

HVACR HERITAGE CENTRE CANADA [HHCC] START-UP YEARS 1999-2020 ESSENTIAL DOCUMENT SERIES DOCUMENT NO. 4

Executive Guide
To
HHCC's Founding Archival Collection of HVACR
Trade and Technical Literature

Prepared By HHCC, Collections and Curatorial Services [CCS]

October 2020

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Preface

This Executive Guide is the 4th in a series of 5 Essential Documents describing the innovative work of the HVACR Heritage Centre Canada [HHCC]. HHCC is a start-up, 21st century, national museum and archive - an industry sponsored, volunteer-based, "distributed" organization "without walls".

Its business model and operations build on its founding collections, which together provide the base for its research, educational materials development, and public educational programming - all of which are outlined in Essential Document No. 3, "Executive Guide to HHCC's Founding HVACR Artifact Collection, Rsearch Program and Data Base" ¹

This Guide provides an introduction to the more recently acquired Founding Archival Collection of HVACR Trade and Technical Literature, including its: Deed of Gift, Apprasial, Cataloguing, and User Guide.

The Collection Deed of Gift - This 64 box archival collection was delivered to the HVACR Heritage Centre Canada [HHCC], to be received by board president Craig McDonald, April 1, 2019 - to be placed under its custodial care as Canandan cultural property.

The Collection Apprasial - Included is a detailed 35 page external appraisal prepared by Pamela Campbell, Fine Art, Antiques and Appraisals. The appraisal [\$ 33,000], undertaken in accordance with the Canadian Cultural Review Board Guidelines, recognized the contibution of the collection to the enhancement and preservation of Canadian culture

In addressing the HHCC board, November 29, 2017, Ms. Campbell elaborated the cultural value of such collections²

- 1. Private collections such as the one to be appraised, are of particular value to public museums, archives and galleries, as well as to private collectors with interests in cultural properties
- 2. Private collections have economic value, as cultural property in the market place they are highly valued for the what they are, for the stories they tell, and for their unique aesthetics
- 3. Graphics in archival collection [such as this one] are highly valued for the understandings they provide of the values, interests, politics, and design idioms of their times and thence for their current influence on contemporary life and times
- 4. Public institutions depend on private collectors as a major source of their cultural materials, making them more widely available to the public
- 5. Research studies based on museum, archives, and private collections provide a significant source our understandings of the world we live in
- 6. In our rapidly changing times public museums, archives, and galleries are taking on an increasingly important role in helping people to understand and appreciate the history, culture, and complexity of the 21st century world in which they live.

¹ See document OA2007C. HHCC Data Centre

² See CCS Report, HHCC Board Meeting November 29, 2017, doc OA1712A, HHCC Data Centre, File 6

- 7. There is an inherent public interest in the archival and artifactual materials of the heating and refrigeration industry given its centrality in private, community, and the national life of Canadians.
- 8. The value of the trade and technical literature collection to be appraised, rests among other things, on the uniquely Canadian perspectives it provides and the world views it enables.

The Collection Catalogue - The catalogue is based on six subject matter groups, which together variously reflect the driving forces shaping the early development years of the HVACR industry in Canada:

- 1. Applied Sciences and Engineering Fundamentals
- 2. HVACR Trade and Technical Journals
- 3. HVACR Manufacturer's and Suppliers of Engineering, Applications
- 4. HVACR Technical and Trade Training Organizations
- 5. Best Practices in Trade Training and Professional Development
- 6. Science, Technology, and Canadian Society and Culture

The 56 page catalogue provided by the donor contains a complete listing of the labels on each of the 64 Bankers boxes, used to transfer the archival collection to HHCC's custodial care.

The box labelling is designed to allow immediate, interim access to the collection by Subject Matter Group, while arrangements are made for permanent archival storage, inventorying, digitization, and the development of a collection management information system [CMIS], facilitating user access.

Subject Matter Group 1 - Applied Sciences and Engineering Fundamentals, Box File Label No. OA1705P, Box numbers 1.1 to 1.3

Subject Matter Group 2 - HVACR Trade and Technical Journals, Box File Label No. OA1802A, Box numbers 2.1 to 2.19

- Subject Matter Group 3 HVACR Manufacturer's and Suppliers of Engineering,
 Applications, Sales and Service Literature, Box File Label No.
 OA1705D, Box numbers 3.1 to 3.12.
- Subject Matter Group 4 HVACR Technical and Trade Training Organizations, Box File Label No. OA1806I, Box numbers 4. 1 to 4.5
- Subject Matter Group 5 Best Practices in Trade Training and Professional Development, Box File Label No. OA1705F, Box numbers 5.1 to 5.2
- Subject Matter Group 6 Science, Technology, and Canadian Society and Culture, Box File Label No. OA1705G, Box numbers 6.1 to 6.5

The Collection User Guide - An 11 page, preliminary guide to the collecion-in-use is provided in Section 4. Seven topics are covered:

- 1) An Introduction to the Collection P. 2
- 2) The Organization of the Collection by Subject Matter Group P. 3
- 3) Boxing and Labeling by Subject Matter Group P. 3
- 4) Preliminary Access to the Collection by Subject Matter Group P. 4
- 5) Searching the Collection by Subject Matter Box Number P. 4
- 6) What the Collection Teaches P. 8
- 7) The Applications and Uses of the Collection as Historic Knowledge P. 10



HVACR Heritage Centre Canada

Deed of Gift

I, G. Leslie Oliver, am the sole lawful owner of the HVACR Trade and Technical Literature Archival Collection, as described in Attachment A, and have full power and authority to enter into this Agreement.

I wish to and do donate this archival collection to the HVACR Heritage Centre Canada (the Centre), and do hereby give this Collection to the Centre.

I, the undersigned, hereby and unconditionally transfer and assign to the HVACR Heritage Centre Canada, all rights, title, interest and full privileges of ownership in the artifacts listed in this Deed of Gift absolutely and without restriction; and in so doing, I understand and agree that the artifacts will be the exclusive and absolute property of the Centre and that they may be used, stored, displayed, loaned, retained or disposed of at the unrestricted discretion of the Centre, as well as the right to provide access to these materials in whole or in part and in all forms of media.

I represent and warrant to the Centre, that the artifacts that are the subject of the gift are free of debt or lien of any kind and hereby warrant the transfer of said property against all and every person or persons, whomever are claiming the same. The Centre is not responsible for liabilities resulting from any discrepancies with the title. I release all claims I now have or may have from this time on to the archives and understand and agree that I make this gift to the Centre absolutely, unconditionally and forever. Any copyrights, intellectual property rights, trademarks, royalties, exhibition rights and related rights and related interests, such as I may possess in this property, are hereby transferred to the Centre.

Mary Jeanne Oliver

Many Jame Oliver

G. Leslie Oliver,

GL. Olives

Donor

Hart Holmstrom

Hmisalmster

Witness

Craig McDonald

President Board of Directors,

HVACR Heritage Centre Canada

Dated: March 2019

SCHEDULE A

The T. H. Oliver, HVACR, Archival, Trade and Technical Literature Collection

Preamble:

Dedicated work on the assembly, research, documentation, and interpretation of this collection was initiated by Leslie Oliver P. Eng., PhD. in 2012. Leslie is the youngest son of T. H, [Howard] Oliver, and one-time vice-president and general manager of the Oliver Refrigeration and Heating family business - a company first established by his father in 1924.

This archival work was undertaken following an acknowledged, systematic three step process for the conservation and preservation of cultural properties¹. Because the genesis of this work goes back a number of years there were many, now forgotten, who deserved due recognition for their inspiration. Most recently I would like to acknowledge the contribution of Jeremy Hood and Pamela Campbell. I am indebted to Jeremey for his latter assistance and insights in helping to organize, box and label the collection, so as to better tell its many stories. Ms. Campbell,

¹"Identification and Recovery, Preservation and Renewal, Interpretation and Use". See "A Strategy for Conserving Ontario's Heritage, A Report of the Ontario Heritage Policy Review", Ontario Ministry of Culture and Communication, 1990

drawing on her extensive experience working with Canadian cultural property, provided some valuable, insightful, interpretive contributions to the text.

Howard Oliver [1896 - 1976] was an early pioneer worker in the Canadian refrigeration and automatic heating industry. With a formal grade 8 education, and thence largely self-educated, he would come to pride himself in his extensive, personal library of trade, technical, and professional development literature. This Collection, the aftermath of his work, has been assembled, intended as a gift back to the Industry, to be entrusted to the custodial care of the HVACR Heritage Centre [HHCC].

The volunteer-based Centre is a uniquely Canadian, NFP cultural organization with a national education and training mandate. It was established under Canadian Letters Patent in 2004, in order to manage the industry's 20th century cultural properties – those artifacts and archival materials which the industry had left behind. These same artifacts would go on to change Canadian society and culture, while advancing Canadian technology through the early and middle years of the 20th century.

The Collection is also uniquely a product of its times, telling the many stories of the seeming contradictions of the period. In classic terms "It was the best, and the worst of times"². for among the lean and war-torn years into which the Industry was born, there was also new life emerging - a renaissance of sorts, a re-awakening to the possibities that the 20th century held for Canadians. In retrospect it was a period of acknowledged, unequalled economic growth, of newly, potentially enriching social and cultural thought, and of previously unheard of expendable personal income. As well the early to mid-years of the century was a period of emerging technologies, with the many labor-saving and potentially enriching life-style devices it enabled³. In short, the stories documented in this archive are as much about its contradictory socio-cultural times, as about the innovative electro-magnetic devices that were created by the HVACR industry.

This forty-box archive, containing over 2,000 volumes, profiles much of the work of the Canadian residential and commercial, HVACR industry from the mid 1920's to the 1960's. One step at a time, in chronological sequence, reflecting Canadian socio-economic and technical progress, we see here the industry evolve through its embryonic, and early development years. They were the WWII years, times of shortage, food rationing, as well as times of deep economic depression in Canada. Through it all we get insightful glimpses of the Industry's role and contribution to Canada's economic, social and cultural development – for it is no coincidence that these years were also those in which Canada, itself, acquired a new maturity as nation state.

A rare, "workingman's" collection, we see in these volumes an unmistakable, on-the-ground legitimacy, providing an authentic view of a rapidly evolving industry at work. Not-with-standing its meager applied scientific foundations, here we see the essential trade and technical literature of an emerging field of thought and practice move from "shop-floor" to national archive. Over 1200 journals trace the evolution of the industry month by month, identifying

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² This contradictory view of life's realities was first popularized by Charles Dickens, in the opening lines of his famous novel "The Tale of Two Cities", 1859.

³ See also "Born at the Right Time, A History of the Baby-Boom Generation", Doug Owram, 1996.

many of its seminal innovators and adaptors, as the leading figures and organizations that made it all happen.

As recently recognized by the Library and Archives of Canada, such collections are national cultural imperatives. For "Documentary heritage is a cornerstone of all democratic societies and is an essential resource for supporting economic, social, legal, and cultural domains, as well as fostering innovation" ⁴

For a detailed description of the content, structure, nature and scope, and the significance of the collection see Briefing Notes, The T. H. Oliver, HVACR, Archival, Trade and Technical Literature Collection, Oliver Associates, June 2018.

The Nature and Scope of the Collection

The collection traces and mirrors the emergence of the HVACR industry in Canada covering its embryonic, formative, and early development years, starting in the 1920's, through to the 1960's.

The literature covers six subject-matter groups, each documenting uniquely different, but complementary stories of the industry at work:

- 1. Applied Sciences and Engineering Fundamentals
- 2. HVACR Trade and Technical Journals
- 3. HVACR Manufacturers and Suppliers of Engineering, Applications, Sales, and Service Literature
- 4. HVACR Technical and Trade Training Organizations
- 5. Best Practices in Trade Training and Professional Development
- 6. Science, Technology, and Canadian Society and Culture

Group 1- Applied Sciences and Engineering Fundamentals – This Subject Matter Group contains archival literature representative of the resource materials in the applied sciences and engineering, available to the Canadian HVACR industry in the first half of the 20th century. Beyond "gut feelings", and "trial and error", this literature displays the stories of the relatively limited applied scientific knowledge and understandings on which the design, construction, production, operation, performance, and safety of the products of the Industry would be largely dependent in its embryonic and early development years.

As the 20th century evolved this volume of literature would explode, reflecting a seemingly exponential growth in the volume of research and development in the applied sciences and engineering practice that followed WWII. Included in this archival group are textbooks and handbooks variously dealing with the key concepts, principles, practices, theories, working assumptions, and related ideas in the applied sciences and engineering practice.

The Collection provides an exemplary historical and educational insight, with the hindsight of an early 21st century vantage point. It illustrates the 20th century period as one where fields of practice often preceded scholarly work. Historically (back to the medieval period), it has been

Oliver Associates, Material Culture of Technology, Proj. 151, Doc. OA1806SS.docx, 6/27/2018, 7/23/2018, 7/31/2018, 3/17/2019, P.4

 $^{^4}$ Library and Archives Canada, "Building a Canadian National Heritage Digital Strategy", Internet May 30, 2018

pointed out that it was "Craftsmen" who were in fact the "Scientists" of their times, experimenting in new materials and processes, the innovators of ideas and principles upon which fields of specialized thought and practice would progressively build.

For the early 20th century ushered in a period of increased private, expendable income, which in turn led to substantial consumer market growth – all strong incentives to creativity, innovation, and entrepreneurship. It is no accident, then, that these were the embryonic and early development years of the automatic refrigeration and heating industry, in which corporations such as Kelvinator⁵ went where scholarly scientific inquiry had not gone before – here, indeed, practice preceded theory. As the 20th century proceeded many universities established corporate partnerships, so it became increasingly difficult to make the distinction between scholarly and entrepreneurial-based research and development.

These are among the many stories told by this Group of archival materials. The Group contains 3 subgroups, moving from generalized applied science and engineering concepts, principles and ideas, to applied thermodynamics, to specific HVACR applications:

- 1. Applied Sciences and Engineering
- 2. Applied thermodynamics
- 3. Automatic Refrigeration, Heating and Air conditioning

Group 2 - HVACR Trade and Technical Journals – This subject matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of occupational endeavor. In month by month format the Collection variously documents the essential stories of the "movers-and-shakers" [people, corporations, products, ideas, and innovations], the dominant issues of the day, the directions, challenges, and accomplishments of the Industry.

With expanding markets following WWII would come an increasing proliferation of commercial journals. Together, they would document the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended, throughout those early developmental, often lean and war-torn years. This literature uniquely tells the essential historic stories of the "how-when-and why" of the HVACR industry's growth and its evolving role and contribution to the Canadian economy, society, and culture.

Group 3 - HVACR Manufacturers and Suppliers of Engineering, Applications, Sales and Service Literature – This Group contains manufacturers' equipment catalogues, engineering, applications and service literature. This literature tells the stories of the critical role and contribution of manufacturers and their agents in the early developmental years of the industry.

Oliver Associates, Material Culture of Technology, Proj. 151, Doc. OA1806SS.docx, 6/27/2018, 7/23/2018, 7/31/2018, 3/17/2019, P.5

⁵ Kelvinator was founded in 1914 by a young engineer, Nathaniel Wales, under the name of "Electro-Automatic Refrigerating Company, to produce the first household electric refrigerator [Internet May 2018]. T.H [Howard] Oliver introduced Kelvinator refrigerating technology into York County on the north slopes of the Oak Ridges Moraine, north of Toronto, in the early 1920's. A hall mark of this collection is the original trade and technical literature produced by Kelvinator in these early years.

This literature is highly valued on two fronts. As a unique literature available to the trade of its day, it was highly valued by field workers, as an authoritative and reliable source of the trade and technical information on which they could and would depend. As a collection, it is also a unique and complete seminal body of literature illustrating the innovative workings of this essential Canadian economic sector. For the 1920's through 30's was a period in which academic and scholarly texts were few and far between, and few dedicated HVACR education and training schools existed. Yet, paradoxically, this was a critical period of "incubation" in the evolution of the Industry. It was a moment in time on which workers in the field were desperately dependent on the "mid-wife" role played by the producers of the innovative equipment and devices that provided the foundation stones on which this Canadian industry would build.

A story of singular importance, told graphically by this archive, is that of the emergence and logistical challenges of the traditional, mail-couriered, "Technical Service Bulletin". A half century before the internet, the ubiquitous, mail-couriered, service bulletin was variously used across the Industry as the "just-in-time" information delivery mechanism of choice. Delivered by the Royal Mail, beginning in the 1920's, it would reach its maturity in the 1970's. Throughout this period such bulletins would be an essential media form in rapidly evolving, early "high-tech" fields of endeavor - fields characterized by increased complexity, rapid innovation, market volatility, and dependence on an informed technical service sector. Here the service bulletin would help meet the "must-know" information needs of the field's front-line workers.

Possibly unique in the Canadian experience would be the contribution of Canadian General Electric Company [CGE], Small Appliance Department, Barrie Ontario, as represented in the Collection. Through the 1960's and on into the 70's, CGE provided an exemplary model of the couriered technical service bulletin at work - with internet and browser technology still half a century in the future. Amongst other things, this archive demonstrates the impracticality and sustainability of the mail-based service bulletin, in meeting the exploding demands for time-dependent, on-demand, technical service information requirements of the late 20th century.

Group 4 - HVACR Technical and Trade Training Organizations – This Group consists of representative trade training and professional development materials produced by independent HVACR technical and trade training organizations. The stories told here are of the centrality of such organizations that sprang up, variously established by the trades themselves [e.g., the Mechanics Movement], responding reflexively to the training needs and conditions of their times. Beyond the support provided by manufacturers in the early developmental years of the Industry [Group 3], these organizations would be central players in trade training and professional development. They would be part of the great "Self-Improvement Movement" of the early 20th century. Their business interests centered on the development of individual personal talents, occupational interests, and on individual economic and intellectual self-improvement.

Along with the support in training, business, and professional development provided by manufacturers, these self-help organizations helped to give the Industry the added "jump-start" it desperately needed to develop the specialized skill pool and labor force required to help ensure the survival of a new, innovative, industrial sector, in lean and uncertain times. The idea of "self-help" in training and development would come to be a significant marker of the HVACR trade

culture in Canada. Among other things it would delay the establishment of formal training programs and apprenticeship in Ontario until the latter part of the 20th century.

Group 5 - Best Practices in Trade Training and Professional Development⁶ - The collection also includes representative, archival literature tracing the evolution of best practices in trade and technical training, vocational education, and professional educational development. The literature in this group provides a valuable reminder of the cumulative wealth of knowledge and understandings in teaching and learning on which the development of a competent workforce in the HVACR trade continues to be dependent in the early years of the 21st century.

The literature covers the evolution of manual and industrial training in pre-renaissance times, detailing the relationship between "things" and "thoughts" [hand and mental training], the rise of the handicrafts, apprenticeship, and the Mechanics Institute movements, as well as the development of vocational education in Ontario from 1835 through to the significant innovations of the 1960. Included also is representative literature covering the emergence of the "educational technology" movement of the times. It was a movement that, along with the subsequent proliferation of affordable, portable digital devices [personal computers, lap-tops, tablets, cell phones, the high-speed internet, and browser], would seemingly change everything.

The 1960's period happily coincided, although not accidentally, with trade certification of HVACR workers in Ontario. It saw a flood of how-to-do-it handbooks and manuals of best trade pedagogical practice, including trade analysis, curriculum development, course outlines, and lesson planning for the trades. Much of this "pedagogical storm" drew on the results of recent research and development work in the behavioural sciences, educational psychology, systems theory, and classroom practice. The evolution of pedagogical thought and practice in the skill trades had moved well beyond that of the handicraft and manual training movements.

Group 6 - Science, Technology, and Canadian Society and Culture – This Subject Matter Group contains a representative archival sampling of original, authentic popular journalism – in its original color and style – although reflecting its age and hard use over the years.

It's a journalism that begins to tell the many stories of the socio-cultural impact of early to mid-20th Century science and technology on the evolving consumer market place, as well as more broadly, on the life and times of Canadians. For these stories, told in the language of the popular press of the period, were the essential stories of science and technology, and of the seeming exponential growth in the devices of human interest they engendered. They would be the precursors of what was to come with the emergence of popular digital devices of the early 21st century.

⁶ Howard Oliver's passion for trade and technical training, and life-long learning was duly reflected in the lifeinterests of his youngest son Leslie. Also active in the family business, he would go on to do advanced work in trade training, technical education, and professional development. Following trade certification in Ontario in the 1960's, he would be the first to receive an Ontario Teaching Specialist Certification in the newly designated Refrigeration, Air Conditioning and Heating Trade. The literature in this Section is a reflection of his work as well as that of his father.

For over the course of the 20th century these new driving forces would progressively reshape the life of Canadians and the Canadian economy from "resource-based" to "consumer-based". In so doing many of Canada's traditional "faith-based" values, interests, and beliefs, would seem to evolve into much more of a "device-based" ethos. Here, values, beliefs, and life-styles might be seen as having been shaped much more by the latest device being marketed, than by the traditional faiths of Canadians. Here, too, the traditional "necessity-based" household-activities, time-allotments, personal interests, and values that had dominated the lives of Canadians would be seen as undergoing a dramatic shift, reflecting the new cultural modernity of early and mid-20th century Canadian life.

December 1, 2019

Dr. G. Leslie Oliver 68 Spruce Street Aurora, Ontario L4G 1R8

Dear Dr. Oliver,

As per your request, I have conducted a self-contained appraisal of the estimated fair market value for cultural property donation of a group of trade and technical journals, training and source suppliers, literature and theory, science, applied science and engineering and popular culture literature and publications from The G. Leslie Oliver HVACR Trade and Technical Literature Archival Collection and the T H Oliver Archival Collection. This report is prepared for valuation purposes relating to your donation of this collection to The HVACR Heritage Center Canada. This appraisal estimates the fair market values effective as of November 30 2016. I am pleased to present my findings herewith.

