the DAO collection, university, museum, and private collections. Canadian meteorites within the collections are identified. Includes pencil correction

MIAC Expense Statement October 2000. Comment: corrections in red ink and pencil

Draft Minutes of MIAC Business Meeting 2000 October 28. Comment: pencil on lined 8.5"X11" (21.6cm x 27.9cm) paper

Minutes of MIAC Business Meeting 2000 October 28. Comment: status of MIAC in relation to SEAC discussed, with changes proposed

FAX 2000 November 15, letter 2000 November 8 in support of CSA continuing MIAC from Ian Halliday

MIAC Meeting 2001 (University of Calgary, 2001 October 19-20)

Research Subcommittee Session Program Abstracts, 2001 October 19. Comment: includes session on Tagish Lake (C2-ung)

Agenda for MIAC Annual Business Meeting 2001 October 20

Minutes of MIAC Business Meeting 2001 October 20. Comment: pencil annotations. A MIAC budget for \$15,000 for 2001 had been approved by CSA, but the money was never issued due to International Space Station cost overruns. Other potential sources of funding discussed. Relation to CSA and SEAC also discussed

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MIAC Expense Statement October 2001

MIAC Operational Standards Subcommittee Report, M.A. Bouchard & H. Plotkin

MIAC Meeting 2002 (Montreal, QC, 2002 November 18-19)

Email 2002 September 16, A.R. Hildebrand to S.A. Kissin, supplying member affiliations. Comment: includes an email string regarding arrangements for the MIAC Annual Meeting

Minutes of the MIAC Annual Meeting, 2002 November 17. Comment: number of full members down by nearly 30% compared to the year before. Multi-year CSA funding for MIAC has not been restored. Discussion of relationship with CSA

Research Subcommittee Meeting Agenda & Abstracts, 2002 November 18. Comment: held at the Planétarium de Montréal

MIAC Operational Standards Subcommittee Report, M.A. Bouchard & H. Plotkin

South-Western Ontario Regional Report 2001-2002, H. Plotkin

H. Plotkin, Brief Biographical Statement

MIAC Meeting 2003 (University of Regina, 2003 November 7-8)

General information notice for the MIAC Annual Meeting 2003 November 7-8, 2003 October 13. Comment: pencil and black ink annotations on reverse

Research Subcommittee Meeting Agenda, 2003 November 7

Research Subcommittee Meeting Agenda & Abstracts, 2003 November 7. Comment: includes a report on the Millman Fireball Archive

Agenda MIAC Annual Meeting 2003 November 8

Minutes of the MIAC Annual Meeting 2003 November 8. Comment: Multi-year CSA funding for MIAC has not been restored. Discussion of relationship with CSA. Offering a "Fireball investigators" summer school discussed, as well as a summer school on meteoritics for graduate students. Cooperation with CASCA discussed. Issue of meteorites from Mercury raised. Possibility of working with the Canadian Coast Guard or DND to gain access to unglaciated cold desserts in the Canadian arctic. Update on UWO-Meteor Network, including the Tavistock radar facility, and the triangular infrasound array at Elgin

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Toronto Area Regional Report 2002-2003, G.C. Wilson & J.C. Rucklidge

South-Western Ontario Regional Report 2002-2003, H. Plotkin

Two transparencies for Dresden Meteorite (H6) search, H. Plotkin

North-Western Ontario Regional Report 2003, S.A. Kissin

MIAC Meeting 2004 (University of Calgary, 2004 November 26-27)

M. Beech, M. Hargrove, & P. Brown, "The Running of the Bulls: a Review of Taurid Fireball Activity Since 1962", *The Observatory* 124, 1182 (2004 August), 277-284. Comment: offprint, autographed by lead author

Email 2004 September 3, H. Plotkin to MIAC

Email 2004 September 3, A.R. Hildebrand to MIAC. Comment: mentions a proposal to cancel the 2001 annual meeting

Email 2004, September 3, S.A. Kissin to MIAC

Email 2004 September 15, R.K. Herd to MIAC. Comment: includes email (2004 September 15) from G. Wilson to MIAC

Email 2004 September 15, H. Plotkin to MIAC. Comment: it appears from some of the discussion that the CSA was providing some limited funds for MIAC Annual Meetings after 2001 (2001 was not funded). The second page of this email is missing from this copy

Email 2004 September 16, A.R. Hildebrand to MIAC

Email 2004 September 16, B. Gladman to MIAC

Email 2004 September 16, H. Plotkin to MIAC

Email 2004 September 26, R.K. Herd to H. Plotkin, and G. Wilson

Email 2004 October 4, A.R. Hildebrand to MIAC. Comment: mentions success of D. Hladiuk in capturing on video the fireball resulting from the reentry of the Genesis sample return probe capsule (COSPAR ID 2001-034A)

Email 2004 October 12, R.K. Herd to MIAC. Comment: discusses an International Academy of Astronautics (IAA) report cited to MIAC by A.R. Hildebrand, and Canada's future in space depicted therein. Also announces the formation of a committee to help develop the National Meteorite Collection of Canada

Research Subcommittee Meeting Agenda, 2004 November 26-27

Research Subcommittee Meeting Abstracts, 2004 November 26-27. Comment: doesn't include the abstract for C. Herd, "A Review of Martian SNC Meteorite Research" (given 2004 November 27)

Agenda MIAC Annual Meeting 2004 November 27. Comment: annotations in blue ink (hand of S.A. Kissin?)