To estimate fair market values, the fair market sales comparison approach was applied. All active markets were investigated and value characteristics were analyzed including the publishers and publications, commercial source, purpose and intent of the material, the subject and rarity, desirability, quality and relevance; size, medium and date of material; exhibition, provenance and other history as well as larger place in the related industries, education and popular culture. These characteristics were matched as closely as possible to other examples that are currently on the market or have come to market over the last few years and compared to other appropriate local and international sales and sources. While sold examples with published prices were of the utmost consideration, examples currently for sale with published current prices or suggested auction or sale estimates were considered for broadest market perspective. The closest published values available have been used but in some cases, the last date of a comparable sale falls outside the requested five year period. When quoting auction values, they are generally considered fair market values.

I have read and considered your report on the scope, rarity and relevance of this collection in terms of donation for the enhancement and preservation of Canadian culture. The conclusions expressed in this report are also subject to the Basic Assumptions and Limiting Conditions, which appear in this report.

This report has been prepared in accordance with the Canadian Cultural Property Review Board updated guidelines for monetary appraisals that are submitted for the purpose of a Cultural Property Donation. My fee for the research, development and production of this report is based on a fee for service and is not in any way contingent upon the value conclusions or any other findings. My engagement for this assignment was not contingent upon developing or reporting any pre-determined result. I have no past, present or contemplated interest in the subject properties.

Based on the investigation outlined, it is my opinion that the Fair Market Value for cultural donation purposes of the specified group of archival material and literature making up The G. Leslie Oliver HVACR Trade and Technical Literature Archival Collection, as December 1, 2018, is **thirty three thousand Canadian dollars**.

Total Charitable Donation Value

\$ 33,000.00

Yours respectfully,

Pamela J. Campbell

Pamela Campbell, M.A.

A DONATION APPRAISAL

OF

PROPERTY BELONGING TO DR. G. LESLIE OLIVER

LOCATED AT 68 SPRUCE STREET, AURORA, ONTARIO, L4G 1R8

TO BE DONATED TO THE HVACR HERITAGE CENTER CANADA

LOCATED AT 419 DEERHURST DRIVE, BRAMPTON, ONTARIO L6T 5K3

The following appraisal was made by Pamela J. Campbell of the Fair Market Value for the purpose of a Charitable Donation.

2

DONATION APPRAISAL

For a collection of trade and technical journals, training and source suppliers, theory and literature, science, applied science and engineering and popular culture literature and publications to The HVACR Heritage Center Canada.

Type of Value:

This report concludes fair market value, which is defined as:

The highest price, expressed in terms of money that a property would bring in an open and unrestricted market between a willing buyer and a willing seller who are knowledgeable, informed and prudent and who are acting independently of each other.

Archival material of the types and descriptions set forth are accomplished work and literature of their and related industries with well respected peer reviewed and established credentials. Comparable literature of like stature are archived, exhibited, collected, traded, bought and sold internationally in private and public collecting and archival institutions, through industry, literature and ephemera dealers, at auction and/or private treaty transactions. In part, like or comparable work and literature is represented in the public and private market. Some material is more obscure and is not frequently or ever represented in the open market. Consequently, not only all markets were considered and investigated to represent the relevant and appropriate market for this report but collections held in public archives. All sales over the last ten years have been considered as relevant for the collecting time frame as some like examples have not frequently traded within a narrower time frame. When comparable examples have not been represented in the open market, cultural opinion on the rarity of the material was highly considered in determining theoretical replacement, and therefore market value.

Effective Date of this Report:

The effective date of this appraisal report is December 1, 2018.

Intended Use and Intended Users:

The intended use of this appraisal report is for a Cultural Property Charitable Donation. The intended users of this report are the Receiving Institution HVACR Heritage Center Canada and Dr. G. Leslie Oliver, the Donor.

Cataloguing:

The colletion has been catalogued according to the subject matter-based systems determined by Dr. G. Leslie Oliver with archival input provided by Mr. Jeremy Hood, based on the Getty ID system that presents this archival literature in a database format (with selected representative photos of examples within each section). There are thirty five pages to this appraisal in total, including the cover letter to Dr. Oliver, the donor.

Approach to Value:

The approach to value used in this report is that of the sales comparison/value. In determining the fair market value, the aim has been to establish the highest price in terms of money that like materials would bring between willing buyer and willing seller, both parties being informed, reasonable and acting independently of each other in an open and unrestricted market. All active markets were investigated and value characteristics were analyzed including rarity, desirability, publisher, source, originality and innovative aspect, purpose to society, size, medium, date, history and provenance. These characteristics were matched as closely as possible to current or recent market sales or market sales over the last few years of comparable material.

Scope of Work:

The scope of work undertaken for this report consisted of a review and research of sales of comparables at relevant dealers and galleries, public auction, brokers and consultations with experts, collectors, museum curators, archivists and consultants.

Total Fair Market Value for the donated collection is thirty three thousand dollars Canadian.

Total Charitable Donation Value of the G. Leslie Oliver Archival Collection: CDN \$33,000.00

3

DONATION APPRAISAL

Basic Assumptions and Limiting Conditions:

The values of the subject properties are based on the following basic assumptions and limiting conditions. The analyses, opinions, and conclusions set out in the appraisal represent the unbiased professional analyses, opinions and conclusions of Pamela Campbell of Pamela Campbell Fine Art, Antiques & Appraisals.

To the best of my knowledge and belief, the statements contained in this appraisal are true and correct. This appraisal is based on the expertly identified and described identity of the material being appraised. A full written expert catalogue description was provided to me as well as firsthand inspection and guided expert tutorial for the purpose and my opinions and values are based on that material provided. I have examined the collection personally. No further guarantee of condition, nor of genuineness, authenticity, or attribution was deemed necessary. In contracting me to undertake this appraisal the parties agree to indemnify and hold me harmless against and from any and all losses, claims, actions, damages, expenses, or liabilities to which I may become subject in connection with this engagement.

The services provided by me have been performed in accordance with professional appraisal standards. My compensation was not contingent in any way upon my conclusions of value. I have no present or prospective interest in the property that is the subject of this appraisal, nor do I have any personal interest or bias with respect to the parties involved.

This appraisal is to be used only for the purpose stated herein; any use or reliance for any other purpose, by you or third parties, is invalid. This appraisal should only be shown in its entirety to those third parties who need to review the information contained herein.

This appraisal does not give any consideration to the possible effect of future inflation and currency differences. Values are as of the appraisal date and I assume no responsibility or liability for future upward and/or downward fluctuations of the value of the donated collection. No consideration has been given to the future availability of any particular asset listed in this appraisal.

Subject to legal process or proceedings, all information contained within this appraisal is considered strictly confidential and will not be revealed to any third party without the written permission of all interested parties. While I have consulted fellow professionals, archivists, specialists and curators who in certain cases have worked with these or comparable materials, I have employed no other appraisers or experts to render my opinion and conclusion.

Value Assignment: is in Canadian Dollar Currency as noted. When currency conversions was necessary, the conversion was calculated as closely as possible to the date of the sale. While every effort has been made to quote sale comparison examples within the past five years, this has proven impossible in some cases due to the scarcity of equivalents in the market. A longer timeframe for sale comparisons and/or expert opinion has thus been considered when necessary.

Date Of Donation: December 1st, 2018

Recipient Institution: The HVACR Heritage Center Canada, Located at 419 Deerhurst Drive, Brampton,

Ontario L6T 5K3

Donor: Dr. G. Leslie Oliver, 68 Spruce Street, Aurora, Ontario, L4G 1R8

Provenance: Property of Dr. G. Leslie Oliver, and noted as a single donation from a personal

collection from this private donor through professional acquisition and/or

inheritance when of determining significance to the value and provenance.

Appraiser's Name: Pamela J. Campbell

Gallery / Company: Pamela Campbell Fine Art, Antiques & Appraisals

Criterion: For cataloguing and fair market appraisal purposes for a Canadian Cultural

Property Donation and Canadian cultural property acquisition

Condition: All material is generally considered in fair and good condition respectively,

commensurate with age and purpose of use, unless and including otherwise noted

in the condition reports provided by the donor.

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DONATION APPRAISAL

Appraiser Professional Profile:

Pamela Campbell is a recognized authority in the field of Canadian art and Canadian Cultural Property, European Decorative and Fine Arts and private collection donations including the kind and description set down and valued in this appraisal, as summarized.

Pamela Campbell, M. A., whose principal place of business is Canada, is actively engaged in the management, appraisal and sale of fine and decorative arts and ephemera, and cultural property of every description, including institutional, private and estate collections. Pamela Campbell is qualified to render appraisals by way of the following.

Pamela is a recognized authority in the field of International Decorative Arts and Canadian Fine Art, holding a Masters of Arts graduate degree from the Victoria & Albert Museum, London, England and an Honours Bachelor of Arts degree from Queen's University, Ontario. Pamela is a past member of the Board of the Volunteer Committee of the George R. Gardiner Museum of Ceramic Art, Toronto and a past Secretary of the Canadian Antique Dealers Association, Expert Advising Specialist and Collections Curator and Manager to a number of international private, corporate, commercial and public institutional clients. While working in the broader field of international fine and decorative arts, Ms. Campbell has specialized in Canadian art and decorative arts including collectables and ephemera. Pam's thirty-five year career includes the position of Principal of her consulting company offering valuations and curatorial collection management and private dealing. Pam has dealt with all scopes and scale of collections from institutional to private single owner and estates; including direction of sale or donation locally or internationally. This has included Canadian Cultural Property donations benefiting national institutions. Pamela is specialized in appraisals for the legal and insurance industries including cataloguing and valuations for coverage, estate planning and probate, collection divestment, dispersal and donations, forensic circumstances and fraud investigation.

Her ten-year tenure as Department Director and Specialist of Decorative Arts at Sotheby's Auctioneers involved production of international auctions. Also, as Head of Appraisals for Sotheby's Canada, Pamela performed a wide variety of appraisal and collection/divestment services and functions for the private, public and corporate communities, done to international appraisal standards. These included the sale of the Canadiana Collection of The Detroit Institute of Arts. Pamela was the specialist manager of the prestigious two-part single-owner auction of The Meech Collection of Silver, held at Sotheby's New York. Pamela has appraised and facilitated acquisitions from private collections to the Montreal Museum of Fine Art, Royal Ontario Museum, Art Gallery of Ontario, Art Gallery of Hamilton, Winnipeg Art Gallery, Glenbow Museum of Calgary, University of Lethbridge, Alberta and Art Gallery of Victoria. Pamela directed fund raising and appraisal projects for galleries and museums across Canada while at Sotheby's. Pamela was also Manager of Client Services including International Private Client Liaison for Sotheby's Canada. Ms. Campbell's museum expertise includes curatorial positions at the Royal Ontario Museum and the Art Gallery of Ontario as well as other outreach programs for Canadian public institutions while at Sotheby's. Pamela also appeared as a specialist on the popular 'Canadian Antiques Road Show' television program and lecture circuit.

Dated:	Signed:
December 1st, 2018	Pamela J. Campbell
	Pamela J. Campbell MA

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DONATION APPRAISAL

The G. Leslie Oliver HVACR Trade and Technical Literature Archival Collection For Donation To The HVACR Heritage Center Canada

To follow is a brief historical overview of the Canadian Heating, Ventilation, Air Conditioning and Refrigeration industry represented in the G. Leslie Oliver Donation. Through the lens of this industry it is the documentation of a modern material history. Fittingly, the collection is being donated to the HVACR Heritage Center of Canada In it's turn, the HVACR Heritage Center of Canada recognizes the importance of the preservation of it's history and archival material, an act in it's self that is at the forefront of Canadian cultural preservation.

The collection is a rare and possibly unique example of an amassed body of material in it's wide variety of aspects representative of a revolutionary emerging modern technical industry. The Oliver Collection embodies a company at the forefront of it's field, within the context of Canadian HVACR companies at the forefront of industry advancement internationally. Hence this collection is significant to Canadian culture and important to preserve in it's entirety. The collection reveals trends and technology of our forward society, of leading developments across a scope of Canadian endeavours. It reveals changing goals and aspirations, a wish to embrace innovation in science and technology, industrial design, commercial enterprise, progressive educational methods, a shared co-operative spirit between competitors, and employment of the newest theories and practices. The collection is cross-cultural in interest. It illustrates modern trends in lifestyle, design, fashion, architecture and interior design through employment of leading graphic design, advertising and media. The advent of refrigeration illustrates moves to weekly food shopping and thus an evolution in town planning and family activities. The advertising component of the collection is an invaluable reference to period social, historical, town planning and development and political study.

The Oliver Collection further puts into context the rarity and uniqueness of this archival collection as a completely preserved and amassed body of content by one donor. The collection is the property of the donor through direct contribution and through decent, an interesting and important aspect illustrating a family lineage in, and contribution to, this innovative Canadian industry. The Oliver family business, and others like it, is an excellent example of the significance of a private company's contribution to Canadian technology, commerce and ultimately, culture.

An Overview of The HVACR Heritage Center Canada Receiving Institution

The HVACR Heritage Center Canada is a uniquely Canadian Not For Profit Cultural Organization with a mandate of national education and training as well as that of custodians of their history. It is a volunteer-based organization. The HVACR Heritage Center Canada was established under Canadian Letters Patent in 2004 in response to their recognition of a larger purpose of preservation of their history. The HVACR Heritage Center Canada further recognized their industry as embodying multiple important aspects of Canadian advancement. The Center was established in order to manage the HVACR industry's 20th century cultural properties – those artifacts and archival materials falling into practical obsolescence that are the material legacy of a technology-based progressive industry in constant advancement. These artifacts and archival materials are the material objects and ephemera that changed so many aspects of Canadian society and culture. The materials and archival objects were the physical working content of that advancement, a seminal Canadian technology through the early and middle years of the 20th century.

The HVACR Heritage Center Canada is the receiving institution of the G Leslie Oliver HVACR Trade and Technical Literature Archival Collection Donation. The Oliver archival and artifact donation will be the exclusive and absolute property of the HVACR Heritage Center Centre. The Center has undertaken the custodial care of the donation with the intent to appropriately house, keep and offer it to the agreed standards and purposes of such an institution, to be used, stored, displayed, loaned, retained or disposed of at the unrestricted discretion of The Centre, as well as the right to provide access to these materials in whole or in part and in all forms of media in accordance with their mandate.

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DONATION APPRAISAL

A Brief Overview of The Principles of The HVACR Industry

HVACR is a sub-discipline of mechanical engineering. The science is based on the principles of thermodynamics, fluid mechanics and heat transfer. Refrigeration is sometimes added to the field's abbreviation, which is the technology of cooling for environmental comfort.

The three central functions of heating, ventilation, and air conditioning are interrelated, especially with the need to provide thermal comfort and indoor air quality within reasonable installation, operation, and maintenance costs. HVAC systems can be used in both domestic and commercial environments. HVAC systems can provide ventilation and maintain pressure relationships between spaces. The means of air delivery and removal from spaces is known as room air distribution. The science, applied science and industrial design of the industry is an excellent example of interdisciplinary technological advancement in Canada

An Overview of G. Leslie Oliver, Donor and The Donation of The G. Leslie Oliver HVACR Trade and Technical Literature Archival Collection

G. Leslie Oliver P. Eng., PhD, is the sole lawful owner of the HVACR Trade and Technical Literature Archival Collection and donates this archival collection to the HVACR Heritage Centre Canada to provide the seed of The HVACR Collection holdings and to further the cultural and educational aims and goals of The HVACR Centre. Dedicated work on the assembly, research, documentation, and technical explanation and interpretation of this archival collection was initiated by Leslie Oliver beginning in 2012. The work was rigorously undertaken, following an acknowledged three step process for the conservation and preservation of cultural property for the end purpose of this donation.

This donation embodies a forty box archive containing over 2,000 volumes which profile much of the work of the Canadian residential and commercial, HVACR industry from the mid 1920's to the 1970's. In step by step chronological sequence, the material documents the evolution of the industry through its embryonic, and early development years, through WWII, times of shortage, food rationing, and times of deep economic depression in Canada. In a larger sense, the collection documents Canadian socio-economic and technical progress through aids to home living, business and industrial housing. The material provides insightful glimpses of its role and contribution to Canada's economic, social, educational and cultural development. The collection illustrates an industry concurrent to the seminal years in which Canada itself, acquired a new maturity as a nation state.

The Donor describes the donation as a rare, "workingman's" collection. Revealed in these volumes is an unmistakable, on-the-ground legitimacy, providing an authentic view of the industry at work and in development from a hands-on perspective. The collection holds the original copies of essential trade and technical literature of this emerging field of applied science, thought and practice, moving directly from working "shop-floor" to storage to national archive. Over 1200 journals trace the evolution of the industry month by month, identifying many of its seminal innovators and adaptors; the leading figures and organizations that made it all happen. A detailed description follows of the contents, structure, nature and scope, and the significance of the collection as described by subject groups and archival cataloguing and storage methods. References are also made to the T. H. Oliver, HVACR, Archival, Trade and Technical Literature Collection, Oliver Associates.

This donation is an excellent representation of a Canadian national cultural imperative as recently stated by the Library and Archives of Canada. The Library and Archives of Canada states as a principle guideline that "Documentary heritage is a cornerstone of all democratic societies and is an essential resource for supporting economic, social, legal, and cultural domains, as well as fostering innovation."

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DONATION APPRAISAL

Historical Context Of The Oliver HVACR Trade and Technical Literature Archival Collection

This donation represents the contributions of two scientific trailblazing individuals from successive generations of a Canadian family, and their family business, to a burgeoning trailblazing Canadian industry, and ultimately to the national culture. The Oliver Refrigeration and Heating Company was a family business, established by Howard Oliver [1896 - 1976] in 1924. Howard Oliver was an early pioneer worker in the Canadian refrigeration and automatic heating industry. With a formal education to the level of grade eight he was thence largely self-educated. Howard Oliver would come to pride himself in his exhaustive personal library of trade, technical, and professional development literature from his company. Leslie Oliver is the youngest son of T. H, [Howard] Oliver, and one-time vice-president and general manager of The Oliver Refrigeration and Heating family business. His contributions added to the company technology, literature and artifacts. Leslie Oliver came to recognize this assembled body of artifacts as possibly unique in it's scope and as cultural property in it's own right, representative of a sector of Canadian history and it's contribution to modern society. It is the aftermath of Leslie Oliver's work and has been assembled, intended as a gift back to the industry, to be entrusted to the custodial care of the HVACR Heritage Centre [HHCC].

The Collection is also uniquely a product of its times, illustrating the many stories of the seeming contradictions of the period. In classic terms it reveals a case of 'the best, and the worst of times', for among the lean and war-torn years into which the industry was born, there was also new life emerging, a reawakening to the possibilities that the 20th century held for Canadians. In retrospect it was an acknowledged period of unequalled economic growth, of new potentially enriching social and cultural thought, and of expendable personal income. The early to middle years of the 20th century were also an unprecedented period of emerging technologies that offered many new labor saving and potentially enriching life-style devices. In short, the stories documented in this archive are as much about its contradictory socio-cultural times, as about the innovative electro-magnetic devices that were created by the HVACR the industry. In it's nature and scope the Oliver Archival Collection traces and mirrors the emergence of the HVACR industry in Canada covering its embryonic, formative, and development years starting in the 1920's, through to the 1970's. It thusly illustrates the advent of HVACR technology creating the ability to build higher than six stories; how the modern sky scraper era emerged and urban planning was revolutionized.

In another context the HVACR industry was on the forefront of recognizing the revolutionarily modern medium of advertising to garner public awareness. In their efforts to represent their products as the cuttingedge conveniences of their day for a modern lifestyle, these companies employed the most sophisticated advertising of the time. As a group, the Oliver journals and publications containing these seminal ads are a time capsule of Canadian graphic design developments and emerging ambitions of the advertising and marketing industry. Concurrent with it's own, the advertising and marketing industry itself was a new emerging field of 20th century connectedness. As a science, the marketing business was recognizing the power of the study of demographics, socio-economic and gender decision-making and influencing. The HVACR industry harnessed this new field to highly successful ends, advertising in prime publications and multi media to capture the attention of their intended demographic. The entire public was aware of the new transformative appliances and technical systems available. A lifestyle of modern comfort, convenience and freedom of mobility for leisure, hitherto taken up by the encumbrances of household toil could be dispensed with. Freed time offered the possibility of a new array of leisure and family based activities. The Oliver Collection holds an extensive array of materials in several categories over decades displaying the most modern advertising, graphic design and marketing concepts. Each ad is an excellent example of the design and colour-association aesthetic characteristic of their respective decades. Print advertisements employed stylish design and lifestylesuggestive vignettes in chic, and showing appliances and HVACR products that would be nothing short of revolutionary to home and business life, all appealingly rendered in full-page ads. Examples from 1950's housewives in domestic settings with modern kitchen appliances move to 1960's leisure pop-culture air conditioned rooms. 1940's publications depicting wartime associations of tanks and quonset huts move to futuristic monorails and jets of the 1970's.

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DONATION APPRAISAL

The Nature & Scope Of The Oliver Collection by Archival Subject Matter Groups: Oliver Collection Group Number 1 Relating To Applied Sciences and Engineering

Subject Matter Description: The scientific, industrial, cultural and historic context of textbooks and handbooks in the collection

The Subject Matter in Group number one contains archival literature representative of the formal knowledge base that existed in the applied sciences and engineering, on which the Canadian HVACR industry was dependent in the first half of the 20th century, extending to the early post WWII years. Beyond "trial and error", this material tells the stories of the limited codified knowledge of science and practice on which the design, construction, production, operation, performance standards, service, and safety of the residential, commercial, and industrial HVACR industry would be largely dependent in its embryonic and early development years. As the 20th century evolved this volume of literature would explode, reflecting a seemingly exponential growth in the volume of research and development in the applied sciences and engineering practice that followed WWII. It would document the results of the rapid increase in research and development taking place concurrent to the expanding economy and buoyant consumer market of the post WWII years. Included in this archival group are textbooks and handbooks variously dealing with the key concepts, principles, practices, theories, working assumptions, and related ideas in the applied sciences and engineering practice.

The Oliver Collection provides an exemplary historical and educational insight, with the hindsight of an early 21st century vantage point, illustrating the 20th century period as that of working practices often preceding scholarly work. It has been pointed out that historically it was "craftsmen" who were in fact the "scientists" of their times, experimenting in new materials and processes; the innovators of ideas and principles upon which fields of specialized thought and practice would progressively build.

For the early 20th century ushered in a period of increased private, expendable income, which in turn led to substantial consumer market growth, all strong incentives to creativity, innovation, and entrepreneurship. It follows that these were the embryonic and early development years of the automatic refrigeration and heating industry, in which corporations such as Kelvinator went, where scholarly scientific inquiry had not gone before, where working practices often preceded scholarly theory. It has been pointed out that historically in development years of the automatic refrigeration and heating industry, in which corporations such as Kelvinator florished, scholarly scientific inquiry had not yet gone.

As an illustrating note, Kelvinator was founded in 1914 by a young engineer, Nathaniel Wales, under the name of "Electro-Automatic Refrigerating Company, to produce the first household electric refrigerator. T.H [Howard] Oliver introduced Kelvinator refrigerating technology into York County on the north slopes of the Oak Ridges Moraine, north of Toronto, in the early 1920's. A hall mark of this collection is the original trade and technical literature produced by Kelvinator in these early years. As the 20th century proceeded, many universities established corporate partnerships, making it increasingly difficult to make the distinction between scholarly and entrepreneurial-based research and development. Group one contains three subgroups, moving from generalized applied science and engineering concepts, principles and ideas, to applied thermodynamics, to specific HVACR applications:

- 1. Applied Sciences and Engineering
- 2. Applied thermodynamics
- 3. Automatic Refrigeration, Heating and Air conditioning

The contents of this subject matter group contain published text books and handbooks of the period from 1929 to 1965 (and possibly the later 1960's) and are divided into three sections, each representing specific categories of hardbound text and hand books. As a whole, this subject matter group is a rare and possibly unique collection of gathered publications on these subjects in a single, original source. While other examples of these texts are possibly available, they are individually scattered throughout libraries and the open market. The advantage to Canadian material culture of this assembled group is not only in it's completeness but also it's grouping in immediate proximity as a whole. The collection further exemplifies the importance of published volumes across a spectrum of academic, educational and applied technical teaching, from academic classroom to commercial and labour reference resources.

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The first group pertains to applied science and engineering from 1935 to 1965. It contains representative text books and handbooks variously from 1935 to 1965 dealing with the key basic concepts, principles, theories, ideas, and working assumptions, standards and practices, in the applied science and engineering literature on which the Canadian residential, commercial and industrial industry would build. The second group pertains to applied thermodynamics and contains representative books variously from 1929 to 1960 dealing with concepts, principles and best practices in HVACR on which the residential and commercial industry would build in the early to mid-20th century in Canada. The third group pertains to residential and commercial refrigeration and air conditioning and contains books variously dealing with the key introductory concepts, principles, ideas, and practices in residential and commercial refrigeration and air conditioning from 1920's through to the 1960's.

Oliver Collection Group Number 2 Relating To HVACR Trade & Technical Journals

Subject Matter Description: The scientific, industrial and historical context of industry developments displayed in the trade and technical journals in the collection

This Subject Matter Group number two contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

The contents of this subject matter group contain published commercial trade and technical journals including HVACR Serial Journals relating to refrigeration, heating, including automatic heating, and air conditioning from the mid 1930's to the late 1960's. The time span of these journals illustrates the ongoing development as a leading Canadian industry. The publications include individual and partial selected sequential months of the annual volumes but not complete sets of volumes, from the following years: List of Publications: Refrigeration and Air Conditioning including Automatic Heating (National Business Publications Ltd., Gardenvale, PQ) from 1941 and 1942

Canadian Refrigeration Journal (National Business Publications Ltd., Gardenvale, PQ) from 1943 to 1958 Canadian Refrigeration and Air Conditioning (National Business Publications Ltd., Gardenvale, PQ) The Refrigeration Service Engineer (Nickerson & Collins Co., Chicago, IL) from 1936 to 1951 Refrigeration Service and Contracting (Nickerson & Collins Co., Chicago, IL) from 1952 to 1970 Air Conditioning and Refrigeration News (Business News Publication, Co., Detroit, MI) in 1937 Air Conditioning Heating & Refrigeration NEWS (Business News Publications, Co., Detroit, MI) The Refrigeration Industry (Refrigeration Publications, Inc., Cleveland, Ohio) from 1944 to 1949 Commercial Refrigeration and Air Conditioning (Refrigeration Publications, Inc., Cleveland, Ohio) Refrigeration & Air Conditioning Business (Industrial Publishing Corporation, Cleveland) 1958 to 1959 The Refrigeration & Air Conditioning Business (Industrial Publishing Corp, Cleveland, Ohio) 1959 to 1964 The Air Conditioning & Refrigeration Business (Industrial Publishing Corp. Cleveland, Ohio) 1965 to 1969 Air Conditioning & Refrigeration Business (Industrial Publishing Corp., Cleveland, Ohio) 1969 to 1970 Refrigerating Engineering (American Society of Refrigerating Engineers, New York, NY) 1954 to 1957 Ashrae Journal (American Society of Heating, Refrigeration and Air- Conditioning Engineers, New York, Oil-Heat & Propane World (Age Publications, Ltd., Toronto, Ontario from 1950 to 1957 Oil & Gas Heat (Age Publications, Ltd., Toronto, Ontario) from 1952 to 1954

Automatic Heating (Age Publications, Ltd., Toronto, Ontario) 1958

Heating, Plumbing and Air Conditioning Age (Age Publications, Ltd., Toronto, Ontario from 1951 to 1958 Automatic Heating/Plumbing/Air Conditioning (Age Publications, Ltd., Toronto, Ontario) 1959 to 1964

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Heating/Plumbing/Air Conditioning (Southam Business Publications, Don Mills, ON) 1965

Heating Piping & Air Conditioning (Reinhold Publishing Corp., Chicago, IL) 1965

Heating & Plumbing Engineer (Maclean-Hunter Publishing Company Ltd., Toronto, ON) 1955 to 1962 Mechanical Contracting & Plumbing (Maclean-Hunter Publishing Co. Ltd., Toronto, ON) 1962 to 1967

Mechanical Contracting & Engineering (Maclean-Hunter Publishing Company Ltd., Toronto, ON)

Electrical Contracting & Maintenance in Canada (McLean-Hunter Publishing Co, Toronto, ON) 1954

National Plumbing & Heating Contractor (Arthurs-Franklin Publications, Ltd., Toronto, ON) 1957

Industrial Refrigeration (Nickerson & Collins, Co., Chicago, IL) 1957

Canadian Mechanical Contractor (National Directorate of Canadian Plumbing & Mechanical Contractors Association, Toronto, ON) 1959

Fuel Oil News of Canada (Oildom Publishing, Bayonne, NJ) 1960

Automatic Heating/Plumbing/Air Conditioning (Southam Business Publications, Ltd. Don Mills, ON) 1964 Heating Piping & Air Conditioning (Reinhold Publishing, Inc., Chicago, IL)

The Canadian Mechanical Contractor (Canadian Plumbing & Mechanical Contractors Association, Toronto, ON) 1966, 25th Annual Report

Comfort Engineering (US Industrial Publications, Inc. Stamford, CT) 1967

Environmental Design (US Industrial Publications, Inc. Stamford, CT) 1968

Building Services the CIBSE Journal (CIBSE Heritage Group, UK) 1988

The Magic Of Hot Water (Andrews Water Heaters, Birmingham, UK) 2001

Historic Gas Times (The Institution of Gas Engineers and Managers, Edinburgh, UK) 2001

HAC (EMAP Trenton, Ltd., Croydon, UK) 2002

SNIPS (Business News Publishing Company, Troy, MI) 2002

HPAC (Rogers Media Inc, Toronto, ON) from 2002 to 2004

Plumbing Systems & Design (American Society of Plumbing Engineers, Chicago, IL) 2002

HPAC Engineering (Penton Media, Cleveland, OH) 2002

RSES Journal (Refrigeration Service Engineers Society, Des Plaines, IL) 2002

Supply House Times (Business News Publishing Company, Troy, MI) 2002

Plumbing & Mechanical (Business News Publishing Company, Troy, MI) 2002

Oliver Collection Group Number 3 Relating To HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature

Subject Matter Description: The scientific, industrial and historical context of industry developments displayed in the HVACR manufacturer's documentation archival literature in the collection

The Subject Matter in Group number three contains HVACR manufacturer's equipment catalogues, engineering applications and service literature. This group of literature tells the stories of the critical role and contribution of manufactures and their agents in the early developmental years of the industry.

This literature is highly valued on two fronts. As unique literature available to the trade of it's day, it was highly valued by field workers, as an authoritative and reliable source of the trade and technical information on which they could and would depend. As a collection, it is the unique and complete seminal body of work illustrating the innovative working environment of this innovative Canadian economic sector. For the 1920's through 30's was a period in which academic and scholarly texts were few and far between, and few dedicated HVACR education and training schools existed. Yet, paradoxically, this was a critical period of "incubation" in the evolution of the Industry. It was a moment in time on which workers in the field were desperately dependent on the direct role played by the producers of the innovative equipment and devices that provided the foundation stones on which the Canadian industry would build. A story of singular importance, told graphically by this archive, is that of the emergence and logistical challenges of the ubiquitous, traditional, mail-couriered, "Technical Service Bulletin".

DONATION APPRAISAL

A half century before the internet, the mail-couriered, technical service bulletin was variously used across the industry as the "up-to-the-minute" information delivery mechanism of choice. Delivered by the Royal Mail, beginning in the 1920's, the service bulletin would reach its maturity in the 1970's. Throughout this period it would be an essential media form in the then rapidly evolving, early "high-tech" fields of endeavor - fields characterized by increased complexity, innovation, market volatility, and dependence on an informed technical service sector. Here the service bulletin would help meet the "must-know" information needs of the field's front-line workers.

Possibly unique in the Canadian experience would be the contribution of Canadian General Electric Company [CGE], Small Appliance Department, Barrie Ontario, as represented in the collection. Through the 1960's and into the 70's, CGE provided an exemplary model of the couriered technical service bulletin at work - with internet and browser technology still half a century in the future. Amongst other things, this archive demonstrates the practicality and sustainability of the mail-based service bulletin, in meeting the exploding demands for time-dependent, on-demand, technical service information requirements of the late 20th century.

The contents of this subject matter group contains published manufacturer's documentation for refrigeration, air conditioning and plumbing including air conditioning components, their suppliers and wholesalers and manufacturers and suppliers of refrigeration and AC components, pipe, tube and fitting manufacturers and suppliers, refrigeration/AC tools, testing and instrumentation devices and household refrigeration/AC equipment. It also holds manufacturer's documentation for automatic oil heating including manuals for domestic and commercial oil heating equipment and service, automatic oil heating control systems and controls, Honeywell residential controls handbooks and control systems installation and product guides. Kelvinator & Kelvinator of Canada manufacturer's documentation include a pocket dealer's catalogue and refrigeration commercial sales and equipment manuals from 1929 to 1960, bulletins and price lists from 1928 to 1936, domestic and commercial refrigerator equipment, service and sales literature from 1929 - 1959 and thematic graphic materials for the domestic technology exhibit, all assembled for the National Museum of Science and Technology, 1995. Frigidaire documentation includes dated (1937 to 1940) and undated commercial installation and service & sales and literature and manuals with supplements, master parts and price catalogue, manuals from the 1940's to 1950's, and T. H. Oliver's personalized Leatherette Service and Sales Literature Binder and Frigidaire data book, air conditioning product memos. Carrier Corporation documentation includes applied products sales & engineering manuals, packaged products sales & engineering volumes from the 1950's the 1960's, a service parts price list, system design manual, crane, valves, fittings and pipes technical papers and construction specifications, sheet metal, ducts and piping. A copy of Bell & Gossett Company handbook, second edition and engineering manual and S.A. Armstrong, Ltd., sound control in hydronic piping systems are included. Documentation from Canadian General Electric Company, Ltd. (G.E.) includes manufacturer's filing instructions and service manuals of small appliances parts & prices (books 1 through 3) with addendums from 1960 to 1972, related documentation on technical data, heating appliances, service tools, policy, product sheets, and further small and motorized appliances and technical data. There are also various individual pieces of related ephemera in most these categories.

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DONATION APPRAISAL

Oliver Collection Group Number 4 Relating To Technical and Training Literature and Literature Pertaining to Self-Help Organizations

Subject Matter Description: The HVACR technical & trade training, self-help organizations, related material

Subject Matter Description: The Subject Matter in Group 4 contains literature illustrating and representative of the trade training and professional development materials produced by HVACR independent technical and trade training organizations from the 1920's to the 1970's. The materials illustrate the nature of these organizations; the centrality of such organizations that sprung up independently, variously established by the trades themselves [e.g., the Mechanics Movement], as it responded reflexively to the needs and conditions of the times. Beyond the support provided by manufactures in the early developmental years of the industry [illustrated in Group 3], these organizations would be central players in trade training and professional development in the wider industry.

They would be part of the great "self-improvement movement" of the early 20th century, whose business definition typically centered on the development of individual, personal talents, interests, and on economic and intellectual self-improvement. Along with the support in training and business development provided by manufactures, these organizations helped to give the industry the added jump-start it desperately needed to develop the specialized skill pool and labor force required to help ensure the survival of the industry in often lean times. The idea of self-help in training and development would come to be significant marker of the HVACR trade culture in Canada. Viewed in historical perspective, among other things, the concurrency of independent participants within a common field would delay the establishment of formal training programs and apprenticeship until the later part of the 20th century. It is extraordinary that this comprehensive collection of trade training and development materials is extant, as material of this nature is usually lost or destroyed once rendered obsolete or redundant by technological advancements.

The contents of this subject matter group contain HVACR archival literature including The Refrigeration Services Engineers Society (RSES) publications. The RSES was particularly important in the formative years of this industry in creating a cohesive network for independent entities within a common sphere, ably illustrated through it's training literature. The RSES was founded in 1933 to provide training and development for independent service operators, through their publications, and local chapters, which promoted discussion and the exchange of ideas and experience. Notably, Howard [T.H. Oliver] was a founding member of the RSES Canadian, Maple Leaf. The literature includes RSES lecture courses from 1934 to 1946; 44 lectures offered by RSES for self-help, independent technical training and professional development, produced over a 12-year period and notably, sustained through the WWII years. RESE service application manuals and corresponding supplements published through the 1950's and 1960's in various sections are included. Further RSES related service publications include The RSES Question Box, refrigeration service pointers, Refrigeration Contractor's Estimating Guide, RSES Annual Reports of various dates, the RSES Directory Service Companies Chapter Members of 1945, the RSES Ontario Maple Leaf Chapter 1947-48, the RSES Membership Bulletin 1960, an archival example of a blank RSES customer equipment record pad dated 1953, an RSES Master Service Manual, all variously but not completely from 1938 to 1960. Also in this section are HVACR technical and trade training, self-help organization manuals, and documents including the National Warm Air Heating and Air Conditioning Association, Canadian Chapter 1950, Electric Heating Manual, 1960, Electric Heating Association Docs, the Canadian Refrigeration and Air Conditioning Association (CRCA), Oil Heating Association of Canada, text for use in service & installation courses, and fuel oil & oil heat, a actual service folder example, ventilation and construction estimating documents, the ASRE Air Conditioning Data Book and ASHRAE Heating, Ventilating, Air Conditioning Data Book including publications for applications and those for fundamentals & equipment dating between 1960 and 1967, and the ASHRAE Handbook of Fundamentals and ASHRAE Guide & Data Book in various forms for systems and equipment, applications, and fundaments from 1967 to 1972. All these assorted documents are physically contained in sleeves. Most are uncatalogued.

DONATION APPRAISAL

Oliver Collection Group Number 5 Relating To Trade Training and Professional Development Literature

Subject Matter Description: Trade training and professional development documentation archival literature

Subject Matter Description: The Subject Matter in Group 5 contains further literature on trade training and development of common standardized and best practices, vocational education, and professional educational development based on the independent literature from system manufacturers and suppliers, equipment and component literature, and literature for parts, engineering applications, service, and sales, technical, training and self-help organizations. The literature in this group provides a valuable reminder of the cumulative wealth of knowledge and understandings in teaching and learning of vocational education in Ontario from 1835 through to the significant innovations of the 1960's on which the development of a competent workforce in the HVACR trade continues to be dependent in the early years of the 21st century. Also included is representative literature covering the emergence of the "educational technology" and emphasis on increasing professionalism, the contribution of educational psychology, and the emergence of the educational movement of the 1960's. It was a movement that, along with the subsequent proliferation of affordable, portable digital devices [personal computers, cell phones, the high-speed internet], would seemingly change everything.

The 1960's period happily coincided, although not accidentally, with trade certification of HVACR workers in Ontario. It saw a flood of how-to-do-it handbooks and manuals of best trade pedagogical practice, including trade analysis, curriculum development, course outlines, and lesson planning for the trades, all drawing on the results of recent research and development work in the behavioral sciences, educational psychology, systems theory, and classroom practice. The evolution of pedagogical thought and practice in the skill trades had moved well beyond that of the handicraft and manual training movements. Unpublished manuscripts, unpublished curriculum materials and unpublished analysis of industry educational practices by G. L. Oliver are included in this subject group.

This Subject Matter Group contains archival literature tracing the evolution of best practices in trade and technical training, and professional development. It illustrates a valuable reminder of the cumulative wealth of knowledge and understandings on which the HVACR was built in responding to the demanding training and human development challenges of the Industry in the early years of the 21st century. The stories told are of the evolution of manual and industrial training, the rise of the handicraft and apprenticeship movements, the contribution of modern science to our understandings of best practices in teaching and learning, the world change in trade, technical and vocational training that came with WWII, the push for increasing professionalism, the contribution of educational psychology, and the emergence of the "educational technology" movement of the 1960's.

The contents of this subject matter group contain published and unpublished HVACR archival literature and textbooks. In the first section, published textbooks cover the broader topic and principles of education, instruction, learning, training methods, systems principles and theories and educational applications. As a collection they illustrate the breadth of research undertaken within the industry towards educational excellence. Important volumes include The History of Manual and Industrial Education, Up to 1870" 1926, and The History of Manual and Industrial Education, 1870-1917 937, both by Charles Alpheus Bennett. Further textbooks comprehensively cover the subjects of the history of education, applied teaching techniques, programmed learning, psychological concepts and psychological principles in system development, categories of human learning, educational technology and teaching machines and programmed learning, man-machine systems in education, training research and education including vocational and technical, cybernetic principles of learning and educational design, sociology and modern systems theory, educational psychology from a cognitive perspective, designing and improving courses and curricula in higher education, a study of redefining student learning and a training and development handbook.

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Building on these forward educational principles of the industry, the collection has valuable examples of unpublished manuals, and theory studies, vocational and technical training and Departments of Extension curriculum materials as well as chronicles of educational development all by G. L. Oliver intended for specialized educational institutions. These include An Analysis of the Refrigeration and Air Conditioning Trade for the Ontario College of Education Vocational Training Department, A Course of Study in Refrigeration and Air Conditioning for the Four-Year Science, Technology, and Trades Secondary School Program, An Introduction to Refrigeration, Air Conditioning and Heating, A Shop Manual for Use in Grades 9 and 10, Air Conditioning and Refrigeration Course of Study Outline, An Introduction to Refrigeration, Air Conditioning and Heating, Mechanical Systems for Buildings, Chronological Listing of Major Events in the Development of Vocational-Technical Education in Ontario 1835-1925, and The Development of Vocational-Technical Education in Ontario 1835-1925.

Oliver Collection Group Number 6 Relating To Science and Technology, and Canadian Society and Culture Specifically Through Magazine Publications

Subject Matter Description: The science and technology, Canadian society and cultural documentation archival literature in the collection

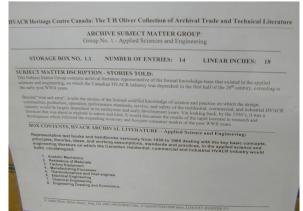
Subject Matter Description: This Subject Matter Group contains an archival sampling of popular commercial journalism. The material is vividly reflective of the subjects of science merging with science fiction, geopolitical and social current events, views, styles, tastes and colours of lifestyle interests and aspirational living of the day. This journalism tells the many stories of the socio-cultural impact of early to mid-20th century science and technology, on the evolving consumer market place, and on the life and times of Canadians. They represent examples of commercially successful popular press coverage of science and technology, and of the seeming exponential growth in the devices of human interest. These stories of science and technology, and the devices and human interest they engendered, would prove to be important precursors and leading indicators of significant social, political and cultural change. Over the course of the 20th century and into the 21st these new driving forces would, among other things, progressively reshape the lives and values and lifestyle expectations of Canadians and the Canadian economy from a "resource-base" to a "consumer-base".

The contents of this subject matter group contain published popular commercial journalism and popular culture magazines related to science, the industrial sciences and popular science fiction, including Popular Science Magazine (Popular Science Publishing Co., New York, NY) of various incomplete volumes dating between 1920 to 1973, selected examples of Canadian Geographical Journal (The Canadian Geographical Society, Montreal, PQ) published between 1930 and 1941, selected examples of the National Geographic Magazine (National Geographic Society, Washington, D.C.) published between 1917 and 1944, , selected examples of Maclean's (Maclean-Hunter Publishing Company Ltd., Toronto, ON) published between 1962 and 1968, a March 1935 volume of The Strand Magazine (Newnes & Pearson, Kensington, UK), three examples of Popular Mechanics (The Hearst Corp., NY) between 1935 and 1964, various individual examples of Mechanix Illustrated (Fawcett Publications, Inc., Louisville, KY) dating between 1942 and 1966, a single volume of House & Garden's New Complete Guide to Interior Decoration. (Simon & Schuster, New York. 1953), and four volumes of Ontario Homes & Living (Mitchell Press Ltd., Vancouver, BC) dating between 1963 and 1966.