Minutes of the MIAC Annual Meeting 2004 November 27. Comment: A three-year CSA funding contract of \$10,000-\$15,000 per annum for MIAC has been verbally agreed to. Discussion of relationship with CSA. Ways to improve the process of the Canadian Cultural Property Export Review process were discussed. Inter-committee collegiality and conduct was discussed. Includes a report on initiatives taken at the University of Alberta Meteorite Collection

South-Western Ontario Regional Report 2004, H. Plotkin

Abstracts of D. Hladiuk & A.R. Hildebrand, "Re-entry Observations of the Genesis Sample Return Capsule, 2004-09-08", and A.R. Hildebrand *et al.*, "Three Dimensional Gravity field Modelling of the Chicxulub Impact Crater". Comment: while the results of the first study are mentioned in an email of 2004 October 4, A.R. Hildebrand to MIAC, neither are listed as presentations in the Research Subcommittee Meeting Agenda, 2004 November 26-27

MIAC Terms of Reference

MIAC Meeting 2005 (Lakehead University, 2005 October 20-23)

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Email 2005 February 7, H. Plotkin to G. Wilson

Email 2005 February 7, G. Wilson to H. Plotkin

Email 2005 February 8, H. Plotkin to G. Wilson

Research Subcommittee Meeting Agenda, 2005 October 21

Research Subcommittee Meeting Agenda & Abstracts, 2005 October 21

Review of Martian Meteorite Porosity Estimates, M. Beech *et al.*, hand-out for talk 2005 October 21. Comment: annotations in blue ink by H. Plotkin

Minutes of the MIAC Annual Meeting 2005 October 22. Comment: Bourinot's rules adopted for the conduct of (non-scientific) meetings. Relations with CSA discussed. Includes two curators' reports, and the MIAC regional reports

Curator's Report University of Alberta Meteorite Collection, C. Herd. Comment: this is also included in the Minutes of the MIAC Annual Meeting 2005 November 22

South-Western Ontario Regional Report 2005, II, H. Plotkin. Comment: this is also included in the Minutes of the MIAC Annual Meeting 2005 November 22

FAX cover page for CSA "non-staff travel letter" 2005 November 29, D. Larocque to H. Plotkin. Comment: the letter is not present

MIAC Meeting 2006 (St. Hubert QC, 2006 October 20-21)

Research Subcommittee Meeting Agenda & Abstracts, 2006 October 20

Agenda of the MIAC Annual Meeting 2006 October 21. Comment: minutes not preserved in the file

Proposal to the CSA for A Canadian Astromaterials Facilities Network, Part I: New Meteorites, M. Beech *et al.* Comment: includes budget, and costs of various laboratory analytical tests

offered by different Canadian institutions. Other parts of the proposal, if any, are missing from this copy

Miscellaneous Offprints

P.M. Millman, "Canadian Meteorites", *JRASC* 47 (1953), 29-33, 92-94, 162-165. Comment: offprints of several of Millman's "Meteor News" columns about Canadian meteorites bound together (includes "A Catalogue of Canadian Meteorites"). Provenance: Bruce A. McIntosh

G.S. Hawkins, "A Study of Tektites", *Journal of Geophysical Research* 68, 3 (February 1963), 895-910

P.M. Millman & D.W.R. McKinley, "Stars Fall Over Canada", *JRASC* 61, 5 (October 1967), 277-294. Provenance: Bruce A. McIntosh

Meteoritics 21, 2 (1986). Comment: complete, but the individual papers detached from the binding and stapled as offprints

MORP (Meteorite Observation and Recovery Project)

Catalogue of Probable Meteorites Observed by MORP, 1981 November. Comment: 2 pp., photocopy

I. Halliday, A.T. Blackwell, & A.A. Griffin, "Detailed Records of Many Unrecovered Meteorites in Western Canada for Which Further Searches are Recommended", preprint 1988. Comment: published in *JRASC* 83, 2 (April 1989), 49-80

I. Halliday, A.A. Griffin, & A.T. Blackwell, "Detailed Data for 259 Fireballs from the Canadian Camera Network and Inferences Concerning the Influx of Large Meteoroids", *Meteoritics* 31, 2 (March 1996), 185-217. Comment: has tipped-in photocopy of G.W. Wetherill, "What's Coming Down? New Canadian Fireball Data", announcing the upcoming appearance of Halliday *et al.* in *Meteoritics*. Inscribed by I. Halliday to S.A. Kissin

Cover letter 2000 June 26 D.G. Turner to S.A. Kissin, asking the latter to review for *JRASC* E. Cloutis *et al.*, "A Recent Field Campaign to Recover Meteorites Detected by the Meteorite Observation and Recovery Program". Comment: the paper appeared in *JRASC* 95, 1 (February 2001), 24-26

Review typescript of E. Cloutis *et al.*, " A Recent Field Campaign to Recover Meteorites Detected by the Meteorite Observation and Recovery Program". Comment: the paper appeared in *JRASC* 95, 1 (February 2001), 24-26. Pencil annotations

NASA—Meteoroid Damage Assessment

[V.C. Frost,] *Meteoroid Damage Assessment*, NASA Space Vehicle Design Criteria (Structures), NASA SP-8042. Washington, D.C.: NASA, 1970, pp. 1-2, 29-32. Comment: photocopy of only 12% of the publication

NaturalHistoryAuction.com

Postcard notice of an upcoming commercial auction of the 1998 March 22 fall Monahans (H5), sent to S.A. Kissin

New, David (meteorite dealer)

David New, *Diamonds[,] METEORITES[,] Tektites*, 1996 February. Comment dealer's catalogue. Specimens of Bruderheim (L6) are among the offerings

David New, *Meteorites[,] Tektites* (undated). February. Comment dealer's catalogue

David New, postcard soliciting buyer's collecting preferences (undated)

Peekskill (H6)

Email 1992 December 22, J.C. Rucklidge to MIAC, forwarding an email from R.K. Herd about a possible purchase for the National Meteorite Collection of Canada

Email 1993 January 19, P. Brown to S.A. Kissin, expressing interest in the dynamical aspects of the event

Penouille (Iron, IAB complex)

Email 1995 March 24, D. Pagé to . Hawkes, A.R. Hildebrand. & S.A. Kissin

Email 1995 March 25, R. Hawkes to D. Pagé, cc. to A Hildebrand, & S.A. Kissin

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Email 1995 March 25, R. Hawkes to A.R. Hildebrand, cc. to S.A. Kissin, and D. Pagé

FAX 1995 March 30, draft of CSA media release. Comment: blue and black ink annotations

Email 1995 April 1, D. Pagé to S.A. Kissin

Map of find site, 1995 April 5

FAX 1995 April 6, revised version of CSA media release, S.A. Kissin to D. Pagé

Media Release "Rare meteorite located in Penouille, Gaspé", CSA 1995 April 6

Email 1995 April 8, R. Hawkes to D. Pagé, cc. S.A. Kissin

Email 1995 April 8, R. Hawkes to L. Blenkhorn (CSA), cc. S.A. Kissin & D. Pagé

Email 1995 April 11, R.K. Herd to R. Hawkes, cc. S.A. Kissin & A. LeCheminant

Letter 1995 June 5, F. Wlotzka to S.A. Kissin. Comment: advises that the name and characterization of Penouille "are fine", and "if the Nomenclature Committee has no objections", if will appear in the next Bulletin in the November issue of *Meteoritics*

Email 1995 October 18, R.K. Herd to P. Lacombe

Perseid Meteor Shower

The Perseid Meteor Shower 1993 August 10-11, Observations made at Butterpot Park, Nfld by [the] St. John's Branch [*recte* Centre], RASC, P. McCausland

Planétarium de Montréal

Printed invitation to planetarium show <<Les Météorites : Messagères de l'espace>> 1995
September 28, from P. Lacombe, directeur de Planétarium

Phillips Auctioning & Appraising (meteorite dealer)

Auction Catalogue, Natural History, 1995 December 2. Comment: meteorites pp. 26-36. Includes an Apollo 12 sample (lot 127A, pp. 26-27), incompetently characterized. Also the "Macovich" Collection (lots 128-167, pp. 29-36). Includes an 82.5gr polished slice of Springwater (Pallasite, PMG-an) (lot 155, p. 35, fig. p. 34), provenance "DuPont Collection"

Prairie Search

Email 1999 June 6, D. Lemay to MIAC, soliciting opinions on a request for funding from MIAC for the Prairie Meteorite Search (A.R. Hildebrand, P. Brown, & M. Beech), and calling for a vote. Comment: the Hildebrand, Brown, & Beech proposal is included, along with suggestions on the proposal by R. Huziak

Email 2000 July 8, A.R. Hildebrand to S.A. Kissin & H. Plotkin, responding to their offer to take part in the Prairie Meteorite Search

Email 2000 August 2, A.R. Hildebrand to MIAC, with attached media release regarding the first "find" of the program

MSS notes 2000 August 8-9, 13, S.A. Kissin's field notes of interviews as part of the Prairie Meteorite Search

Media release 2000 October 5, announcing the second "find" of the Prairie Meteorite Search

Presqu'île, Lac de la

M. Higgins & L. Tait, "A Possible New Impact Structure Near Lac de la Presqu'île, Québec, Canada", *Meteoritics* 25 (1990), 235-236. Comment: offprint