DONATION APPRAISAL

Oliver Collection Selected Photographed Examples Of Archival Subjects By Groups: Selected Representative Examples of Subject Matter Content, Box Labels and Labeled Files

Oliver Collection Group Number 1 Relating Textbooks of Applied Sciences and Engineering





Group Box 1.1 label example

Group Box 1.1 archival published textbooks

Oliver Collection Group Number 2 Relating To HVACR Trade and Technical Journals







Group Box Label Examples: Box label 2.1

Group Box label 2.3

Group Box label 2.5







Group Box examples containing Files - File Holders: 2.1, 2.2, 2.3

File contents 2.1 example Group Box File 2.3 publication example

DONATION APPRAISAL

Oliver Collection Group Number 2 Relating To HVACR Trade and Technical Journals Continued



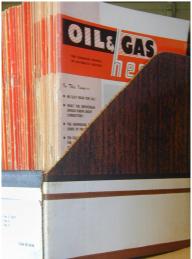
Group 2 - Publication examples from 1943



Publication example from 1958



Publication example from the 1960's



File 2.1.5 publication example from 1952



Box 2.1.5 publication example from 1954



Box 2.1.5 publication example from 1954





Box 2.1.2 1962 example



BOX 2.1.21 1902 example



Box 2.1.21 1968 example

DONATION APPRAISAL

Oliver Collection Group Number 3 Relating To HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature



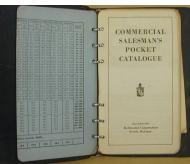




Box 3.1 Publication example

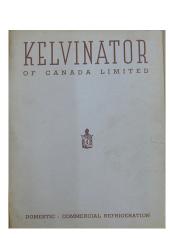




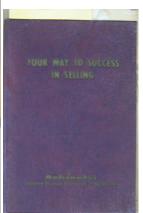


File 3.1.3 Kelvinator archival objects examples Group Box containing Files 3.1.1 to 3.1.9 File 3.1.3

Commercial Salesman Pocket book







DONATION APPRAISAL

Oliver Collection Group Number 3 Relating To HVACR Manufacturers and Suppliers of Systems, **Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature Continued**



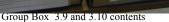




File 3.7.2 example

File 3.8.1 example







Group Box 3.11 and 3.12 content



File 3.12.1 example

Oliver Collection Group Number 4 Relating To HVACR Technical and Trade Training and Self-Help Organizations Individual Publications and Literature



Group Box 4.2 - Files 4.2.1, 4.2.2, 4.2.3



Group Box 4.3.6 examples



Group Box 4.1 examples



Group Box 4.1.4 contents

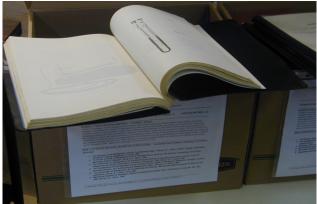


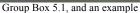
Group Box 4.4 contents

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DONATION APPRAISAL

Oliver Collection Group Number 5 Relating To HVACR Trade Training & Professional Development Literature and the Unpublished Manuscripts and Course Material by G. L. Oliver

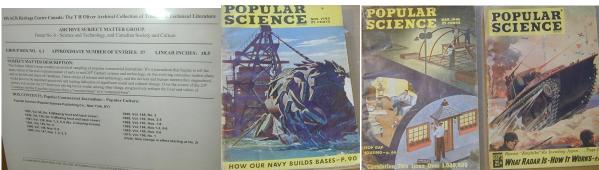






Box 5.2 example unpublished manuscript by G. L. Oliver

Oliver Collection Group Number 6 Relating To Science and Technology, Canadian Society and Culture



Group Box nmuber 6.1 label

BOX 0.1 Popular Science 1945

Group Box 6.1 Popular Science 1946 examples



Group Box 6.1 Popular Science 1960's publications

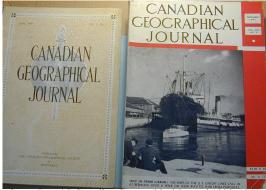


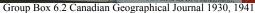
Group Box 6.1 Popular Science 1971 publications

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DONATION APPRAISAL

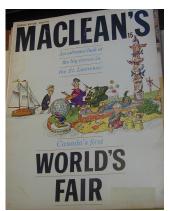
Oliver Collection Group Number 6 Relating To Science and Technology, and Canadian Society and Culture







Group Box 6. 3 National Geographic Magazine 194



Group Box 6.4 Maclean's 1963



Group Box 6.5 magazines form the 1930's and 1940's



Group Box 6.5 Mechanix Illustrated Magazines examples

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DONATION APPRAISAL

G. L. Oliver Collection Archival Subject Organization And Storage Descriptions:

The Oliver Archival Collection occupies 40 Storage Boxes ('bankers boxes'). Each Box is numbered sequentially. The archival material of the collection is notionally divided into six subject-matter "Groups" each documenting unique, different, but complementary aspects of the industry at work. Hence each numbered Group representing a material category.

- Group 1. Applied Sciences and Engineering Fundamentals
- Group 2: HVACR Trade and Technical Journals
- Group 3: HVACR Manufacturers and Suppliers of Engineering, Applications Sales, and Service Literature
- Group 4: HVACR Technical and Trade Training Organizations
- Group 5: Best Practices in Trade Training and Professional Development
- Group 6: Science, Technology, and Canadian Society and Culture

Each Box contains multiple "Files"; each File containing the material in more specific sub-categories. Each File bears it's Box Number followed by it's File Number. Paper labels affixed to the exterior of each Box fully indentifying the contents thusly. In archival terms the collection measures 652.5 linear inches = 54.5 linear feet, in 46 boxes. The collection is catalogued by this storage and subject grouping method.

Oliver Collection Group Number 1 Relating To Applied Sciences and Engineering

Subject Matter Physical Contents And Storage Index:

Storage Box Number 1.1 Number Of Entries: 14 Linear Inches: 18

Box Contents: HVACR Archival Literature: Applied Science and Engineering:

Representative text books and handbooks variously from 1935 to 1965 dealing with the key basic concepts, principles, theories, ideas, and working assumptions, standards and practices, in the applied science and engineering literature on which the Canadian residential, commercial and industrial HVACR industry would build.

- File 1.1.1 "Elements of Chemical Engineering" Walter L. Badger & Warren L. McCabe, 1936
- File 1.1.2 "Electrical Engineering" Clarence V. Christie, 1938
- File 1.1.3 "Analytical Mechanics for Engineers" Fred B. Seely & Newton E. Ensign, 1941
- File 1.1.4 "Engineering Drawing" Thomas E. French, 1941
- File 1.1.5 "Factory Equipment" Joseph W. Roe & Charles W. Lytle, 1941
- File 1.1.6 "Principles of Physics: Mechanics" Francis Weston Sears, 1945
- File 1.1.7 "An Introduction to Heat Engines" E.A. Allcut, 1946
- File 1.1.8 "Manufacturing Processes" Myron L. Begeman, 1947
- File 1.1.9 "Elementary Fluid Mechanics" with stapled answer sheets, John K. Vennard, 1947
- File 1.1.10 "Elementary Engineering Thermodynamics" Vincent W. Young & Gilbert A. Young, 1947
- File 1.1.11 "Resistance of Materials" Fred B. Seely, 1947
- File 1.1.12 "An Introduction to Engineering Economics" C.R. Young, 1949
- File 1.1.13 "Heat Engines" S.H. Moorefield & H.H. Winstanley, 1960
- File 1.1.14 "Basic Instrumentation: Industrial Measurement" Patrick J. O'Higgins, 1966

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DONATION APPRAISAL

Storage Box Number 1.2 Number Of Entries: 13 Linear Inches: 15

Box Contents: HVACR Archival Literature: Applied Thermodynamics:

Representative text books and handbooks variously from 1929 to 1960 dealing with concepts, principles and best practices in HVACR on which the residential and commercial industry would build in the early to mid-20th century in Canada.

- File 1.2.1 "Hawkins Electrical Guide 5" Hawkins and Staff, eds., (1929)
- File 1.2.2 "Steam Tables: Properties of Saturated and Superheated Steam" The Superheater Steam

Company and Combustion Engineering Corporation Ltd., 1940

- File 1.2.3 "Practical Design of Exhaust and Blower Systems" E.W. Favalora, 1948
- File 1.2.4 "Warm Air Heating and Winter Air Conditioning" John W. Norris, 1950
- File 1.2.5 "Refrigeration Engineering" H.J. MacIntyre & F.W. Hutchinson, 1950
- File 1.2.6 "Heating Design and Practice" Robert Henderson Emerick, 1951
- File 1.2.7 "Automatic Control of Heating and Air Conditioning" John E. Haines, 1953
- File 1.2.8 "American Electricians' Handbook" Terrell Croft & Clifford C. Carr, 1953
- File 1.2.9 "Steam and Hot Water Fitting" William T. Walters & B.E. Ferrell, Jr., 1953
- File 1.2.10 "Estimating Manual for Heating and Piping Systems" Harry A. Erickson, 1956
- File 1.2.11 "Automatic Refrigeration" S. A. Anderson, 1959
- File 1.2.12 "Automatic Refrigeration Diagrams" Bound sleeves 33 folded diagrams, SA Anderson, 1959
- File 1.2.13 "Thermodynamic Fundamentals for Engineers" Cecil F. Warner, 1961

Storage Box Number 1.3 Number Of Entries: 15 Linear Inches: 17

Box Contents: HVACR Archival Literature: Residential & Commercial Refrigeration and Air Conditioning:

Representative text books and handbooks variously dealing with the key introductory concepts, principles, ideas & practices in residential & commercial refrigeration & air conditioning from the 1920's to 1960's.

- File 1.3.1 "Household Refrigeration" H.B. Hull, 1933
- File 1.3.2 "Commercial Refrigeration" L. Kay Wright, 1936
- File 1.3.3 "Handbook of Automatic Refrigerant Control" Alco Valve Co., 1940
- File 1.3.4 "A to Zero of Refrigeration" General Motors, 1950
- File 1.3.5 "Refrigeration and Air Conditioning" W.F. Stoecker, 1958
- File 1.3.6 "Modern Air Conditioning Heating and Ventilating" Willis H. Carrier, Realto E. Cherne,

Walter A. Grant & William H. Roberts, 1959

- File 1.3.7 "Modern Air Conditioning Practice" Norman C. Harris, 1959
- File 1.3.8 "Modern Refrigeration and Air Conditioning" Andrew D. Althouse & Carl H. Turnquist, 1960
- File 1.3.9 "Refrigeration Servicing" Paul F. Goliber, 1960
- File 1.3.10 "Basic Refrigeration" Guy R. King, 1961
- File 1.3.11 "Standard Refrigeration and Air Conditioning Questions and Answers" Steven Michael

Elonka & Quaid Walton Minich, 1961

- File 1.3.12 "A to Zero of Refrigeration" General Motors, 1961
- File 1.3.13 "Principles of Air Conditioning" V. Paul Lang, 1962
- File 1.3.14 "Principles of Refrigeration" R. Warren Marsh & C. Thomas Olivo, 1963
- File 1.3.15 "Air Conditioning and Heating Practice" Julian M. Laub, 1963

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DONATION APPRAISAL

Oliver Collection Group Number 2 Relating To HVACR Trade & Technical Journals

Subject Matter Physical Contents And Storage Index:

Storage Box Number 2.1 Approximate Number Of Entries: 106 Linear Inches: 11.25

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

Refrigeration and Air Conditioning including Automatic Heating (National Business Publications Ltd., Gardenvale, PQ)

1941, Vol. 7, Nos. 2-4, 6-12 (Note size is 222x298mm)

1942, Vol. 8, Nos. 1-4, 6-12

Canadian Refrigeration Journal (National Business Publications Ltd., Gardenvale, PQ)

1943, Vol 9, Nos. 1-12 (Note size change to 208x287mm @ No.6)

1944, Vol. 10, Nos. 1-12

1945, Vol. 11, Nos. 1-12 (Note Volume No. on July issue misprinted to "10")

1946, Vol. 12, Nos. 1-3, 5-12 (Note size change to 222x296mm @ No.3)

1947, Vol. 13, Nos. 1-12 (Note size change to 210x282mm @ No.1)

1948, Vol. 14, Nos. 1-8, 10-12

1949, Vol. 15, Nos. 1-12

Storage Box Number 2.2 Approximate Number Of Entries: 99 Linear Inches: 11.5

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

Canadian Refrigeration Journal (National Business Publications Ltd., Gardenvale, PQ)

1950, Vol. 16, Nos. 1-12

1951, Vol. 17, Nos. 1-10, 12

1952, Vol. 18, Nos. 1-12

1953, Vol. 19, Nos. 1-12

1954, Vol. 20, Nos. 1-3, 5-7, 11-12

Canadian Refrigeration and Air Conditioning Journal (National Business Publication Ltd., Gardenvale, PQ) 1955, Vol. 21, Nos. 1-4, 5, 7, 9, 12

Canadian Refrigeration and Air Conditioning (National Business Publications Ltd., Gardenvale, PQ)

1956, Vol. 22, Nos. 1-12

1957, Vol. 23, Nos. 1-12

1958, Vol. 24, Nos. 1-12

Storage Box Number 2.3 Approximate Number Of Entries: 74 Linear Inches: 7.25

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

Canadian Refrigeration and Air Conditioning (National Business Publications Ltd., Gardenvale, PQ)

1959, Vol. 25, Nos. 1-12

1960, Vol. 26, Nos. 1-12

1961, Vol. 27, Nos. 1-12

1962, Vol. 28, Nos. 1, 3-12

1963, Vol. 29, Nos. 1-8, 12

1964, Vol. 30, Nos. 3-12

1965. Vol. 31, Nos. 1-4, 6, 7

1967, Vol. 33, Nos. 6, 10, 12

1968, Vol. 34, Nos. 1-8, 10-12

1969, Vol. 35, Nos. 1-4

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DONATION APPRAISAL

Storage Box Number 2.4 Approximate Number Of Entries: 91 Linear Inches: 11.5

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

The Refrigeration Service Engineer (Nickerson & Collins Co., Chicago, IL)

1936, Vol. 4, Nos. 9-12 (Note size is 152x228mm)

1937, Vol. 5, Nos. 1-12

1938, Vol. 6, Nos. 1-12

1939, Vol. 7, Nos 1-12

1940. Vol. 8. Nos. 1-12

1941, Vol. 9, Nos. 1-12

1942, Vol. 10, Nos. 1-8, 11, 12

Storage Box Number 2.5 Approximate Number Of Entries: 60 Linear Inches: 11

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

The Refrigeration Service Engineer (Nickerson & Collins Co., Chicago, IL)

1943, Vol. 11, Nos. 1-12

1944, Vol. 12, Nos. 1-12

1945, Vol. 13, Nos. 1-12

1946, Vol. 14. Nos. 1-12

1947, Vol. 15, Nos. 1-12

Storage Box Number 2.6 Approximate Number Of Entries: 58 Linear Inches: 13

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

The Refrigeration Service Engineer (Nickerson & Collins Co., Chicago, IL)

1948, Vol. 16, Nos. 1-12

1949, Vol. 17, Nos. 1-6, 8-12

1950, Vol. 18, Nos. 1-3, 5-12

1951, Vol. 19, Nos. 1-12

Refrigeration Service and Contracting (Nickerson & Collins Co., Chicago, IL) 1952, Vol 20, Nos. 1-12

Storage Box Number 2.7 Approximate Number Of Entries: 60 Linear Inches: 12.25

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

Refrigeration Service and Contracting (Nickerson & Collins Co., Chicago, IL)

1953, Vol. 21, Nos. 1-11

1954, Vol. 22, Nos. 1, 7-12

1955, Vol. 23, Nos. 2-10, 12

1956, Vol. 24, Nos. 2-11

1957, Vol. 25, Nos. 1, 2, 7, 9-12 (Note size change to 210x286mm @ No.1)

1958, Vol. 26, Nos. 1-12

1959, Vol. 27. Nos. 1, 8-12

Storage Box Number 2.8 Approximate Number Of Entries: 48 Linear Inches: 8

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

Refrigeration Service and Contracting (Nickerson & Collins Co., Chicago, IL)

1960, Vol. 28, Nos. 1-4, 6-8, 10-12

1961, Vol. 29, Nos. 1-5, 7, 8, 10-12

1962, Vol. 30, Nos. 1-12

1963, Vol. 31, Nos. 1-7, 10-12

1964, Vol. 32, Nos. 1-12

1965, Vol. 33, Nos. 1-7, 9-12

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DONATION APPRAISAL

Storage Box Number 2.9 Approximate Number Of Entries: 60 Linear Inches: 11

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

Refrigeration Service and Contracting (Nickerson & Collins Co., Chicago, IL)

1966, Vol. 34, Nos. 1-7, 10-12

1967, Vol. 35, Nos. 11, 12

1968, Vol. 36, Nos. 1-12

1969, Vol. 37, Nos. 1-11

1970, Vol. 38, No. 8

Air Conditioning and Refrigeration News (Business News Publication, Co., Detroit, MI)

1937, Vol. 20, No. 16 (April 21)

1937, Vol. 22, No. 5 (September 29)

1937, Vol. 22, No. 8, Supplement (October 20)

1937, No Volume Number

Year Unknown – Air Conditioning Fundamentals (In Sleeve)

Air Conditioning Heating & Refrigeration NEWS (Business News Publications, Co., Detroit, MI)

1962 Directory Issue (December 25, 1961)

1968, Vol. 113, Nos. 3, 10-14

Storage Box Number 2.10 Approximate Number Of Entries: 75 Linear Inches: 13

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

The Refrigeration Industry (Refrigeration Publications, Inc., Cleveland, Ohio)

1944, Vol. 1, Nos. 5-7

1945, Vol. 2, Nos. 1-12

1946, Vol. 3, Nos. 1-12

1947, Vol. 4, Nos. 1-12

1948, Vol 5, Nos. 1-12

1949, Vol 6, Nos. 1-3

Commercial Refrigeration and Air Conditioning (Refrigeration Publications, Inc., Cleveland, Ohio)

1949, Vol 6, Nos. 4-12 (Note Vols. 4 & 5 have cover overlay detailing name change)

1950, Vol. 7, Nos. 1-12

Storage Box Number 2.11 Approximate Number Of Entries: 50 Linear Inches: 9.5

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

Commercial Refrigeration and Air Conditioning (Refrigeration Publications, Inc., Cleveland, Ohio)

1951, Vol. 8, Nos. 1-8, 10-12

Refrigeration & Air Conditioning Business (Industrial Publishing Corporation, Cleveland, Ohio)

1958, Vol. 15, Nos. 8-12

1959, Vol. 16, Nos. 1

The Refrigeration & Air Conditioning Business (Industrial Publishing Corp, Cleveland, Ohio)

1959, Vol. 16, Nos. 2-12

1960, Vol. 17, Nos. 2-12

1961, Vol. 18, Nos. 1, 3-11

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DONATION APPRAISAL

Storage Box Number 2.12 Approximate Number Of Entries: 54 Linear Inches: 11.5

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

The Refrigeration & Air Conditioning Business (Industrial Publishing Corp, Cleveland, Ohio)

1962, Vol. 19, Nos. 1-11

1963, Vol. 20, Nos. 1, 3, 5-7

1964, Vol. 21, No. 1

The Air Conditioning & Refrigeration Business (Industrial Publishing Corp., Cleveland, Ohio)

1965, Vol. 22, Nos. 6, 8-12

1966, Vol. 23, Nos. 1-2, 4, 9-12

1967, Vol. 24, Nos. 2, 11-12

1968, Vol. 25, Nos. 1-12

1969, Vol. 26, No. 1

Air Conditioning & Refrigeration Business (Industrial Publishing Corp., Cleveland, Ohio)

1969, Vol. 26, Nos. 2-8, 1970, Vol. 27, No. 8

Storage Box Number 2.13 Approximate Number Of Entries: 41 Linear Inches: 9

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

Refrigerating Engineering (American Society of Refrigerating Engineers, New York, NY)

1954, Vol. 62, Nos. 3, 5-12

1955, Vol. 63, Nos. 1-5, 7-12

1956, Vol. 64, Nos. 1-12

1957, Vol. 65, Nos. 1-9

Storage Box Number 2.14 Approximate Number Of Entries: 50 Linear Inches: 12

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

Ashrae Journal (American Society of Heating, Refrigeration and Air-Conditioning Engineers, NY, NY)

1960, Vol. 2, Nos. 7-9

1961, Vol. 3, Nos. 5-9, 11-12

1962, Vol. 4, No. 1

1964, Vol. 6, Nos. 11-12

1965, Vol. 7, Nos. 7-8, 10-12

1966, Vol. 8, Nos. 1, 5, 10, 12

1967, Vol. 9, Nos. 1, 3, 11-12

1968, Vol. 10, Nos. 1-12

1969, Vol. 11, Nos. 1-10

1973, Vol. 15, No. 6

2002, Vol. 44, No. 3

Storage Box Number 2.15 Approximate Number Of Entries: 82 Linear Inches: 12

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

Oil-Heat & Propane World (Age Publications, Ltd., Toronto, Ontario)

1950, Vol. 1, Nos. 2-4, 6-12 Oil & Gas Heat (Age Publications, Ltd., Toronto, Ontario)

1951, Vol. 2, Nos. 1-12

1952, Vol. 3, Nos. 1-7 1952, Vol. 3, Nos. 8-12 1953, Vol. 4, Nos. 1-12 1954, Vol. 5, Nos. 1-11