Rucklidge, John

R.G. Cresswell, Y. Miura, R. P. Beukens, & J.C. Rucklidge, "¹⁴C Terrestrial Ages of Nine Antarctic Meteorites Using Co and Co₂ Temperature Extractions". Comment: computer draft typescript. Published in the *Seventeenth Symposium on Antarctic Meteorites. Proceedings of the NIPR Symposium, No. 6, held August 19-21, 1992, at the National Institute of Polar Research, Tokyo*, ed. Keizo Yanai, with Hideyasu Kojima, Keiji Misawa, Nobuo Takaoka, and Yoshio Yoshida. Tokyo: National Institute of Polar Research, 1993, pp. 381-390

St-Robert (H5)

Le Journal de Montréal 1994 June 15. Comment: photocopy of page with meteorite story

Le Journal de Montréal 1994 June 16. Comment: photocopy of two pages with meteorite story

Canadian Press story on St-Robert (H5) 1994 June 16. Comment: newspaper from which the story is clipped is not identified

Vancouver Province 1994 June 16. Comment: photocopy of page with meteorite story

The Ottawa Citizen 1994 June 16. Comment: photocopy of page with meteorite story

Montreal Gazette 1994 June 17. Comment: photocopy of page with meteorite story

La voix 35, 26 (1984 June 19). Comment: newspaper pages with meteorite story

Le Journal de Montréal 1994 June 21. Comment: newspaper page with meteorite story

Le Journal de Montréal 1994 June 22. Comment: newspaper pages with meteorite story

St-Robert Meteorite, Chronology of Events 1994 June 14-26. Comment: photocopy of MS. Includes list of fragments

Photograph 1994 June 18, S.A. Kissin in St-Robert area

Photograph 1994 June 19, S.A. Kissin searching cornfields near Yamaska for impact craters (in St-Robert area)

Email 1994 June 22, S.A. Kissin to D. Pagé

FAX 1994 June 22, S.A. Kissin to P. Brown & J.C. Rucklidge

FAX 1994 June 23, D. Pagé to S.A. Kissin. Comment: map by D. Pagé showing location of meteorites

Map showing strewn field (ellipse hypothesis 240⁰) D. Pagé. Comment: photocopy

Map showing strewn field (ellipse hypothesis 208⁰) D. Pagé. Comment: photocopy, with correction in blue ink

Map by D. Pagé showing location of meteorites. Comment: photocopy

FAX 1994 June 24, S.A. Kissin to P. Brown & J.C. Rucklidge. Comment: communications with the Australian Federal Police about the suspicious activities of Robert Haag (meteorite dealer)

FAX 1994 June 24, A.R. Hildebrand to S.A. Kissin. Covering letter, with letter to the American Embassy in Ottawa advising them of the possibility that Haag (meteorite dealer) may try to illegally export a piece of St-Robert

Notepaper with contact information for the Australian Federal Police official in Washington, D.C. Comment: pencil and black ink

Covering letter with expense claim & receipts 1994 June 29, S.A. Kissin to J.C. Rucklidge. Comment: covers expenses for S.A. Kissin, D. Pagé, and P. Brown

Email 1994 July 13, D. Pagé to S.A. Kissin. Comment: preliminary synthesis of flight path

Email 1994 July 14, G. Ansell to S.A. Kissin & R.K. Herd. Comment: on weight of the two largest pieces

Email July 21, A.R. Hildebrand to P. Brown

Email 1994 July 22, A.R. Hildebrand to S.A. Kissin. Comment: on weight of several pieces

Email 1994 July 26, A.R. Hildebrand to J.C. Rucklidge, P. Brown, D. Smith, R.K. Herd, S.A. Kissin, D. Lemay, R. Hawkes, M. Bouchard

Email 1994 July 26, A.R. Hildebrand to H. Plotkin

Email 1994 August 4, A.R. Hildebrand to H. Plotkin

Email 1994 August 11, A.R. Hildebrand to H. Plotkin. Comment: report on fieldwork. Also interesting unrelated comments in Chicxulub

Email 1994 August 15, D. Pagé to A.R. Hildebrand & S.A. Kissin

Email 1994 August 16, H. Plotkin to A.R. Hildebrand

Email 1994 August 22, A.R. Hildebrand to H. Plotkin

Email 1994 August 23, A.R. Hildebrand to MIAC members involved in St-Robert work

Email 1994 August 26, A.R. Hildebrand to MIAC members involved in St-Robert work.
Comment: report on examination after sawing

G. Wilson, "Mineralogy, Chondrule Types, Textures and Optical Classification of the St-Robert Meteorite Fall", Toronto: Isotrace Laboratory, 1994 August 30

Clipping from *Sky & Telescope* 1994 September, 11

Canadian Press story on St-Robert (H5) 1994 August(?). Comment: newspaper from which the story is clipped is not identified

Clipping on St-Robert (H5) 1994 August(?). Comment: newspaper from which the story is clipped is not identified