1955, Vol. 6, Nos. 1-2, 4, 8, 11-12

1956, Vol. 7, Nos. 3, 5-6, 8-12, 1957, Vol. 8, Nos. 1-7, 9

Automatic Heating (Age Publications Ltd. Toronto, Ontario)

1958, Vol. 9, Nos. 10 – 12

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DONATION APPRAISAL

Storage Box Number 2.16 Approximate Number Of Entries: 67 Linear Inches: 10

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

Heating, Plumbing and Air Conditioning Age (Age Publications, Ltd., Toronto, Ontario)

1951, Vol. 30, Nos. 2-12

1952, Vol. 31, Nos. 1-12

1953, Vol. 32, Nos. 1-12

1954, Vol. 33, Nos. 1-10, 12

1955, Vol. 34, Nos. 1-4, 7-12

1956, Vol. 35, Nos. 2-12

Storage Box Number 2.17 Approximate Number Of Entries: 55 Linear Inches: 12.5

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

Heating, Plumbing and Air Conditioning Age (Age Publications, Ltd., Toronto, Ontario)

1957, Vol. 36, Nos. 1-3, 5, 7-9, 11, 1958, Vol. 37, Nos. 1-6, 10-11

Automatic Heating/Plumbing/Air Conditioning (Age Publications, Ltd., Toronto, Ontario)

1959, Vol. 38, Nos. 4, 7, 9, 11

1960, Vol. 39, Nos. 5-11

1961, Vol. 40, Nos. 4-9, 11-12

1962, Vol. 41, Nos. 3, 7, 11-12

1963, Vol. 42, Nos. 1, 5, 11

1964, Volume unknown, in sleeve

Heating/Plumbing/Air Conditioning (Southam Business Publications, Don Mills, ON)

1965, Vol. 44, Nos. 6, 9-12

Heating Piping & Air Conditioning (Reinhold Publishing Corp., Chicago, IL)

1965, Vol. 37, Nos. 5, 7, 9-12

Storage Box Number 2.18 Approximate Number Of Entries: 45 Linear Inches: 8.75

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

Heating & Plumbing Engineer (Maclean-Hunter Publishing Company Ltd., Toronto, ON)

1955, Vol. 49, No.12

1956, Vol. 50, Nos. 2-12

1957, Vol. 51, Nos. 1-12

1958, Vol. 52, Nos. 2, 4-5

1960, Vol. 54, Nos. 2-11

1961, Vol. 55, Nos. 4-6, 8-12

Storage Box Number 2.19 Approximate Number Of Entries: 72 Linear Inches: 10.5

Box Contents: HVACR Serial Journals: Refrigeration, Heating And Air Conditioning:

Heating & Plumbing Engineer (Maclean-Hunter Publishing Company Ltd., Toronto, ON)

1962, Vol. 56, Nos.1, 7-8

Mechanical Contracting & Plumbing (Maclean-Hunter Publishing Company Ltd., Toronto, ON)

1962, Vol. 56, No. 11

1963, Vol. 57, Nos. 1, 4-7, 10

1964, Vol. 58, No. 1

1965, Vol. 59, Nos. 8, 10-12

1966, Vol. 60, Nos. 1, 3-4, 9-12

1967, Vol. 61, Nos. 1, 6

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Mechanical Contracting & Engineering (Maclean-Hunter Publishing Company Ltd., Toronto, ON)

1967, Vol. 61, Nos. 10-12, 1968, Vol. 62, Nos. 1-11

Electrical Contracting & Maintenance in Canada (McLean-Hunter Publishing Co, Toronto, ON)

1954, December Issue

National Plumbing & Heating Contractor (Arthurs-Franklin Publications, Ltd., Toronto, ON)

1957, Vol. 5, Nos. 8-12, 1957, Vol. 6, No. 1

Industrial Refrigeration (Nickerson & Collins, Co., Chicago, IL)

1957, Vol. 133, No. 5

Canadian Mechanical Contractor (National Directorate of Canadian Plumbing & Mechanical Contractors

Association, Toronto, ON)

1959, May-June Issue

Fuel Oil News of Canada (Oildom Publishing, Bayonne, NJ)

1960, Vol. 1, Nos. 10-12

Automatic Heating/Plumbing/Air Conditioning (Southam Business Publications, Ltd., Don Mills, ON)

1964, Vol. 43, No. 1

Heating Piping & Air Conditioning (Reinhold Publishing, Inc., Chicago, IL)

The Canadian Mechanical Contractor (Canadian Plumbing & Mechanical Contractors Association,

Toronto, ON)

1966, 25th Annual Report

Comfort Engineering ((US Industrial Publications, Inc. Stamford, CT)

1967, Vol. 7, No. 2

Environmental Design (US Industrial Publications, Inc. Stamford, CT)

1968, Vol. 8, No. 1

Building Services the CIBSE Journal (CIBSE Heritage Group, UK)

1988, Stand-Alone Publication

The Magic Of Hot Water (Andrews Water Heaters, Birmingham, UK)

2001, Stand-alone Publication

Historic Gas Times (The Institution of Gas Engineers and Managers, Edinburgh, UK)

2001, Nos. 27 (June) & 29 (December)

HAC (EMAP Trenton, Ltd., Croydon, UK)

2002, January Issue.

SNIPS (Business News Publishing Company, Troy, MI)

2002, Vol. 71, Nos. 2, 12

HPAC (Rogers Media Inc, Toronto, ON)

2002, Vol. 76, No. 4, 6, 2003, Vol. 77, No. 1, 2004, Vol. 78, No. 2

Plumbing Systems & Design (American Society of Plumbing Engineers, Chicago, IL)

2002, September/October Issue.

HPAC Engineering (Penton Media, Cleveland, OH)

2002, Vol. 74, No. 10

RSES Journal (Refrigeration Service Engineers Society, Des Plaines, IL)

2002, Vol. 8, Nos. 5, 6

Supply House Times (Business News Publishing Company, Troy, MI)

2002, Vol. 45, No. 8

Plumbing & Mechanical (Business News Publishing Company, Troy, MI)

2002, Vol. 20, No. 8

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DONATION APPRAISAL

Oliver Collection Group Number 3 Relating To HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature: Subject Matter Physical Contents And Storage Index:

Storage Box Number 3.1 Approximate Number Of Entries: 83 Linear Inches: 11

Box Contents: HVAC Archival Literature – Manufacturer's Documentation:

Refrigertion & Air Conditioning: File 3.1.1 - Manufacturers of Refrigeration/AC Components, Uncatalogued

File 3.1.2 - Suppliers and Wholesalers of Refrigeration/AC Components, Uncatalogued

File 3.1.3 Manufacturers and Suppliers of Refrigeration/AC Components, Uncatalogued

Storage Box Number 3.2 Approximate Number Of Entries: 88 Linear Inches: 9

Box Contents: HVAC Archival Literature – Manufacturer's Documentation:

Refrigeration, Air Conditioning & Plumbing

File 3.2.1 – Pipe, Tube and Fitting Manufacturers & Suppliers, Uncatalogued

File 3.2.2 – Refrigeration/AC Tools, Testing and Instrumentation Devices, Uncatalogued

Files 3.2.3 to 3.2.8 - Household Refrigeration/AC Equipment

Storage Box Number 3.3 Approximate Number Of Entries: 86 Linear Inches: 12

Box Contents: HVAC Archival Literature – Manufacturer's Documentation:

Automatic Oil Heating:

File 3.3.1 - Domestic and Commercial Oil Heating Equipment and Service Manuals, Uncatalogued

File 3.3.2 - Domestic and Commercial Oil Heating Equipment and Service Manuals, Uncatalogued

File 3.3.3 – Automatic Oil Heating Control Systems and Controls, Uncatalogued

File 3.4.4 – Honeywell Residential Controls Handbooks, Vols. 1 & 2

File 3.4.5 – Honeywell Residential Controls Handbooks, Vols. 5 & 6

File 3.4.6 – Honeywell Control Systems Installation & Product Guides, Uncatalogued in Binder

Storage Box Number 3.4 Approximate Number Of Entries: 118 Linear Inches: 12

Box Contents: HVAC Archival Literature – Manufacturer's Documentation:

Kelvinator & Kelvinator of Canada:

File 3.4.1 – Coin Commemorating Kelvinator's Silver Anniversary

File 3.4.2 – Business Card

File 3.4.3 – Pocket Dealer's Catalogue

File 3.4.4 – Leatherette folders (2)

File 3.4.5 – Dealer Newsletters, Bulletins, Uncatalogued

File 3.4.6 - Kelvinator Refrigeration Commercial Sales Manual, 1940-1950, Uncatalogued

File 3.4.7 – Kelvinator Refrigeration Commercial Sales Manual, 1950s, Uncatalogued

File 3.4.8 – Kelvinator Refrigeration Domestic Sales Manual, 1950-1960s, Uncatalogued

File 3.4.9 - Kelvinator Refrigeration Domestic Sales Manual, 1950-1960, Uncatalogued

Storage Box Number 3.5 Approximate Number Of Entries: 5 Linear Inches: 10

Box Contents: HVAC Archival Literature – Manufacturer's Documentation:

Kelvinator & Kelvinator of Canada Manuals

File 3.5.1 - Equipment Manuals, 1929, Reconstructed 1995, Uncatalogued

File 3.5.2 – Bulletins, 1928-1936, Uncatalogued

File 3.5.3 – Price Lists, 1929-1936, Uncatalogued

File 3.5.4 – Domestic and Commercial Parts Catalogue, 1931-1941, Uncatalogued

File 3.5.5 – Thematic Graphic Materials, Domestic Technology Exhibit,

Assembled for National Museum of Science and Technology, 1995, Uncatalogued

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Storage Box Number 3.6 Approximate Number Of Entries: 4 Linear Inches: 7

Box Contents: HVAC Archival Literature – Manufacturer's Documentation:

Kelvinator & Kelvinator of Canada

- File 3.6.1 Commercial Refrigerator Equipment and Sales Literature, 1929 1959, Uncatalogued
- File 3.6.2 Commercial Refrigeration Equipment, 1929 1939, Uncatalogued
- File 3.6.3 Domestic and Commercial Refrigeration Service, 1929 1936, Uncatalogued

Storage Box Number 3.7 Approximate Number Of Entries: 21 Linear Inches: 13

Box Contents: HVAC Archival Literature – Manufacturer's Documentation: Frigidaire

- File 3.7.1 Service Manuals, Chapters 1-6, undated, with Supplements 6 & 7
- File 3.7.2 Commercial Service Manual, Chapters 1-6, undated, with Supplements 8-37
- File 3.7.3 Master Parts and Price Catalogue, 1937-1940
- File 3.7.4 Installation and Service Manuals, Series 405, for products prior to 1937, copyright 1930-1943

Storage Box Number 3.8 Approximate Number Of Entries: 13 Linear Inches: 9

Box Contents: HVAC Archival Literature – Manufacturer's Documentation:

Frigidaire

- File 3.8.1 Personalized Frigidaire Data Book, T.H. Oliver
- File 3.8.2 Air Conditioning Product Memos, Manuals, 1940s-1950s, Uncatalogued
- File 3.8.3 Service and Sales Literature, Uncatalogued
- File 3.8.4 Personalized Leatherette Service and Sales Literature Binder, T.H. Oliver (Empty

Storage Box Number 3.9 Approximate Number Of Entries: 5 Linear Inches: 15

Box Contents: HVAC Archival Literature – Manufacturer's Documentation:

Carrier Corporation

- File 3.9.1 Applied Products Sales & Engineering Manual, Vol. 1 (1950s 1960s)
- File 3.9.2 Applied Products Sales & Engineering Manual, Vol. 2 (1950s 1960s)
- File 3.9.3 Packaged Products Sales & Engineering, Vol. 1 (1950s 1960s)
- File 3.9.4 Packaged Products Sales & Engineering, Vol. 2 (1950s 1960s)
- File 3.9.5 Service Parts Price List

Storage Box Number 3.10 Approximate Number Of Entries: 5 Linear Inches: 12

Box Contents: HVAC Archival Literature – Manufacturer's Documentation:

- File 3.10.1 Carrier Corporation, System Design Manual, 1950
- File 3.10.2 Crane, Valves, Fittings and Pipes
- File 3.10.3 Crane, Flow of Fluids Through Valves, Fittings and Pipes, Technical Paper 410-C, 1957
- File 3.10.4 Bell & Gossett Company, Handbook, Second Edition, Undated
- File 3.10.5 Bell & Gossett Company Engineering Manual, Undated
- File 3.10.6 S.A. Armstrong, Ltd., Sound Control in Hydronic Piping Systems, Undated
- File 3.10.7 Carrier Corporation, Construction Specifications, Sheet Metal, Ducts, Piping (Reconstructed Manual) 1946-1958
- File 3.10.8 Carrier Corporation, Product Information, Comfort and Industrial Air Conditioning Load Estimating Data and Standards, Chapters 1-7 (Reconstructed Manual) 1956-1958
- File 3.10.9 Carrier Corporation, Air Conditioning, Fundamentals of Refrigeration, Service Training Aids,
- T.H. Oliver Ltd., Aurora (Reconstructed Manual) 1960-1965

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Storage Box Number 3.11 Approximate Number Of Entries: 6 Linear Inches: 15

Box Contents: HVAC Archival Literature – Manufacturer's Documentation:

Canadian General Electric Company, Ltd. (G.E.)

File 3.11.1 – Manufacturer's Filing Instructions

File 3.11.2 – Service Manual – Book No. 1, Small Appliances Parts & Prices

File 3.11.3 - Book No. 1, Small Appliances Parts & Prices, Addendum 1960-1962

File 3.11.4 – Book No. 1, Small Appliances Parts & Prices, Addendum 1963-1966

File 3.11.5 – Book No. 1, Small Appliances Parts & Prices, Addendum 1963-1967

File 3.11.6 – Book No. 1, Small Appliances Parts & Prices, Addendum 1968-1969

File 3.11.7 – Book No. 1, Small Appliances Parts & Prices, Addendum 1970-1972

Storage Box Number 3.12 Approximate Number Of Entries: 7 Linear Inches: 15

Box Contents: HVAC Archival Literature – Manufacturer's Documentation:

Canadian General Electric, Ltd. (G.E.)

File 3.12.1 – Product Sheets, Uncatalogued

File 3.12.2 – Service Manual – Book No. 2, Small Appliances, Technical Data, Heating Appliances,

File 3.12.3 - Small Appliances, Technical Data, Heating Appliances, Addendum, 1960-1972

File 3.12.4 – Service Manual – Book No. 3, Small Appliances, Technical Data, Motorized Appliances

File 3.12.5 – Book No. 3, Small Appliances, Technical Data, Motorized Appliances, Addendum 1960-1968

File 3.12.6 - Book No. 3, Small Appliances, Technical Data, Motorized Appliances, Addendum 1969-1972

Oliver Collection Group Number 4 Relating To HVACR Technical and Trade Training and Self-Help Organizations Individual Publications and Literature

Subject Matter Physical Contents And Storage Index: HVACR Ttechnical and trade training, self-help organizations material

Storage Box Number 4.1 Approximate Number Of Entries: 4 Linear Inches: 12

Box Contents HVACR Archival Literature: The Refrigeration Services Engineers Society

File 4.1.1 – RSES Lecture Course 1934 to 1946, 44 lectures offered by RSES for self-help, independent technical training and professional development – produced over a 12-year period, sustained through the WWII years

File 4.1.2 – RSES Service Application Manual, published 1950's to 1960's, Sections 1-24

File 4.1.3 – RSES Service Application Manual, published 1950's to 1960's, Sections 26-99

File 4.1.4 – RSES Service Manual, published 1950's to 1960's, Sections 0-99

Storage Box Number 4.2 Approximate Number Of Entries: 21 Linear Inches: 13

Box Contents HVACR Archival Literature: The RSES related services publications:

File 4.2.1 – RSES Service Applications Manual, Supplements 1950's to 1960's, Uncatalogued

File 4.2.2 – The RSES Question Box 1938, 1939,1941, 1945, 1946

Refrigeration Service Pointers: 1946,1959

Refrigeration Contractor's Estimating Guide 1948

RSES Annual Reports 1937, 1929, 1941-42

RSES Directory Service Companies Chapter Members, 1945

RSES Ontario Maple Leaf Chapter 1947-48

RSES Membership Bulletin 1960

File 4.2.3 – RSES Customer Equipment Record Pad, Blank, 1953

RSES Master Service Manual, Vol. 3, Assorted Documents, Sleeved, Uncatalogued

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Storage Box Number 4.3 Approximate Number Of Entries: 24 Linear Inches: 15

Box Contents HVACR Archival Literature: HVACR technical and trade training, self-help organizations:

- File 4.3.1 National Warm Air Heating and Air Conditioning Association, Canadian Chapter 1950
- File 4.3.2 Electric Heating Manual, 1960
- File 4.3.3 Electric Heating Association Docs, Sleeved, Courses
- File 4.3.5 Fuel Oil & Oil Heat, Service Folder, c. 1959
- File 4.3.6 Ventilation Documents, Sleeved, 10 documents.
- File 4.3.7 Construction Estimating, Sleeved, 3 documents.

Storage Box Number 4.4 Approximate Number Of Entries: 6 Linear Inches: 15

Box Contents HVACR Archival Literature: HVACR technical and trade training, self-help organizations:

- File 4.4.1 ASRE Air Conditioning Data Book
- File 4.4.2 ASHRAE Heating, Ventilating, Air Conditioning Data Book, 196
- File 4.4.3 ASHRAE Guide & Data Book, Applications, 1962
- File 4.4.4 ASHRAE Guide & Data Book, Fundamentals & Equipment, 1963
- File 4.4.5 ASHRAE Guide & Data Book, Fundamentals & Equipment, 1965 & 1966
- File 4.4.6 ASHRAE Guide & Data Book, Applications, 1966 & 1967

Storage Box Number 4.5 Approximate Number Of Entries: 9 Linear Inches: 15

Box Contents HVACR Archival Literature: HVACR technical and trade training, self-help organizations:

- File 4.5.1 ASHRAE Handbook of Fundamentals, 1967 (2)
- File 4.5.2 ASHRAE Guide & Data Book, Systems & Equipment, 1967
- File 4.5.3 ASHRAE Guide & Data Book, Applications, 1968
- File 4.5.4 ASHRAE Guide & Data Book, Equipment, 1969
- File 4.5.5 ASHRAE Guide & Data Book, Systems, 1970
- File 4.5.6 ASHRAE Guide & Data Book, Applications, 1971
- File 4.5.7 ASHRAE Guide & Data Book Equipment, 1972
- File 4.5.8 ASHRAE Handbook of Fundamentals, 1972

Oliver Collection Group Number 5 Relating To HVACR Trade Training and Professional Development Literature and Unpublished Manuscripts by G. L. Oliver

Storage Box Number 5.1 Approximate Number Of Entries: 23 Linear Inches: 25

Box Contents HVACR Archival Literature: Texts

- File 5.1.1 "History of Manual and Industrial Education, Up to 1870" Charles Alpheus Bennett, 1926
- File 5.1.2 "History of Manual and Industrial Education, 1870-1917" Charles Alpheus Bennett, 1937
- File 5.1.3 "Applied Teaching Techniques" Gilbert G. Weaver & Louis Cenci, 1960
- File 5.1.4 "A History of Education: Socrates to Montessori" Luella Cole, 1961
- File 5.1.5 "Programmed Learning" Wendell I. Smith & J. William Moore, 1962
- File 5.1.6 "Psychological Principles in System Development" Robert M. Gagné, 1963
- File 5.1.7 "Categories of Human Learning" Arthur W. Melton, 1964
- File 5.1.8 "Educational Technology" John P. De Cecco, 1964
- File 5.1.9 "Teaching Machines and Programmed Learning II" Robert Glaser, 1965
- File 5.1.10 "Training Research and Education" Robert Glaser, 1965
- File 5.1.11 "Learning and Programmed Instruction" Julian I. Taber, Robert Glaser & Halmuth H. Schaefer. 1965
- File 5.1.12 "Analysis Technique for Instructors" Verne C. Fryklund, 1965
- File 5.1.13 "Teaching and Learning in Adult Education" Harry L. Miller, 1966

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- File 5.1.14 "Man-Machine Systems in Education" John W. Loughary, 1966
- File 5.1.15 "Cybernetic Principles of Learning & Educational Design" Karl Smith Margaret Smith, 1966
- File 5.1.16 "Research in Vocational and Technical Education" University of Wisconsin, 1967
- File 5.1.17 "Sociology and Modern Systems Theory" Walter Buckley, 1967
- File 5.1.18 "Training and Development Handbook" Robert L. Craig & Lester R. Bittel, 1967
- File 5.1.19 "Educational Psychology: A Cognitive View" David P. Ausbel, 1968
- File 5.1.20 "The Teaching Revolution" W. Kenneth Richmond, 1969
- File 5.1.21 "Psychological Concepts in Education" B. Paul Komisar & C.J.B. Macmillan, eds., 1969
- File 5.1.22 "Designing & Improving Courses & Curricula in Higher Education" Robert Diamond, 1989
- File 5.1.23 "Redefining Student Learning" Hermine H. Marshall, 1992

Storage Box Number 5.2 Approximate Number Of Entries: 8 Linear Inches: 12

Box Contents HVACR Archival Literature: vocational and technical training curriculum matter File 5.2.1 – "An Analysis of the Refrigeration and Air Conditioning Trade", 152 pp. G. L. Oliver, Ontario College of Education, Vocational Training Department, Toronto 1964, Unpublished. File 5.2.2 – "A Course of Study in Refrigeration and Air Conditioning for the Four-Year Science, Technology, and Trades Secondary School Program", 60 pp. G. L. Oliver, 1964, Unpublished.