Letter 1994(?) September 7, A.R. Hildebrand to H. Plotkin

The London Free Press 1994 November 10. Comment: clipping with meteorite story

Western News 1994 November 10. Comment: clipping with meteorite story

Email 1995 March 4, D. Pagé to F. Wicks. Comment: efforts of ROM to obtain a good sample, against American efforts

Email 1995 March 5, D. Pagé to F. Wicks

Email 1995 March 6, F. Wicks to D. Pagé

Email 1995 March 8, F. Wicks to D. Pagé

Email 1995 March 8, F. Wicks to D. Pagé. Comment: ink annotation

Email 1995 March 9, F. Wicks to D. Pagé

Email 1995 March 9, D. Pagé to F. Wicks

Email 1995 March 13, F. Wicks to D. Pagé

Email 1995 March 20, D. Pagé to F. Wicks

Email 1995 March 30, F. Wicks to D. Pagé

Email 1995 March 30, D. Brose to F. Wicks. Comment: attempt to find internal funds for ROM acquisition. Pencil annotations

Email 1995 March 30, D. Pagé to F. Wicks

Email 1995 April 5, F. Wicks to J. McNeill

Email 1995 April 20, D. Pagé to F. Wicks

Email 1995 April 21, F. Wicks to J. McNeill

Email 1995 April 21, F. Wicks to D. Pagé

Email 1995 April 24, J. McNeill to F. Wicks. Comment: black ink annotations, photocopy. ROM approves the asking price with 20% discount offered by seller

Email 1995 April 25, F. Wicks to D. Pagé

Email 1995 April 26, D. Pagé to F. Wicks. Comment: includes interesting notes on Penouille

Email 1995 April 27, F. Wicks to D. Pagé

Email 1995 April 28, F. Wicks to D. Pagé

Email 1995 April 30, D. Pagé to MIAC. Comment: success of ROM negotiations, bidding against Robert Haag

MS Known St-Robert Meteorite Prices 1994 May(?). Comment: photocopy with black ink annotations

Email 1995 May 29, S.A. Kissin to ?, "Preliminary Results from the Recovery and Analysis of the St-Robert Meteorite...". Comment: abstract of study

Email 1995 June 28, P. Brown to H. Plotkin, ?, "Preliminary Results from the Recovery and Analysis of the St-Robert Meteorite...". Comment: abstract of study

Email 1995 July 14, H. Plotkin to P. Brown

Email 1995 July 14, P. Brown to H. Plotkin

"Geofacts: The St-Robert Meteorite", R.K. Herd(?), Natural Resources Canada. Comment: two (2) English copies, an one (1) French of this information sheet for the media and public

Table of all known fragments of St-Robert, P. Brown. Comment: has sticky-note with blue pencil message from P. Brown to S.A. Kissin

Table of all known fragments of St-Robert, P. Brown (second copy). Comment: important pencil annotations

SkyNews May/June 1995. Comment: two pages with meteorite story

Leaflet (single page) to raise awareness of issues of illegally exporting St-Robert meteorites, Geological Survey of Canada. Comment: French version

D. Niehaus, A.R. Hildebrand, & P. Brown, "A Geographically Corrected Air Photo Mosaic for the St-Robert Meteorite Fall Strewnfield with Recommendations for Further Searches, St-Robert, Quebec", Geological Survey of Canada Open File XXXX. Comment: photocopy of draft of portion of the publication

P. Brown, A. Hildebrand, D.W.E. Green, D. Pagé, *et al.*, "The Fall of the St-Robert Meteorite", *Meteoritics & Planetary Science* 31 (1996), 502-517. Comment: offprint. Has sticky-note with message from A.R. Hildebrand to S.A. Kissin

P. Brown, A. Hildebrand, D.W.E. Green, D. Pagé, *et al.*, "The Fall of the St-Robert Meteorite", *Meteoritics & Planetary Science* 31 (1996), 502-517. Comment: second copy

G. Poirier & W.E. Trzcinski, "Mineralogy of the St. Robert Meteorite", poster from the Geological Association of Canada (GAC)/Mineralogical Association of Canada (MAC) meeting, Ottawa 1997 May 21. Comment: photocopy

R.K. Herd, "MIAC: Meteorite Identification". Comment: printout of page from the MIAC website. Also printed in the RASC *Observer's Handbook*

D. Pagé, "CCMI: La chute de météorite de St-Robert, Québec". Comment: printout of page from the MIAC website

Saint-Robert, Quebec, Canadian Meteorite Collection, Department of Geology, University of Calgary. Comment: printout of page from website. Information cut-off in printing, and supplied on the verso in black ink

S.A. Kissin, R.K. Herd, & D. Pagé, "Deux nouvelles météorites de fer au Québec". Comment: computer draft of French translation of article published in *JRASC* 91, 5 (October 1997), 211-215. Includes sticky-note from D. Pagé to S.A. Kissin

A.R. Hildebrand, P. Brown, J. Wacker, B. Wetmiller, D. Pagé, *et al.*, "The St-Robert Bolide of June 14, 1994". Comment: computer draft of article published in *JRASC* 91, 6 (December 1997), 261-274. Includes sticky-note from A.R. Hildebrand to S.A. Kissin

R.W. Kempton, "Centerpiece: The St. Robert Stone Meteorite", *METEORITE! Magazine* 1996 August. Comment: photocopy

R.W. Kempton, "The St. Robert Stone Meteorite", *METEROLAB2001*. Comment: web-reprint of the above. Photocopy

Email 1996 August 23, R.K. Herd to S.A. Kissin

G.F. Herzog *et al.*, "Preatmospheric Size of the St-Robert (H5) Chondrite", *Meteoritics & Planetary Science* 32, 4 (Supplement, 1997), A59. Comment: photocopy

"The St-Robert Meteorite", Geological Survey of Canada. Comment: printout of page from the website

Stolen Meteorites—Sale of

P. Olivella, "Venta de meteoritos robados", *E.d.u.c.y.t: Noticias Educacion, Universidad, Ciencia y Tecnica*, 1, 11 (1997 August 28). Comment: printout of a web publication. Pencil annotations

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Email 1997 October 22, S.A. Kissin to A.R. Hildebrand and R.K. Herd. Comment: English translation of the Olivella article above

Swiss Meteorite Lab (Rolf W. Bühler, meteorite dealer)

Circular 1992 January 9. Comment: firm's change of address

Flyer 1992 April

Flyer 1992 May

Flyer 1992 June

Flyer 1992 September

Flyer 1993 February

Flyer 1993 March

Flyer 1993 April

Catalogue 5, 1 (1993 April). Comment: Bruderheim 124g with fusion crust (p.12), price indicated

Catalogue 5, 2 (1993 November). Comment: notes (p. 1) that the Bruderheim piece from Catalogue 5, 1 is sold

Tagish Lake (C2-ung)—Early Concerns

Email 2000 February 29, A.R. Hildebrand & P. Brown to MIAC

Email 2000 February 29, R.K. Herd to D. Lemay, J.C. Rucklidge, D. Peterson, & J. Tatum.
Comment: includes email string, including the above

Email 2000 March 2, A.R. Hildebrand to D. Lemay

Email 2000 March 2, R.K. Herd to D. Lemay

Email 2000 March 2, R.K. Herd to D. Lemay, G. le Cheminant, C. Roots, J.C. Rucklidge, J. Tatum, & D. Peterson

Email 2000 March 6, D. Lemay to R.K. Herd, G. le Cheminant, C. Roots, J.C. Rucklidge, J. Tatum, & D. Peterson

Email 2000 March 6, R.K. Herd to D. Lemay, G. le Cheminant, C. Roots, R. Grieve, & B. Robertson

Email 2000 March 20, J.C. Rucklidge to D. Lemay & J. Tatum

MS 2000 March 26, variant chronologies: i) according to A.R Hildebrand; ii) according to R.K. Herd. Comment: in hand of S.A. Kissin(?). Blue ink on lined 8.5"X11" (21.6cm x 27.9cm) paper

Email 2000 March 26, A.R. Hildebrand to D. Lemay. Comment: includes email string

Email 2000 March 26, A.R. Hildebrand to D. Lemay. Comment: copy of the above, with a fuller version of the email string

Email 2000 March 27, R.K. Herd to S.A. Kissin. Comment: includes email string

Email 2000 March 27, R.K. Herd to S.A. Kissin. Comment: includes email string

Tektites

Fact Sheet: Tektites—Tons of the Moon Already on Earth, Ames Research Center, 1985 April 25. Comment: photocopy

Thompson, Edwin (meteorite dealer)

Catalogue Winter 98/99. Comment: includes several pieces of Abee (EH4) (p. 1), with price per gr.

West Hawk Lake

M. Zalcik, "West Hawk Lake: the Development of a Canadian Crater Tourist Attraction", 1997 October 13. Comment: prospective to raise MIAC interest. Produced on a colour desk-top printer

Wethersfield (1982, L6)

New York Times article 1982 November 10. Comment: photocopy

Wilson, Graham (n.b.: some of the documents in this file are "water-damaged")

FAX 1997 August 16, to S.A. Kissin. Comment: regarding an unknown Iron. Three pages

G. Wilson *et al.*, *A Traverse of Auyuittuq National Park, Baffin Island, and a Meteorite Search on the Penny Ice Cap: Concerning the Prospects for Meteorite Finds on Arctic Ice*, Toronto: Turnstone Geological Services, 1997 August 26

G. Wilson, *Recent Meteoritics Projects, Including a Compact Catalogue of Canadian Meteorites*, Toronto: ISOTRACE Laboratory, 1997 August 31

Email 1997 October 30, G. Wilson to S.A. Kissin. Email: with "Bibliography of Canadian Meteorites and Meteorite Research , Including Impact Events and Structures, dated 1994-1996"

Flyer for Turnstone Geological Services Limited. Comment: undated

FAX 1999 April 15, G. Wilson to S.A. Kissin and R.K. Herd. Comment: cover letter for an "updated meteorite list". The list is not included in this file