- File 5.2.3 "An Introduction to Refrigeration, Air Conditioning and Heating, A shop Manual for Use in Grades 9 and 10", Prepared for the Board of Education, Township of Etobicoke 1965, 250 pp. G. L. Oliver, 1965, Unpublished.
- File 5.2.4 "Air Conditioning and Refrigeration Course of Study Outline, Grade 9. Prepared for Etobicoke Collegiate Institute, Technical Division, Air Conditioning and Refrigeration Dept.", 350 pp. G. L. Oliver, 1965, Unpublished.
- File 5.2.5 "An Introduction to Refrigeration, Air Conditioning and Heating", Manuscript material prepared for McGraw Hill publication, 150 pp. G. L. Oliver, c. 1966, Unpublished.
- File 5.2.6 "Mechanical Systems for Buildings", Ryerson Polytechnical Institute, Dept. of Extension, Course No. 282, 1964-1965, 250 pp., G.L.Oliver, 1964, Unpublished.
- File 5.2.7 "Chronological Listing of Major Events in the Development of Vocational-Technical Education in Ontario 1835-1925" G.L. Oliver, c.1965, Unpublished.
- File 5.2.8 "Assignment The Development of Vocational-Technical Education in Ontario 1835-1925" G.L. Oliver, 1965, Unpublished

Oliver Collection Group Number 6 Relating To Science and Technology, and Canadian Society and Culture

Subject Matter Physical Contents And Storage Index:

Storage Box (Group Box) Number 6.1 Approximate Number Of Entries: 57 Linear Inches: 18.5

Box Contents Popular Commercial Journalism – Popular Culture

Popular Science (Popular Science Publishing Co., New York, NY

1920, Vol. 96, No. 5 (Missing front and back cover)

1939, Vol. 135, No. 5 (Missing front and back cover)

1941, Vol. 138, Nos. 1, 2, 5, 6 (No. 2 missing covers), 1941, Vol. 139, No. 4

1945, Vol. 146, Nos. 5, 6 1945, Vol. 147, Nos. 1, 2, 3, 5

1946, Vol. 148, No. 3

1968, Vol. 192, Nos. 2-5, 1968, Vol. 193, Nos. 1-6

1969, Vol. 194, Nos.1-3, 5-6, 1969, Vol. 195, Nos. 2-6

1970, Vol. 196, No. 1 (Note: Size change in effect starting at No. 2)

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Storage Box Number 6.2 Approximate Number Of Entries: 43 Linear Inches: 14.25 (also referred to as Group Box Number 6.2)

Box Contents Popular Commercial Journalism – Popular Culture

Popular Science (Popular Science Publishing Co., New York, NY)

1970, Vol. 196, Nos.2-6

1970, Vol. 197, Nos. 1, 2, 5, 6

1971, Vol. 198, Nos. 1-6

1971, Vol. 199, Nos. 1-6

1972, Vol. 200, Nos. 1-6

1972, Vol. 201, Nos. 1, 3, 4, 6

1973, Vol. 202, Nos. 1-3

1973, Vol. 203, Nos. 2-5

Canadian Geographical Journal (The Canadian Geographical Society, Montreal, PQ)

1930, Vol. 1, Nos. 1, 5 (No. 5 is missing covers)

1931, Vol. 2, Nos. 5, 6 (May, June)

1933, Vol. 7, No. 1 (July)

1941, Vol. 23, Nos. 2, 3

National Geographic (National Geographic Society, Washington, D.C.)

1917, Vol. 32, No. 4

1919, Vol. 36, No. 6

1921, Vol. 37, No. 3

1922, Vol. 41, Nos. 2, 5, 6

1922, Vol. 42, Nos. 2, 6

1923, Vol. 44, No. 2

1924, Vol. 45, Nos. 2, 5

1926, Vol. 49, Nos. 4-6

1927, Vol. 51, Nos. 1, 4

1927, Vol. 52, Nos. 3, 5, 6

Storage Box Number 6.3 Approximate Number Of Entries: 36 Linear Inches: 13.75 (also referred to as Group Box Number 6.2)

Box Contents Popular Commercial Journalism – Popular Culture

National Geographic (National Geographic Society, Washington, D.C.)

1930, Vol. 57, No. 2

1930, Vol. 58, Nos. 2, 4, 6

1931, Vol. 59, No. 6

1931, Vol. 60, Nos.1, 2, 4

1932, Vol. 61, Nos. 2,

1932, Vol. 62, No. 6

1933, Vol. 63, No. 2

1933, Vol. 64, Nos. 2, 3 (No.3 has loose covers)

1935, Vol. 67, Nos 1, 2, 6

1935, Vol. 68, Nos. 1, 3, 4

1937, Vol. 71, No. 4

1937, Vol. 72, No. 1

1938, Vol. 73, No. 3

1938, Vol. 74, No. 3

1939, Vol. 75, No. 5

1940, Vol. 77, Nos. 2, 6

1940, Vol. 78, No. 2

1941, Vol. 80, Nos. 1, 2

1942, Vol. 81, No. 3

1942, Vol. 82, No. 3

1943, Vol. 84, Nos. 3, 5, 6

1944, Vol. 85, No. 2

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Storage Box Number 6.4 Approximate Number Of Entries: 68 Linear Inches: 8.75 (also referred to as Group Box Number 6.2)

Box Contents Popular Commercial Journalism – Popular Culture

Maclean's (Maclean-Hunter Publishing Company Ltd., Toronto, ON)

1962, Vol. 75, Nos. 15, 16 (2 Issues)

1963, Vol. 76, Nos. 6-11, 13, 16, 19-23 (13 Issues)

1964, Vol. 77, Nos. 2, 4, 5, 7-13, 15, 22-24 (14 Issues)

1965, Vol. 78, Nos. 1, 3-5, 7, 9-14 (11 Issues)

1966, Vol. 79, Nos. 21-24 (4 Issues)

1967, Vol. 80, Nos. 1-12 (Note Change to Monthly Issues)

1968, Vol. 81, Nos. 1-12

Storage Box Number 6.5 Approximate Number Of Entries: 56 Linear Inches: 12 (also referred to as Group Box Number 6.2)

Box Contents Popular Commercial Journalism - Popular Culture

The Strand Magazine (Newnes & Pearson, Kensington, UK)

1935, March

Popular Mechanics (The Hearst Corp., NY)

1935, Vol. 63

1938, Vol. 69

1964, Vol. 121

Mechanix Illustrated (Fawcett Publications, Inc., Louisville, KY)

1942, Vol. 28, No. 4 (August)

1944, Vol. 33, Nos. 1, 2 (November, December)

1945, Vol. 33, Nos. 3-6 (Jan-April)

1945, Vol. 34, Nos. 1, 2, 5 (May, June, Sept.)

1945, Vol. 35, Nos. 1, 2 (Nov., Dec.)

1946, Vol. 35, No. 6 (April, Front is at 70% Loss)

1946, Vol. 36, Nos. 2, 4 (June, August)

1966, Vol. 62, No. 461 (October)

House & Garden's New Complete Guide to Interior Decoration. Simon & Schuster, New York. 1953. (1 vol.)

Ontario Homes & Living (Mitchell Press Ltd., Vancouver, BC)

1963, Vol. 2, Nos. 5-11 (7 Issues)

1964, Vol. 3, Nos. 1, 3-11 (10 Issues)

1965, Vol. 4, Nos. 1-11 (11 Issues)

1966, Vol. 5, Nos. 1, 3, 4, 6-9 (7 Issues)

There are thirty five pages to this appraisal in total, not including the cover letter.

END

of

The G. L. Oliver HVACR Trade & Technical Literature Collection Charitable Donation Appraisal.

The HVACR¹, Archival Trade and Technical Literature Collection

Catalogue of Box Labels

March 2019

Table of Contents

This Catalogue contains a complete listing of the detailed, interim labels on each of the 46 Bankers boxes, used to transfer the archival collection to the custodial care of HHCC, April 1 2019.

The labelling is designed to allow immediate, interim access to the collection by Subject Matter Group, while arrangements are made for permanent archival storage, inventorying, and a collection management information system [CMIS] facilitating user access.

- Subject Matter Group 1 Applied Sciences and Engineering Fundamentals, Box File Label No. OA1705P, Box numbers 1.1 to 1.3
- Subject Matter Group 2 HVACR Trade and Technical Journals, Box File Label No. OA1802A, Box numbers 2.1 to 2.19
- Subject Matter Group 3 HVACR Manufacturer's and Suppliers of Engineering, Applications, Sales and Service Literature, Box File Label No. OA1705D, Box numbers 3.1 to 3.12.
- Subject Matter Group 4 HVACR Technical and Trade Training Organizations, Box File Label No. OA1806I, Box numbers 4. 1 to 4.5
- Subject Matter Group 5 Best Practices in Trade Training and Professional Development, Box File Label No. OA1705F, Box numbers 5.1 to 5.2
- Subject Matter Group 6 Science, Technology, and Canadian Society and Culture, Box File Label No. OA1705G, Box numbers 6.1 to 6.5
- ATTACHMENT A: Subject Matter Group Statistics, Number of Units, Linear Inches, and Totals by Group

Oliver Associates, Material Culture of Technology, Project 114-18, Doc, OA1903G.docx, 3/21/2019, P. 1

¹ HVACR is used as an accepted acronym for the Heating, Ventilating, Air Conditioning, and Refrigeration industry in Canada. Similarly, HHCC is used throughout as an agreed upon acronym for the HVACR Heritage Centre Canada, otherwise referred to as the "Centre"

ARCHIVE SUBJECT MATTER GROUP:

Group No. 1 - Applied Sciences and Engineering

STORAGE BOX NO. 1.1 NUMBER OF ENTRIES: 14 LINEAR INCHES: 18

SUBJECT MATTER DESCRIPTION - STORIES TOLD:

This Subject Matter Group contains archival literature representative of the formal knowledge-base that existed in the applied sciences and engineering, on which the Canadian HVACR industry was dependent in the first half of the 20th century, extending to the early post WWII years.

Beyond "trial and error", it tells the stories of the limited codified knowledge of science and practice on which the design, construction, production, operation, performance standards, service, and safety of the residential, commercial, and industrial HVACR industry would be largely dependent in its embryonic and early development years. Yet looking back, by the 1950's, it was a literature that was about to explode in nature and kind. It would document the results of the rapid increase in research and development which followed the expanding economy and buoyant consumer market of the post WWII years.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE – Applied Science and Engineering:

Representative textbooks and handbooks variously from 1935 to 1965 dealing with the key basic concepts, principles, theories, ideas, and working assumptions, standards and practices, in the applied science and engineering literature on which the Canadian residential, commercial and industrial HVACR industry would build.

- File 1.1.1 "Elements of Chemical Engineering" Walter L. Badger & Warren L. McCabe, 1936
- File 1.1.2 "Electrical Engineering" Clarence V. Christie, 1938
- File 1.1.3- "Analytical Mechanics for Engineers" Fred B. Seely & Newton E. Ensign, 1941
- File 1.1.4 "Engineering Drawing" Thomas E. French, 1941
- File 1.1.5- "Factory Equipment" Joseph W. Roe & Charles W. Lytle, 1941
- File 1.1.6 "Principles of Physics: Mechanics" Francis Weston Sears, 1945
- File 1.1. 7 "An Introduction to Heat Engines" E.A. All cut, 1946
- File 1.1.8 "Manufacturing Processes" Myron L. Begeman, 1947
- File 1.1.9 "Elementary Fluid Mechanics" with stapled answer sheets, John K. Vennard, 1947
- File 1.1.10 "Elementary Engineering Thermodynamics" Vincent W. Young & Gilbert A. Young, 1947
- File 1.1.11 "Resistance of Materials" Fred B. Seely, 1947
- File 1.1.12 "An Introduction to Engineering Economics" C.R. Young, 1949
- File 1.1.13 "Heat Engines" S.H. Moorefield & H.H. Winstanley, 1960
- File 1.1.14 "Basic Instrumentation: Industrial Measurement" Patrick J. O'Higgins, 1966

ARCHIVE SUBJECT MATTER GROUP:

Group No. 1 - Applied Sciences and Engineering

STORAGE BOX NO. 1.2 NUMBER OF ENTRIES: 13 LINEAR INCHES: 15

SUBJECT MATTER DESCRIPTION - STORIES TOLD:

This Subject Matter Group contains archival literature representative of the formal knowledge-base that existed in the applied sciences and engineering, on which the Canadian HVACR industry was dependent in the first half of the 20th century, extending to the early post WWII years.

Beyond "trial and error", it tells the stories of the limited codified knowledge of science and practice on which the design, construction, production, operation, performance standards, service, and safety of the residential, commercial, and industrial HVACR industry would be largely dependent in its embryonic and early development years. Yet looking back, by the 1950's, it was a literature that was about to explode in nature and kind. It would document the results of the rapid increase in research and development which followed the expanding economy and buoyant consumer market of the post WWII years.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE – Applied Thermodynamics:

Representative textbooks and handbooks variously from 1929 to 1960 dealing with concepts, principles and best practices in HVACR on which the residential and commercial industry would build in the early to mid-20th century in Canada.

- File 1.2.1 "Hawkins Electrical Guide 5" Hawkins and Staff, eds., (1929)
- File 1.2.2 "Steam Tables: Properties of Saturated and Superheated Steam" The Superheater Steam Company and Combustion Engineering Corporation Ltd., 1940
- File 1.2.3 "Practical Design of Exhaust and Blower Systems" E.W. Favalora, 1948
- File 1.2.4- "Warm Air Heating and Winter Air Conditioning" John W. Norris, 1950
- File 1.2.5 "Refrigeration Engineering" H.J. MacIntyre & F.W. Hutchinson, 1950
- File 1.2.6- "Heating Design and Practice" Robert Henderson Emerick, 1951
- File 1.2. 7 "Automatic Control of Heating and Air Conditioning" John E. Haines, 1953
- File 1.2.8 "American Electricians' Handbook" Terrell Croft & Clifford C. Carr, 1953
- File 1.2.9 "Steam and Hot Water Fitting" William T. Walters & B.E. Ferrell, Jr., 1953
- File 1.2.10 "Estimating Manual for Heating and Piping Systems" Harry A. Erickson, 1956
- File 1.2.11 "Automatic Refrigeration" S. A. Anderson, 1959
- File 1.2.12- "Automatic Refrigeration= Diagrams" Bound sleeve for 33 folded diagrams, S.A. Anderson, 1959
- File 1.2.13- "Thermodynamic Fundamentals for Engineers" Cecil F. Warner, 1961

ARCHIVE SUBJECT MATTER GROUP:

Group No. 1 - Applied Sciences and Engineering

STORAGE BOX NO. 1.3 NUMBER OF ENTRIES: 14 LINEAR INCHES: 17

SUBJECT MATTER DESCRIPTION - STORIES TOLD:

This Subject Matter Group contains archival literature representative of the formal knowledge-base that existed in the applied sciences and engineering, on which the Canadian HVACR industry was dependent in the first half of the 20th century, extending to the early post WWII years.

Beyond "trial and error", it tells the stories of the limited codified knowledge of science and practice on which the design, construction, production, operation, performance standards, service, and safety of the residential, commercial, and industrial HVACR industry would be largely dependent in its embryonic and early development years. Yet looking back, by the 1950's, it was a literature that was about to explode in nature and kind. It would document the results of the rapid increase in research and development which followed the expanding economy and buoyant consumer market of the post WWII years.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE - Residential and Commercial Refrigeration and Air Conditioning:

Representative textbooks and handbooks variously dealing with the key introductory concepts, principles, ideas, and practices in residential and commercial refrigeration and air conditioning from 1920's through to the 1960's.

- File 1.3.1 "Household Refrigeration" H.B. Hull, 1933
- File 1.3.2 "Commercial Refrigeration" L. Kay Wright, 1936
- File 1.3.3 "Handbook of Automatic Refrigerant Control" Alco Valve Co., 1940
- File 1.3.4 "A to Zero of Refrigeration" General Motors, 1950
- File 1.3.5- "Refrigeration and Air Conditioning" W.F. Stoecker, 1958
- File 1.3.6 "Modern Air Conditioning Heating and Ventilating" Willis H. Carrier, Realto E. Cherne, Walter A. Grant & William H. Roberts, 1959
- File 1.3. 7 "Modern Air Conditioning Practice" Norman C. Harris, 1959
- File 1.3.8- "Modern Refrigeration and Air Conditioning" Andrew D. Althouse & Carl H. Turnquist, 1960
- File 1.3.9 "Refrigeration Servicing" Paul F. Goliber, 1960
- File 1.3.10 "Basic Refrigeration" Guy R. King, 1961
- File 1.3.11 "Standard Refrigeration and Air Conditioning Questions and Answers" Steven Michael Elonka & Quaid Walton Minich, 1961
- File 1.3.12 "A to Zero of Refrigeration" General Motors, 1961
- File 1.3.13 "Principles of Air Conditioning" V. Paul Lang, 1962
- File 1.3.14 "Principles of Refrigeration" R. Warren Marsh & C. Thomas Olivo, 1963
- File 1.3.15 "Air Conditioning and Heting Practice" Julian M. Laub, 1963

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.1 APPROXIMATE NUMBER OF ENTRIES: 106 LINEAR INCHES: 11.25

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS - REFRIGERATION, HEATING AND AIR CONDITIONING:

Refrigeration and Air Conditioning including Automatic Heating (National Business Publications Ltd., Gardenvale, PQ)

1941, Vol. 7, Nos. 2-4, 6-12 (Note size is 222x298mm) 1942, Vol. 8, Nos. 1-4, 6-12

Canadian Refrigeration Journal (National Business Publications Ltd., Gardenvale, PQ)

1943, Vol 9, Nos. 1-12 (Note size change to 208x287mm @ No.6)

1944, Vol. 10, Nos. 1-12

1945, Vol. 11, Nos. 1-12 (Note Volume No. on July issue misprinted to "10")

1946, Vol. 12, Nos. 1-3, 5-12 (Note size change to 222x296mm @ No.3)

1947, Vol. 13, Nos. 1-12 (Note size change to 210x282mm @ No.1)

1948, Vol. 14, Nos. 1-8, 10-12

1949, Vol. 15, Nos. 1-12

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.2 APPROXIMATE NUMBER OF ENTRIES: 99 LINEAR INCHES: 11.5

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING:

Canadian Refrigeration Journal (National Business Publications Ltd., Gardenvale, PQ)

1950, Vol. 16, Nos. 1-12

1951, Vol. 17, Nos. 1-10, 12

1952, Vol. 18, Nos. 1-12

1953, Vol. 19, Nos. 1-12

1954, Vol. 20, Nos. 1-3, 5-7, 11-12

Canadian Refrigeration and Air Conditioning Journal (National Business Publications Ltd., Gardenvale, PQ)

1955, Vol. 21, Nos. 1-4, 5, 7, 9, 12

Canadian Refrigeration and Air Conditioning (National Business Publications Ltd., Gardenvale, PQ)

1956, Vol. 22, Nos. 1-12

1957, Vol. 23, Nos. 1-12

1958, Vol. 24, Nos. 1-12

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.3 APPROXIMATE NUMBER OF ENTRIES: 91 LINEAR INCHES: 7.25

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING:

Canadian Refrigeration and Air Conditioning (National Business Publications Ltd., Gardenvale, PQ)

1959, Vol. 25, Nos. 1-12

1960, Vol. 26, Nos. 1-12

1961, Vol. 27, Nos. 1-12

1962, Vol. 28, Nos. 1, 3-12

1963, Vol. 29, Nos. 1-8, 12

1964, Vol. 30, Nos. 3-12

1965. Vol. 31, Nos. 1-4, 6, 7

1967, Vol. 33, Nos. 6, 10, 12

1968, Vol. 34, Nos. 1-8, 10-12

1969, Vol. 35, Nos. 1-4

ARCHIVE SUBJECT MATTER GROUP:

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.4 APPROXIMATE NUMBER OF ENTRIES: 74 LINEAR INCHES: 11.5

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING:

The Refrigeration Service Engineer (Nickerson & Collins Co., Chicago, IL)

1936, Vol. 4, Nos. 9-12 (Note size is 152x228mm)

1937, Vol. 5, Nos. 1-12

1938, Vol. 6, Nos. 1-12

1939, Vol. 7, Nos 1-12

1940, Vol. 8, Nos. 1-12

1941, Vol. 9, Nos. 1-12

1942, Vol. 10, Nos. 1-8, 11, 12

ARCHIVE SUBJECT MATTER GROUP:

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.5 APPROXIMATE NUMBER OF ENTRIES: 60 LINEAR INCHES: 11

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING:

The Refrigeration Service Engineer (Nickerson & Collins Co., Chicago, IL)

1943, Vol. 11, Nos. 1-12

1944, Vol. 12, Nos. 1-12

1945, Vol. 13, Nos. 1-12

1946, Vol. 14. Nos. 1-12

1947, Vol. 15, Nos. 1-12

ARCHIVE SUBJECT MATTER GROUP:

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.6 APPROXIMATE NUMBER OF ENTRIES: 58 LINEAR INCHES: 13

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING:

The Refrigeration Service Engineer (Nickerson & Collins Co., Chicago, IL)

1948, Vol. 16, Nos. 1-12

1949, Vol. 17, Nos. 1-6, 8-12

1950, Vol. 18, Nos. 1-3, 5-12

1951, Vol. 19, Nos. 1-12

Refrigeration Service and Contracting (Nickerson & Collins Co., Chicago, IL) 1952, Vol 20, Nos. 1-12

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.7 APPROXIMATE NUMBER OF ENTRIES: 60 LINEAR INCHES:12.25

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING:

Refrigeration Service and Contracting (Nickerson & Collins Co., Chicago, IL)

1953, Vol. 21, Nos. 1-11

1954, Vol. 22, Nos. 1, 7-12

1955, Vol. 23, Nos. 2-10, 12

1956, Vol. 24, Nos. 2-11

1957, Vol. 25, Nos. 1, 2, 7, 9-12 (Note size change to 210x286mm @ No.1)