Meteorite Archive: the Records of the NRC's Associate Committee on Meteorites (ACOM), and the CSA's Meteorites and Impacts Advisory Committee (MIAC)

by R.A. Rosenfeld, RASC Archivist

(randall.rosenfed@utoronto.ca)

Abstract

With the creation of ACOM, meteoriticists in Canada had a formal body to coordinate their efforts at meteorite recovery, sample characterization, collection management, fireball reporting and recording, public outreach, and advocacy directed towards the government. It also provided a generally collegial forum for the presentation and discussion of recent work. MIAC fulfilled a similar role in succession to ACOM. This paper briefly describes the documentary record of ACOM & MIAC activity, the creation of the ACOM & MIAC Archive, and suggests several research avenues which can be pursued through the Archive. An extensive finding aid for the Archive is also presented.

Stars Fall Over Canada

Objects dramatically descending from the sky can have interesting impacts on the societies below. The Ensisheim (LL6) fall of 1492 November 7 (old style) was greeted as a wonder inviting pillage and interpretation, and became a civic ornament, an ecclesiastical relic, and an auspicious symbol of the bestowal of divine favour on the King of the Romans, Maximilian I, according to the learned doctors who spun words for remuneration (Marvin 1992; 2006, 16-22). Ensisheim proved a lucky stone in one regard; it is now the earliest witnessed fall in Europe for which a substantial portion of the meteorite is still extant (Marvin 1992, 27; 2006, 15). As an object of continued scientific enquiry (Szurgot 2016), and singular social liturgies (Soergel 2012, 185), it continues to play a role in modern meteoritics writ large.

Nearly half a millennium after Ensisheim, in the early morning of 1960 March 4, a bright fireball was witnessed over southern Alberta, resulting in a shower of meteorites near Bruderheim (L6), north of Edmonton (Millman 1960; Whyte 2009, 57-91). Fireballs had lost nothing of their impressiveness during the ensuing centuries, but their impact among the learned had changed. They were no longer primarily seen as a sign of divine favour, or alternatively, the start of a very bad day, but rather as a research opportunity. One societal result arising directly from the impact of Bruderheim was the creation of the Associate Committee on Meteorites (ACOM) of the National Research Council of Canada (NRC). This was indeed auspicious, for in the words of its prime mover, Peter M. Millman:

The fall of...Bruderheim made clear the need for a national organization to direct and co-ordinate the recovery efforts when new meteorites land in Canada. The Associate Committee on Meteorites was established at the National Research Council, Ottawa, late in 1960 under the able chairmanship of S.C. Robinson of the Geological Survey of Canada. This committee, with representatives in all the major areas of the Dominion, has developed a uniform system of reporting bright fireballs, and has circulated a number of travelling displays to instruct the general public concerning the appearance of genuine meteorites... (Millman & McKinley 1968, 292).

The membership of ACOM included all the major figures in Canadian meteoritics, many of whom were RASC members, nor was it unusual for several highly competent and respected amateurs to be elected to the ranks of the committee. The regular annual meeting which took place in the fall provided an excellent opportunity for the members to take stock of the year's discoveries, projects, and research, to discuss topics of mutual interest, seek advice, to share knowledge of developments elsewhere, including new techniques and bibliography, and to decide strategy when dealing with funding agencies. ACOM lasted till 1990-1991, when NRC funding was severely compromised by the government of the day, forcing the defunding of all the NRC's associate committees.

In what may have been the last scientific act of his career, shortly before he died, Peter Millman contacted Larkin Kerwin, a physicist and former President of the NRC, and then the inaugural President of the Canadian Space Agency (CSA), and suggested the utility for the country of having ACOM transferred under the aegis of the CSA. Kerwin agreed, and from 1991 to about 2006-2007, ACOM became the Meteorites and Impacts Advisory Committee (MIAC) of the Canadian Space Agency. Towards the end of that period MIAC, along with the other CSA advisory committees, became unfunded. The meteoritical community met the challenge of the CSA's new funding models by regrouping as the Astromaterials Discipline Working Group (ADWG) (cms.eas.ualberta.ca/adwg/), and latterly as the Astromaterials Training and Research Opportunities (ASTRO) Cluster (www.astromaterials.ca). MIAC, although unfunded, still fulfills two of its original roles; one as a medium for EPO, and the other as a fireball reporting centre for potential meteorite-dropping events over Canada (www.uqac.ca/miac/).

The normal operation of any scientific body generates a documentary record, and ACOM and MIAC were no exception. The act of producing documents, however, does not in itself insure either the documents' survival, or their rational arrangement. That the ACOM-MIAC Archive exists at all is due to the foresight and hard work of three researchers.