1958, Vol. 26, Nos. 1-12

1959, Vol. 27. Nos. 1, 8-12

ARCHIVE SUBJECT MATTER GROUP:

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.8 APPROXIMATE NUMBER OF ENTRIES: 65 LINEAR INCHES: 11

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING:

Refrigeration Service and Contracting (Nickerson & Collins Co., Chicago, IL)

1960, Vol. 28, Nos. 1-4, 6-8, 10-12

1961, Vol. 29, Nos. 1-5, 7, 8, 10-12

1962, Vol. 30, Nos. 1-12

1963, Vol. 31, Nos. 1-7, 10-12

1964, Vol. 32, Nos. 1-12

1965, Vol. 33, Nos. 1-7, 9-12

ARCHIVE SUBJECT MATTER GROUP: Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.9 APPROXIMATE NUMBER OF ENTRIES: 48 LINEAR INCHES: 8

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS - REFRIGERATION, HEATING AND AIR CONDITIONING:

Refrigeration Service and Contracting (Nickerson & Collins Co., Chicago, IL)

1966, Vol. 34, Nos. 1-7, 10-12

1967, Vol. 35, Nos. 11, 12

1968, Vol. 36, Nos. 1-12

1969, Vol. 37, Nos. 1-11

1970, Vol. 38, No. 8

Air Conditioning and Refrigeration News (Business News Publication, Co., Detroit, MI)

1937, Vol. 20, No. 16 (April 21)

1937, Vol. 22, No. 5 (September 29)

1937, Vol. 22, No. 8, Supplement (October 20)

1937, No Volume Number

Year Unknown – Air Conditioning Fundamentals (In Sleeve)

Air Conditioning Heating & Refrigeration NEWS (Business News Publications, Co., Detroit, MI)

1962 Directory Issue (December 25, 1961)

1968, Vol. 113, Nos. 3, 10-14

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.10 APPROXIMATE NUMBER OF ENTRIES: 75 LINEAR INCHES: 13

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING:

The Refrigeration Industry (Refrigeration Publications, Inc., Cleveland, Ohio)

1944, Vol. 1, Nos. 5-7

1945, Vol. 2, Nos. 1-12

1946, Vol. 3, Nos. 1-12

1947, Vol. 4, Nos. 1-12

1948, Vol 5, Nos. 1-12

1949, Vol 6, Nos. 1-3

Commercial Refrigeration and Air Conditioning (Refrigeration Publications, Inc., Cleveland, Ohio)

1949, Vol 6, Nos. 4-12 (Note Vols. 4 & 5 have cover overlay detailing name change)

1950, Vol. 7, Nos. 1-12

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.11 APPROXIMATE NUMBER OF ENTRIES: 50 LINEAR INCHES: 9.5

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING:

Commercial Refrigeration and Air Conditioning (Refrigeration Publications, Inc., Cleveland, Ohio) 1951, Vol. 8, Nos. 1-8, 10-12

Refrigeration & Air Conditioning Business (Industrial Publishing Corporation, Cleveland, Ohio)

1958, Vol. 15, Nos. 8-12 1959, Vol. 16, Nos. 1

The Refrigeration & Air Conditioning Business (Industrial Publishing Corp, Cleveland, Ohio)

1959, Vol. 16, Nos. 2-12

1960, Vol. 17, Nos. 2-12

1961, Vol. 18, Nos. 1, 3-11

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ARCHIVE SUBJECT MATTER GROUP:

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.12 APPROXIMATE NUMBER OF ENTRIES: 54 LINEAR INCHES: 11.5

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING:

The Refrigeration & Air Conditioning Business (Industrial Publishing Corp, Cleveland, Ohio)

1962, Vol. 19, Nos. 1-11

1963, Vol. 20, Nos. 1, 3, 5-7

1964, Vol. 21, No. 1

The Air Conditioning & Refrigeration Business (Industrial Publishing Corp., Cleveland, Ohio)

1965, Vol. 22, Nos. 6, 8-12

1966, Vol. 23, Nos. 1- 2, 4, 9-12

1967, Vol. 24, Nos. 2, 11-12

1968, Vol. 25, Nos. 1-12

1969, Vol. 26, No. 1

Air Conditioning & Refrigeration Business (Industrial Publishing Corp., Cleveland, Ohio)

1969, Vol. 26, Nos. 2-8

1970, Vol. 27, No. 8

ARCHIVE SUBJECT MATTER GROUP:

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.13 APPROXIMATE NUMBER OF ENTRIES: 41 LINEAR INCHES: 9

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING:

Refrigerating Engineering (American Society of Refrigerating Engineers, New York, NY)

1954, Vol. 62, Nos. 3, 5-12

1955, Vol. 63, Nos. 1-5, 7-12

1956, Vol. 64, Nos. 1-12

1957, Vol. 65, Nos. 1-9

ARCHIVE SUBJECT MATTER GROUP:
Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.14 APPROXIMATE NUMBER OF ENTRIES: 50 LINEAR INCHES: 12

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING:

Ashrae Journal (American Society of Heating, Refrigeration and Air-Conditioning Engineers, New York, NY)

1960, Vol. 2, Nos. 7-9

1961, Vol. 3, Nos. 5-9, 11-12

1962, Vol. 4, No. 1

1964, Vol. 6, Nos. 11-12

1965, Vol. 7, Nos. 7-8, 10-12

1966, Vol. 8, Nos. 1, 5, 10, 12

1967, Vol. 9, Nos. 1, 3, 11-12

1968, Vol. 10, Nos. 1-12

1969, Vol. 11, Nos. 1-10

1973, Vol. 15, No. 6

2002, Vol. 44, No. 3

ARCHIVE SUBJECT MATTER GROUP:

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.15 APPROXIMATE NUMBER OF ENTRIES: 82 LINEAR INCHES: 12

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS - REFRIGERATION, HEATING AND AIR CONDITIONING:

Oil-Heat & Propane World (Age Publications, Ltd.,

Toronto, Ontario)

1950, Vol. 1, Nos. 2-4, 6-12

1951, Vol. 2, Nos. 1-12

1952, Vol. 3, Nos. 1-7

Oil & Gas Heat (Age Publications, Ltd., Toronto, Ontario)

1952, Vol. 3, Nos. 8-12

1953, Vol. 4, Nos. 1-12

1954, Vol. 5, Nos. 1-11

1955, Vol. 6, Nos. 1-2, 4, 8, 11-12

1956, Vol. 7, Nos. 3, 5-6, 8-12

1957, Vol. 8, Nos. 1-7, 9

Automatic Heating (Age Publications, Ltd., Toronto, Ontario)

1958, Vol. 9, Nos. 10-12

ARCHIVE SUBJECT MATTER GROUP:

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.16 APPROXIMATE NUMBER OF ENTRIES: 67 LINEAR INCHES: 10

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING:

Heating, Plumbing and Air Conditioning Age (Age Publications, Ltd., Toronto, Ontario)

1951, Vol. 30, Nos. 2-12

1952, Vol. 31, Nos. 1-12

1953, Vol. 32, Nos. 1-12

1954, Vol. 33, Nos. 1-10, 12

1955, Vol. 34, Nos. 1-4, 7-12

1956, Vol. 35, Nos. 2-12

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.17 APPROXIMATE NUMBER OF ENTRIES: 55 LINEAR INCHES: 12.5

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING:

Heating, Plumbing and Air Conditioning Age (Age Publications, Ltd., Toronto, Ontario)

1957, Vol. 36, Nos. 1-3, 5, 7-9, 11

1958, Vol. 37, Nos. 1-6, 10-11

Automatic Heating/Plumbing/Air Conditioning (Age Publications, Ltd., Toronto, Ontario)

1959, Vol. 38, Nos. 4, 7, 9, 11

1960, Vol. 39, Nos. 5-11

1961, Vol. 40, Nos. 4-9, 11-12

1962, Vol. 41, Nos. 3, 7, 11-12

1963, Vol. 42, Nos. 1, 5, 11

1964, Volume unknown, in sleeve

Heating/Plumbing/Air Conditioning (Southam Business Publications, Don Mills, ON)

1965, Vol. 44, Nos. 6, 9-12

Heating Piping & Air Conditioning (Reinhold Publishing Corp., Chicago, IL)

1965, Vol. 37, Nos. 5, 7, 9-12

1966, Vol. 38, No. 1

ARCHIVE SUBJECT MATTER GROUP:

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.18 APPROXIMATE NUMBER OF ENTRIES: 45 LINEAR INCHES: 8.75

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING:

Heating & Plumbing Engineer (Maclean-Hunter Publishing Company Ltd., Toronto, ON)

1955, Vol. 49, No.12

1956, Vol. 50, Nos. 2-12

1957, Vol. 51, Nos. 1-12

1958, Vol. 52, Nos. 2, 4-5

1960, Vol. 54, Nos. 2-11

1961, Vol. 55, Nos. 4-6, 8-12

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.19 APPROXIMATE NUMBER OF ENTRIES: 72 LINEAR INCHES: 10.5

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains early 20th century, commercial, trade and technical journals. These journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry. With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

BOX CONTENTS, HVACR SERIAL JOURNALS - REFRIGERATION, HEATING AND AIR CONDITIONING:

Heating & Plumbing Engineer (Maclean-Hunter Publishing Company Ltd., Toronto, ON)

1962, Vol. 56, Nos.1, 7-8

Mechanical Contracting & Plumbing (Maclean-Hunter Publishing Company Ltd., Toronto, ON)

1962, Vol. 56, No. 11

1963, Vol. 57, Nos. 1, 4-7, 10

1964, Vol. 58, No. 1

1965, Vol. 59, Nos. 8, 10-12

1966, Vol. 60, Nos. 1, 3-4, 9-12

1967, Vol. 61, Nos. 1, 6

Mechanical Contracting & Engineering (Maclean-Hunter Publishing Company Ltd., Toronto, ON)

1967, Vol. 61, Nos. 10-12

1968, Vol. 62, Nos. 1-11

Page 1 of 4, See Pages 20, 21, 22 Attached

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.19 APPROXIMATE NUMBER OF ENTRIES: 72 LINEAR INCHES: 10.5

BOX CONTENTS, HVACR SERIAL JOURNALS - REFRIGERATION, HEATING AND AIR CONDITIONING: Page 2/4

Electrical Contracting & Maintenance in Canada (McLean-Hunter Publishing Co, Toronto, ON) 1954, December Issue

National Plumbing & Heating Contractor (Arthurs-Franklin Publications, Ltd., Toronto, ON) 1957, Vol. 5, Nos. 8-12 1957, Vol. 6, No. 1

Industrial Refrigeration (Nickerson & Collins, Co., Chicago, IL) 1957, Vol. 133, No. 5

Canadian Mechanical Contractor (National Directorate of Canadian Plumbing & Mechanical Contractors Association, Toronto, ON)

1959, May-June Issue

Fuel Oil News of Canada (Oildom Publishing, Bayonne, NJ) 1960, Vol. 1, Nos. 10-12

Automatic Heating/Plumbing/Air Conditioning (Southam Business Publications, Ltd., Don Mills, ON) 1964, Vol. 43, No. 1

Heating Piping & Air Conditioning (Reinhold Publishing, Inc., Chicago, IL) 1965, September. Trade Literature Supplement, issue 2 of 2.

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.19 APPROXIMATE NUMBER OF ENTRIES: 72 LINEAR INCHES: 10.5

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING: Page 3/4

- The Canadian Mechanical Contractor (Canadian Plumbing & Mechanical Contractors Association, Toronto, ON)
 1966, 25th Annual Report
- Comfort Engineering ((US Industrial Publications, Inc. Stamford, CT) 1967, Vol. 7, No. 2
- Environmental Design (US Industrial Publications, Inc. Stamford, CT) 1968, Vol. 8, No. 1
- Building Services the CIBSE Journal (CIBSE Heritage Group, UK) 1988, Stand-Alone Publication
- The Magic Of Hot Water (Andrews Water Heaters, Birmingham, UK) 2001, Stand-alone Publication
- Historic Gas Times (The Institution of Gas Engineers and Managers, Edinburgh, UK) 2001, Nos. 27 (June) & 29 (December)
- HAC (EMAP Trenton, Ltd., Croydon, UK) 2002, January Issue.

Group No. 2 - HVACR Trade and Technical Journals

STORAGE BOX NO. 2.19 APPROXIMATE NUMBER OF ENTRIES: 72 LINEAR INCHES: 10.5

BOX CONTENTS, HVACR SERIAL JOURNALS – REFRIGERATION, HEATING AND AIR CONDITIONING: Page 4/4

SNIPS (Business News Publishing Company, Troy, MI) 2002, Vol. 71, Nos. 2, 12

HPAC (Rogers Media Inc, Toronto, ON)

2002, Vol. 76, No. 4, 6

2003, Vol. 77, No. 1

2004, Vol. 78, No. 2

Plumbing Systems & Design (American Society of Plumbing Engineers, Chicago, IL) 2002, September/October Issue.

HPAC Engineering (Penton Media, Cleveland, OH) 2002, Vol. 74, No. 10

RSES Journal (Refrigeration Service Engineers Society, Des Plaines, IL) 2002, Vol. 8, Nos. 5, 6

Supply House Times (Business News Publishing Company, Troy, MI) 2002, Vol. 45, No. 8

Plumbing & Mechanical (Business News Publishing Company, Troy, MI) 2002, Vol. 20, No. 8

ARCHIVE SUBJECT MATTER GROUP: Group No. 3

HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature

STORAGE BOX GROUP NO. 3.1 APPROXIMATE NUMBER OF ENTRIES: 83 LINEAR INCHES: 11

SUBJECT MATTER DESCRIPTION - STORIES TOLD:

This Subject Matter Group contains HVACR manufacturer's equipment catalogues, engineering applications and service literature. It tells the stories of the critical role and contribution of manufactures and their agents in the early developmental years of the industry. It was a literature highly valued by workers, as an authoritative and reliable source of consumer and technical information on which they could and would depend.

For it was a period in which academic and scholarly texts were few and far between, and few dedicated HVACR education and training schools existed. Yet, paradoxically, this was a critical period of "incubation" in the evolution of the industry. It was a moment in time on which workers in the field were desperately dependent on the "mid-wife" role played by the manufacturers and suppliers of the innovative equipment and devices that provided the foundation stones on which the Canadian industry would build.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE – Manufacturer's Documentation:

Refrigeration & Air Conditioning:

File 3.1.1 - Manufacturers of Refrigeration/AC Components, Uncatalogued

File 3.1.2 - Suppliers and Wholesalers of Refrigeration/AC Components, Uncatalogued

File 3.1.3 Manufacturers and Suppliers of Refrigeration/AC Components, Uncatalogued

ARCHIVE SUBJECT MATTER GROUP: Group No. 3

HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature

STORAGE BOX GROUP NO. 3.2 APPROXIMATE NUMBER OF ENTRIES: 88 LINEAR INCHES: 9

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains HVACR manufacturer's equipment catalogues, engineering applications and service literature. It tells the stories of the critical role and contribution of manufactures and their agents in the early developmental years of the industry. It was a literature highly valued by workers, as an authoritative and reliable source of consumer and technical information on which they could and would depend.

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BOX CONTENTS, HVACR ARCHIVAL LITERATURE - Manufacturer's Documentation:

Refrigeration, Air Conditioning & Plumbing

File 3.2.1 - Pipe, Tube and Fitting Manufacturers & Suppliers, Uncatalogued

File 3.2.2 - Refrigeration/AC Tools, Testing and Instrumentation Devices, Uncatalogued

Files 3.2.3 to 3.2.8 - Household Refrigeration/AC Equipment

ARCHIVE SUBJECT MATTER GROUP: Group No. 3

HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature

STORAGE BOX GROUP NO. 3.3 APPROXIMATE NUMBER OF ENTRIES: 86 LINEAR INCHES: 12

SUBJECT MATTER DESCRIPTION - STORIES TOLD:

This Subject Matter Group contains HVACR manufacturer's equipment catalogues, engineering applications and service literature. It tells the stories of the critical role and contribution of manufactures and their agents in the early developmental years of the industry. It was a literature highly valued by workers, as an authoritative and reliable source of consumer and technical information on which they could and would depend.

For it was a period in which academic and scholarly texts were few and far between, and few dedicated HVACR education and training schools existed. Yet, paradoxically, this was a critical period of "incubation" in the evolution of the industry. It was a moment in time on which workers in the field were desperately dependent on the "mid-wife" role played by the manufacturers and suppliers of the innovative equipment and devices that provided the foundation stones on which the Canadian industry would build.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE - Manufacturer's Documentation:

Automatic Oil Heating

- File 3.3.1 Domestic and Commercial Oil Heating Equipment and Service Manuals, Uncatalogued
- File 3.3.2 Domestic and Commercial Oil Heating Equipment and Service Manuals, Uncatalogued
- File 3.3.3 Automatic Oil Heating Control Systems and Controls, Uncatalogued
- File 3.4.4 Honeywell Residential Controls Handbooks, Vols. 1 & 2
- File 3.4.5 Honeywell Residential Controls Handbooks, Vols. 5 & 6
- File 3.4.6 Honeywell Control Systems Installation & Product Guides, Uncatalogued in Binder

ARCHIVE SUBJECT MATTER GROUP: Group No. 3

HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature

STORAGE BOX GROUP NO. 3.4 APPROXIMATE NUMBER OF ENTRIES: 118 LINEAR INCHES: 12

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains HVACR manufacturer's equipment catalogues, engineering applications and service literature. It tells the stories of the critical role and contribution of manufactures and their agents in the early developmental years of the industry. It was a literature highly valued by workers, as an authoritative and reliable source of consumer and technical information on which they could and would depend.

For it was a period in which academic and scholarly texts were few and far between, and few dedicated HVACR education and training schools existed. Yet, paradoxically, this was a critical period of "incubation" in the evolution of the industry. It was a moment in time on which workers in the field were desperately dependent on the "mid-wife" role played by the manufacturers and suppliers of the innovative equipment and devices that provided the foundation stones on which the Canadian industry would build.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE - Manufacturer's Documentation:

Kelvinator & Kelvinator of Canada

File 3.4.1 – Coin Commemorating Kelvinator's Silver Anniversary

File 3.4.2 - Business Card

File 3.4.3 – Pocket Dealer's Catalogue

File 3.4.4 – Leatherette folders (2)

File 3.4.5 – Dealer Newsletters, Bulletins, Uncatalogued

File 3.4.6 - Kelvinator Refrigeration Commercial Sales Manual, 1940-1950, Uncatalogued

File 3.4.7 - Kelvinator Refrigeration Commercial Sales Manual, 1950s, Uncatalogued

File 3.4.8 - Kelvinator Refrigeration Domestic Sales Manual, 1950-1960s, Uncatalogued

File 3.4.9 - Kelvinator Refrigeration Domestic Sales Manual, 1950-1960, Uncatalogued

ARCHIVE SUBJECT MATTER GROUP: Group No. 3

HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature

STORAGE BOX GROUP NO. 3.5 APPROXIMATE NUMBER OF ENTRIES: 5 LINEAR INCHES: 10

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains HVACR manufacturer's equipment catalogues, engineering applications and service literature. It tells the stories of the critical role and contribution of manufactures and their agents in the early developmental years of the industry. It was a literature highly valued by workers, as an authoritative and reliable source of consumer and technical information on which they could and would depend.

For it was a period in which academic and scholarly texts were few and far between, and few dedicated HVACR education and training schools existed. Yet, paradoxically, this was a critical period of "incubation" in the evolution of the industry. It was a moment in time on which workers in the field were desperately dependent on the "mid-wife" role played by the manufacturers and suppliers of the innovative equipment and devices that provided the foundation stones on which the Canadian industry would build.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE - Manufacturer's Documentation:

Kelvinator & Kelvinator of Canada Manuals

- File 3.5.1 Equipment Manuals, 1929, Reconstructed 1995, Uncatalogued
- File 3.5.2 Bulletins, 1928-1936, Uncatalogued
- File 3.5.3 Price Lists, 1929-1936, Uncatalogued
- File 3.5.4 Domestic and Commercial Parts Catalogue, 1931-1941, Uncatalogued
- File 3.5.5 Thematic Graphic Materials, Domestic Technology Exhibit,
 Assembled for National Museum of Science and Technology, 1995, Uncatalogued

ARCHIVE SUBJECT MATTER GROUP: Group No. 3

HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature

STORAGE BOX GROUP NO. 3.6 APPROXIMATE NUMBER OF ENTRIES: 21 LINEAR INCHES: 7

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains HVACR manufacturer's equipment catalogues, engineering applications and service literature. It tells the stories of the critical role and contribution of manufactures and their agents in the early developmental years of the industry. It was a literature highly valued by workers, as an authoritative and reliable source of consumer and technical information on which they could and would depend.

For it was a period in which academic and scholarly texts were few and far between, and few dedicated HVACR education and training schools existed. Yet, paradoxically, this was a critical period of "incubation' in the evolution of the industry. It was a moment in time on which workers in the field were desperately dependent on the "mid-wife" role played by the manufacturers and suppliers of the innovative equipment and devices that provided the foundation stones on which the Canadian industry would build.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE - Manufacturer's Documentation:

Kelvinator & Kelvinator of Canada

File 3.6.1 - Commercial Refrigerator Equipment and Sales Literature, 1929 - 1959, Uncatalogued

File 3.6.2 – Commercial Refrigeration Equipment, 1929 – 1939, Uncatalogued

File 3.6.3 – Domestic and Commercial Refrigeration Service, 1929 – 1936, Uncatalogued

ARCHIVE SUBJECT MATTER GROUP: Group No. 3

HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature

STORAGE BOX GROUP NO. 3.7 APPROXIMATE NUMBER OF ENTRIES: 4 LINEAR INCHES: 13

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains HVACR manufacturer's equipment catalogues, engineering applications and service literature. It tells the stories of the critical role and contribution of manufactures and their agents in the early developmental years of the industry. It was a literature highly valued by workers, as an authoritative and reliable source of consumer and technical information on which they could and would depend.