Creation of the Archive

The person primarily responsible for gathering and preserving the documents which now form the bulk of the ACOM-MIAC Archive, is Stephen Kissin, now an emeritus professor of Geology at Lakehead University. Professor Kissin, a still active expert on the characterization of iron meteorites, pallasites, and terrestrial impact structures, was a long-time member of both ACOM and MIAC, and served in various executive positions on both committees. The Archive also contains contributions of documents from Dr. Ian Halliday, a former RASC National President well-known for his work on the flux rates of meteorites, and for spearheading the Meteorite Observation and Recovery Project, MORP (via Professor Peter Brown of Western's Meteor Physics Group), and from two historians of meteoritics, Professor Howard Plotkin of Western, and the late Professor Richard Jarrell, formerly of York University.

Professor Plotkin went through the boxes of loose papers he had received from Professor Kissin, and ordered and arranged the Archive. He grouped associated documents, devised coherent file classes, determined the order of documents within the files, and then devised a logical and workable succession for the files.

The third person involved in the work is Professor Phil McCausland, also at Western, a meteoriticist with an interest in the history of his discipline, who has participated in and organized several Canadian meteorite-fall recovery expeditions. Phil and Howard were responsible for contacting the RASC to see if the ACOM-MIAC Archive could be accommodated in the RASC Archives, and were responsible for the transport of the Archive to the RASC.

Calendar of the ACOM-MIAC Archive

The RASC Archivist has written a fairly detailed calendar of the ACOM-MIAC Archive, which identifies the contents of the files, and describes the contents, physical nature, and state of preservation of each document in the files. The documents are cross-referenced where possible. The intent of this work is provide a resource for exploring the Archive, enabling a considerable amount of preliminary work to be done before the researcher consults the actual documents *in situ*. The *ACOM-MIAC Calendar of Documents* is publicly accessible at: www.rasc.ca/sites/default/files/ACOM-MIAC_Calendar_of_Documents.pdf. To arrange a consultation of any of the ACOM-MIAC documents at the RASC Archives, or for any other inquiry regarding the ACOM-MIAC Archive, please contact the RASC Archivist at the address given above.

A Resource for the History of Meteoritics in Canada

The ACOM-MIAC Archive is a rich resource for exploring many facets of meteoritics in Canada during its efflorescence over the last fifty years. Among the topics which could be explored are

- the workings and achievements of ACOM and MIAC, and the changing interactions of the meteoritical community with government patrons over time
- the impact on Canadian meteoriticists of world-wide changes both within the discipline—new techniques for characterization, new platforms for publication, and communication—and without, such as changing market and collecting pressures
- the Canadian Fireball Reporting Centre
- meteorite recovery campaigns (for an example see the paper by Plotkin in this number of the *Journal* on the St-Robert [H5] meteorite recovery campaign. Additional topics could be the recovery of the Tagish Lake [C2-ung] meteorite; MORP; and the Prairie Meteorite Search program)
- pro-am cooperation in meteoritics (the work of RASC members and amateur astronomers Dr. Roy Bishop, Denis Pagé, and Damien Lemay as part of MIAC was outstanding)

- the Canadian Arctic Meteorite Search (few people know about this effort, spurred by the success of the Antarctic searches. The Canadian Arctic program was ultimately unsuccessful because of the absence of the geological and meteorological conditions in the Antarctic which enable the transport processes which concentrate the meteorites; on the Antarctic program see Righter *et al.* 2015)
- education and public outreach (this would include the public lectures presented during the annual MIAC meetings, the education materials in various media, and the meteorite/meteorwrong identification clinics)

Perusal of the *ACOM-MIAC Calendar of Documents* will suggest other possible avenues of inquiry. Many of the stories of Canadian meteoritics have yet to be written. Some of them in their own way are as remarkable as those which occurred in the wake of the fabled fall of Ensisheim half a millennium and an ocean away.

Acknowledgements

The author wishes to thank Howard Plotkin and Phil McCausland for improvements to this article. Any remaining errors are the author's sole responsibility. This research has made use of NASA's Astrophysics Data System.

Manuscripts, Books, and Articles

Marvin, U. (1992). The Meteorite of Ensisheim: 1492-1992, *Meteoritics* 27, 28-72

Marvin, U. (2006). Meteorites in History: an Overview from the Renaissance to the 20th Century. In (Eds.) G McCall, A. Bowden, & R. Howarth, *The History of Meteoritics and Key Meteorite Collections: Fireballs, Falls and Finds*, Geological Society Special Publications 256 (pp. 15-71). London: Geological Society

Millman, P. (1960). Meteor News, *JRASC* 54, 5, 247-248

Millman, P., & McKinley, D. (1968). Stars Fall Over Canada, *JRASC* 61, 5, 277-294

Righter, K., *et al.* (Eds.) (2015). *35 Seasons of U.S. Antarctic Meteorites (1976–2010): A Pictorial Guide to the Collection*, Special Publications 68. Washington, DC: American Geophysical Union

Soergel, P. (2012). *Miracles and the Protestant Imagination: The Evangelical Wonder Book in Reformation Germany*. New York–Oxford: Oxford University Press

Szurgot, M. (2016). Mean Atomic Weight of Ordinary Chondrites: Effect of Petrologic Type, 79th Annual Meeting of the Meteoritical Society, *Meteoritics & Planetary Science* 51, S1, A613

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