For it was a period in which academic and scholarly texts were few and far between, and few dedicated HVACR education and training schools existed. Yet, paradoxically, this was a critical period of "incubation' in the evolution of the industry. It was a moment in time on which workers in the field were desperately dependent on the "mid-wife" role played by the manufacturers and suppliers of the innovative equipment and devices that provided the foundation stones on which the Canadian industry would build.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE - Manufacturer's Documentation:

Frigidaire

File 3.7.1 - Service Manuals, Chapters 1-6, undated, with Supplements 6 & 7

File 3.7.2 - Commercial Service Manual, Chapters 1-6, undated, with Supplements 8-37

File 3.7.3 - Master Parts and Price Catalogue, 1937-1940

File 3.7.4 – Installation and Service Manuals, Series 405, for products prior to 1937, copyright 1930-1943

ARCHIVE SUBJECT MATTER GROUP: Group No. 3

HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature

STORAGE BOX GROUP NO. 3.8 APPROXIMATE NUMBER OF ENTRIES: 13 LINEAR INCHES: 9

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains HVACR manufacturer's equipment catalogues, engineering applications and service literature. It tells the stories of the critical role and contribution of manufactures and their agents in the early developmental years of the industry. It was a literature highly valued by workers, as an authoritative and reliable source of consumer and technical information on which they could and would depend.

For it was a period in which academic and scholarly texts were few and far between, and few dedicated HVACR education and training schools existed. Yet, paradoxically, this was a critical period of "incubation' in the evolution of the industry. It was a moment in time on which workers in the field were desperately dependent on the "mid-wife" role played by the manufacturers and suppliers of the innovative equipment and devices that provided the foundation stones on which the Canadian industry would build.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE - Manufacturer's Documentation:

Frigidaire

File 3.8.1 – Personalized Frigidaire Data Book, T.H. Oliver

File 3.8.2 - Air Conditioning Product Memos, Manuals, 1940s-1950s, Uncatalogued

File 3.8.3 – Service and Sales Literature, Uncatalogued

File 3.8.4 – Personalized Leatherette Service and Sales Literature Binder, T.H. Oliver (Empty)

ARCHIVE SUBJECT MATTER GROUP: Group No. 3

HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature

STORAGE BOX GROUP NO. 3.9 APPROXIMATE NUMBER OF ENTRIES: 5 LINEAR INCHES: 15

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains HVACR manufacturer's equipment catalogues, engineering applications and service literature. It tells the stories of the critical role and contribution of manufactures and their agents in the early developmental years of the industry. It was a literature highly valued by workers, as an authoritative and reliable source of consumer and technical information on which they could and would depend.

For it was a period in which academic and scholarly texts were few and far between, and few dedicated HVACR education and training schools existed. Yet, paradoxically, this was a critical period of "incubation" in the evolution of the industry. It was a moment in time on which workers in the field were desperately dependent on the "mid-wife" role played by the manufacturers and suppliers of the innovative equipment and devices that provided the foundation stones on which the Canadian industry would build.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE - Manufacturer's Documentation:

Carrier Corporation

File 3.9.1 – Applied Products Sales & Engineering Manual, Vol. 1 (1950s – 1960s)

File 3.9.2 - Applied Products Sales & Engineering Manual, Vol. 2 (1950s - 1960s)

File 3.9.3 – Packaged Products Sales & Engineering, Vol. 1 (1950s – 1960s)

File 3.9.4 – Packaged Products Sales & Engineering, Vol. 2 (1950s – 1960s)

File 3.9.5 - Service Parts Price List

ARCHIVE SUBJECT MATTER GROUP: Group No. 3

HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature

STORAGE BOX GROUP NO. 3.10 APPROXIMATE NUMBER OF ENTRIES: 9 LINEAR INCHES: 15

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains HVACR manufacturer's equipment catalogues, engineering applications and service literature. It tells the stories of the critical role and contribution of manufactures and their agents in the early developmental years of the industry. It was a literature highly valued by workers, as an authoritative and reliable source of consumer and technical information on which they could and would depend.

For it was a period in which academic and scholarly texts were few and far between, and few dedicated HVACR education and training schools existed. Yet, paradoxically, this was a critical period of "incubation" in the evolution of the industry. It was a moment in time on which workers in the field were desperately dependent on the "mid-wife" role played by the manufacturers and suppliers of the innovative equipment and devices that provided the foundation stones on which the Canadian industry would build.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE – Manufacturer's Documentation:

File 3.10.1 - Carrier Corporation, System Design Manual, 1950

File 3.10.2 - Crane, Valves, Fittings and Pipes

File 3.10.3 - Crane, Flow of Fluids Through Valves, Fittings and Pipes, Technical Paper 410-C, 1957

File 3.10.4 - Bell & Gossett Company, Handbook, Second Edition, Undated

File 3.10.5 - Bell & Gossett Company Engineering Manual, Undated

File 3.10.6 - S.A. Armstrong, Ltd., Sound Control in Hydronic Piping Systems, Undated

File 3.10.7 - Carrier Corporation, Construction Specifications, Sheet Metal, Ducts, Piping

(Reconstructed Manual) 1946-1958

File 3.10.8 – Carrier Corporation, Product Information, Comfort and Industrial Air Conditioning – Load Estimating
Data and Standards, Chapters 1-7 (Reconstructed Manual) 1956-1958

File 3.10.9 – Carrier Corporation, Air Conditioning, Fundamentals of Refrigeration, Service Training Aids, T.H. Oliver Ltd., Aurora (Reconstructed Manual) 1960-1965

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ARCHIVE SUBJECT MATTER GROUP: Group No. 3

HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature

STORAGE BOX GROUP NO. 3.11 APPROXIMATE NUMBER OF ENTRIES: 6 LINEAR INCHES: 15

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains HVACR manufacturer's equipment catalogues, engineering applications and service literature. It tells the stories of the critical role and contribution of manufactures and their agents in the early developmental years of the industry. It was a literature highly valued by workers, as an authoritative and reliable source of consumer and technical information on which they could and would depend.

For it was a period in which academic and scholarly texts were few and far between, and few dedicated HVACR education and training schools existed. Yet, paradoxically, this was a critical period of "incubation" in the evolution of the industry. It was a moment in time on which workers in the field were desperately dependent on the "mid-wife" role played by the manufacturers and suppliers of the innovative equipment and devices that provided the foundation stones on which the Canadian industry would build.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE – Manufacturer's Documentation:

Canadian General Electric Company, Ltd. (G.E.)

File 3.11.1 - Manufacturer's Filing Instructions

File 3.11.2 – Service Manual – Book No. 1, Small Appliances Parts & Prices

File 3.11.3 - Book No. 1, Small Appliances Parts & Prices, Addendum 1960-1962

File 3.11.4 – Book No. 1, Small Appliances Parts & Prices, Addendum 1963-1966

File 3.11.5 - Book No. 1, Small Appliances Parts & Prices, Addendum 1963-1967

File 3.11.6 - Book No. 1, Small Appliances Parts & Prices, Addendum 1968-1969

File 3.11.7 - Book No. 1, Small Appliances Parts & Prices, Addendum 1970-1972

ARCHIVE SUBJECT MATTER GROUP: Group No. 3

HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature

STORAGE BOX GROUP NO. 3.12 APPROXIMATE NUMBER OF ENTRIES: 7 LINEAR INCHES: 15

SUBJECT MATTER DESCRIPTION - STORIES TOLD:

This Subject Matter Group contains HVACR manufacturer's equipment catalogues, engineering applications and service literature. It tells the stories of the critical role and contribution of manufactures and their agents in the early developmental years of the industry. It was a literature highly valued by workers, as an authoritative and reliable source of consumer and technical information on which they could and would depend.

For it was a period in which academic and scholarly texts were few and far between, and few dedicated HVACR education and training schools existed. Yet, paradoxically, this was a critical period of "incubation" in the evolution of the industry. It was a moment in time on which workers in the field were desperately dependent on the "mid-wife" role played by the manufacturers and suppliers of the innovative equipment and devices that provided the foundation stones on which the Canadian industry would build.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE – Manufacturer's Documentation:

Canadian General Electric Company, Ltd. (G.E.)

File 3.12.1 - Product Sheets, Uncatalogued

File 3.12.2 – Service Manual – Book No. 2, Small Appliances, Technical Data, Heating Appliances, Service Tools, Policy

File 3.12.3 - Small Appliances, Technical Data, Heating Appliances, Addendum, 1960-1972

File 3.12.4 – Service Manual – Book No. 3, Small Appliances, Technical Data, Motorized Appliances

File 3.12.5 - Book No. 3, Small Appliances, Technical Data, Motorized Appliances, Addendum 1960-1968

File 3.12.6 – Book No. 3, Small Appliances, Technical Data, Motorized Appliances, Addendum 1969-1972

ARCHIVE SUBJECT MATTER GROUP:

Group No. 4 - HVACR Technical and Trade Training, Self-Help Organizations

STORAGE BOX NO. 4.1 APPROXIMATE NUMBER OF ENTRIES: 4 LINEAR INCHES: 12

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains representative trade training and professional development materials produced by independent HVACR technical and trade training organizations. The stories told are of the centrality of such organizations that sprung up, variously established by the trade itself, as it responded reflexively to the needs and conditions of the times. Beyond the support provided by manufactures in the early developmental years of the industry [Group 3], these organization would be a central player in trade training and professional development.

They would be part of the great "self-improvement movement" of the early 20th century, whose business definition typically centered on the development of individual, personal talents, interests, and on economic and intellectual self-improvement. Along with the support in training and business development provided by manufactures, these organizations helped to give the industry the added "jump-start" it desperately needed to develop the specialized skill pool and labor force required to help ensure the survival of the industry in often lean times. The idea of "self-help" in training and development would come to be significant marker of the HVACR trade culture in Canada. Among other things it would delay the establishment of formal training programs and apprenticeship until the later part of the 20th century.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE – The Refrigeration Services Engineers Society:

Founded in 1933, RSES provided training and development for independent service operators, through their publications, and local Chapters, which promoted discussion and the exchange of ideas and experience. Howard [T.H. Oliver] was a founding member of the RSES Canadian, Maple Leaf:

- File 4.1.1 RSES Lecture Course 1934 to 1946, 44 lectures offered by RSES for self-help, independent technical training and professional development produced over a 12-year period, sustained through the WWII years
- File 4.1.2 RSES Service Application Manual, published 1950's to 1960's, Sections 1-24
- File 4.1.3 RSES Service Application Manual, published 1950's to 1960's, Sections 26-99
- File 4.1.4 RSES Service Manual, published 1950's to 1960's, Sections 0-99

ARCHIVE SUBJECT MATTER GROUP:

Group No. 4 - HVACR Technical and Trade Training, Self-Help Organizations

STORAGE BOX NO. 4.2 APPROXIMATE NUMBER OF ENTRIES: 21 LINEAR INCHES: 13

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains representative trade training and professional development materials produced by independent HVACR technical and trade training organizations. The stories told are of the centrality of such organizations that sprung up, variously established by the trade itself, as it responded reflexively to the needs and conditions of the times. Beyond the support provided by manufactures in the early developmental years of the industry [Group 3], these organization would be a central player in trade training and professional development.

They would be part of the great "self-improvement movement" of the early 20th century, whose business definition typically centered on the development of individual, personal talents, interests, and on economic and intellectual self-improvement. Along with the support in training and business development provided by manufactures, these organizations helped to give the industry the added "jump-start" it desperately needed to develop the specialized skill pool and labor force required to help ensure the survival of the industry in often lean times. The idea of "self-help" in training and development would come to be significant marker of the HVACR trade culture in Canada. Among other things it would delay the establishment of formal training programs and apprenticeship until the later part of the 20th century.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE - RSES Related Service Publications:

RSES, Continued:

File 4.2.1 – RSES Service Applications Manual, Supplements 1950's to 1960's, Uncatalogued

File 4.2.2 - The RSES Question Box 1938, 1939,1941, 1945, 1946

Refrigeration Service Pointers: 1946,1959,

Refrigeration Contractor's Estimating Guide 1948

RSES Annual Reports 1937, 1929, 1941-42

RSES Directory Service Companies Chapter Members, 1945

RSES Ontario Maple Leaf Chapter 1947-48

RSES Membership Bulletin 1960

File 4.2.3 – RSES Customer Equipment Record Pad, Blank, 1953

RSES Master Service Manual, Vol. 3

Assorted Documents, Sleeved, Uncatalogued

ARCHIVE SUBJECT MATTER GROUP:

Group No. 4 - HVACR Technical and Trade Training, Self-Help Organizations

STORAGE BOX NO. 4.3 APPROXIMATE NUMBER OF ENTRIES: 8 LINEAR INCHES: 15

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains representative trade training and professional development materials produced by independent HVACR technical and trade training organizations. The stories told are of the centrality of such organizations that sprung up, variously established by the trade itself, as it responded reflexively to the needs and conditions of the times. Beyond the support provided by manufactures in the early developmental years of the industry [Group 3], these organization would be a central player in trade training and professional development.

They would be part of the great "self-improvement movement" of the early 20th century, whose business definition typically centered on the development of individual, personal talents, interests, and on economic and intellectual self-improvement. Along with the support in training and business development provided by manufactures, these organizations helped to give the industry the added "jump-start" it desperately needed to develop the specialized skill pool and labor force required to help ensure the survival of the industry in often lean times. The idea of "self-help" in training and development would come to be significant marker of the HVACR trade culture in Canada. Among other things it would delay the establishment of formal training programs and apprenticeship until the later part of the 20th century.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE – HVACR Technical and Trade Training, Self-Help Organizations:

- File 4.3.1 National Warm Air Heating and Air Conditioning Association, Canadian Chapter 1950
- File 4.3.2 Electric Heating Manual, 1960
- File 4.3.3 Electric Heating Association Docs, Sleeved,
 Canadian Refrigeration and Air Conditioning Association [CRCA], 1960

ARCHIVE SUBJECT MATTER GROUP:

Group No. 4 - HVACR Technical and Trade Training, Self-Help Organizations

STORAGE BOX NO. 4.4 APPROXIMATE NUMBER OF ENTRIES: 6 LINEAR INCHES: 15

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains representative trade training and professional development materials produced by independent HVACR technical and trade training organizations. The stories told are of the centrality of such organizations that sprung up, variously established by the trade itself, as it responded reflexively to the needs and conditions of the times. Beyond the support provided by manufactures in the early developmental years of the industry [Group 3], these organization would be a central player in trade training and professional development.

They would be part of the great "self-improvement movement" of the early 20th century, whose business definition typically centered on the development of individual, personal talents, interests, and on economic and intellectual self-improvement. Along with the support in training and business development provided by manufactures, these organizations helped to give the industry the added "jump-start" it desperately needed to develop the specialized skill pool and labor force required to help ensure the survival of the industry in often lean times. The idea of "self-help" in training and development would come to be significant marker of the HVACR trade culture in Canada. Among other things it would delay the establishment of formal training programs and apprenticeship until the later part of the 20th century.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE – HVACR Technical and Trade Training, Self-Help Organizations:

- File 4.4.1 ASRE Air Conditioning Data Book
- File 4.4.2 ASHRAE Heating, Ventilating, Air Conditioning Data Book, 196
- File 4.4.3 ASHRAE Guide & Data Book, Applications, 1962
- File 4.4.4 ASHRAE Guide & Data Book, Fundamentals & Equipment, 1963
- File 4.4.5 ASHRAE Guide & Data Book, Fundamentals & Equipment, 1965 & 1966
- File 4.4.6 ASHRAE Guide & Data Book, Applications, 1966 & 1967

ARCHIVE SUBJECT MATTER GROUP:

Group No. 4 - HVACR Technical and Trade Training, Self-Help Organizations

STORAGE BOX NO. 4.5 APPROXIMATE NUMBER OF ENTRIES: 9 LINEAR INCHES: 15

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

This Subject Matter Group contains representative trade training and professional development materials produced by independent HVACR technical and trade training organizations. The stories told are of the centrality of such organizations that sprung up, variously established by the trade itself, as it responded reflexively to the needs and conditions of the times. Beyond the support provided by manufactures in the early developmental years of the industry [Group 3], these organization would be a central player in trade training and professional development.

They would be part of the great "self-improvement movement" of the early 20th century, whose business definition typically centered on the development of individual, personal talents, interests, and on economic and intellectual self-improvement. Along with the support in training and business development provided by manufactures, these organizations helped to give the industry the added "jump-start" it desperately needed to develop the specialized skill pool and labor force required to help ensure the survival of the industry in often lean times. The idea of "self-help" in training and development would come to be significant marker of the HVACR trade culture in Canada. Among other things it would delay the establishment of formal training programs and apprenticeship until the later part of the 20th century.

BOX CONTENTS, HVACR ARCHIVAL LITERATURE – HVACR Technical and Trade Training, Self-Help Organizations:

File 4.5.1 – ASHRAE Handbook of Fundamentals, 1967 (2)

File 4.5.2 – ASHRAE Guide & Data Book, Systems & Equipment, 1967

File 4.5.3 – ASHRAE Guide & Data Book, Applications, 1968

File 4.5.4 – ASHRAE Guide & Data Book, Equipment, 1969

File 4.5.5 – ASHRAE Guide & Data Book, Systems, 1970

File 4.5.6 – ASHRAE Guide & Data Book, Applications, 1971

File 4.5.7 – ASHRAE Guide & Data Book Equipment, 1972

File 4.5.8 – ASHRAE Handbook of Fundamentals, 1972

ARCHIVE SUBJECT MATTER GROUP:

Group No. 5 - Trade Training and Professional Development

STORAGE BOX NO. 5.1 APPROXIMATE NUMBER OF ENTRIES: 26 LINEAR INCHES: 25

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

Further in the matter of trade training and development [See Groups 3 and 4], this Subject Matter Group contains an archival literature which traces the evolution of best practices in trade and technical training, and professional development. It provides a valuable reminder of the cumulative wealth of knowledge and understandings on which the HVACR builds in responding to the demanding training and human development challenges of the Industry in the early years of the 21st century. The stories told are of the evolution of manual and industrial training in pre-renaissance times, the rise of the handicraft and apprenticeship movements, the contribution of modern science to our understandings of best practices in teaching and learning, the world change in trade, technical and vocational training that came with WWII, the push for increasing professionalism, the contribution of educational psychology, and the emergence of the "educational technology" movement of the 1960's

BOX CONTENTS, HVACR ARCHIVAL LITERATURE - TEXTS, PAGE 1 OF 2:

- File 5.1.1 "History of Manual and Industrial Education, Up to 1870" Charles Alpheus Bennett, 1926
- File 5.1.2 "History of Manual and Industrial Education, 1870-1917" Charles Alpheus Bennett, 1937
- File 5.1.3 "Applied Teaching Techniques" Gilbert G. Weaver & Louis Cenci, 1960
- File 5.1.4 "A History of Education: Socrates to Montessori" Luella Cole, 1961
- File 5.1.5- "Programmed Learning" Wendell I. Smith & J. William Moore, 1962
- File 5.1.6- "Psychological Principles in System Development" Robert M. Gagne, 1963
- File 5.1.7 "Categories of Human Learning" Arthur W. Melton, 1964
- File 5.1.8- "Educational Technology" John P. De Cecco, 1964
- File 5.1.9 "Teaching Machines.and Programmed Learning II" Robert Glaser, 1965 ·
- File 5.1.10 "Training Research and Education" Robert Glaser, 1965
- File 5.1.11 "Learning and Programmed Instruction" Julian I. Taber, Robert Glaser & Halmuth H. Schaefer, 1965
- File 5.1.12- "Analysis Technique for Instructors" Verne C. Fryklund, 1965
- File 5.1.13- "Teaching and Learning in Adult Education" Harry L. Miller; 1966
- File 5.1.14- "Man-Machine Systems in Education" John W. Loughary, 1966
- File 5.1.15 "Cybernetic Principles of Learning and Educational Design" Karl U. Smith & Margaret Foltz Smith, 1966
- File 5.1.16- "Research in Vocational and Technical Education" University of Wisconsin, 1967

CONTINUED ON PAGE 2

ARCHIVE SUBJECT MATTER GROUP:

Group No. 5 - Trade Training and Professional Development

STORAGE BOX NO. 5.1 APPROXIMATE NUMBER OF ENTRIES: 26 LINEAR INCHES: 25

BOX CONTENTS, HVACR ARCHIVAL LITERATURE - TEXTS, PAGE 2 OF 2:

File 5.1.17 - "Sociology and Modern Systems Theory" Walter Buckley, 1967

File 5.1.18 - "Training and Development Handbook" Robert L. Craig. & Lester R. Bittel, 1967

File 5.1.19 - "Educational Psychology: A Cognitive View" David P. Ausbel, 1968

File 5.1.20 - "The Teaching Revolution" W. Kenneth Richmond, 1969

File 5.1.21 - "Psychological Concepts in Education" B. Paul Komisar & C.J.B. Macmillan, eds., 1969

File 5.1.22 - "Designing1and Improving Courses and Curricula in Higher Education" Robert M. Diamond, 1989

File 5.1.23 - "Redefining Student Learning" Hermine H. Marshall, 1992

ARCHIVE SUBJECT MATTER GROUP: Group No. 5 - Trade Training and Professional Development

STORAGE BOX NO. 5.2 APPROXIMATE NUMBER OF ENTRIES: 6 LINEAR INCHES: 12

SUBJECT MATTER DESCRIPTION – STORIES TOLD:

Further in the matter of trade training and development [See Groups 3 and 4], this Subject Matter Group contains an archival literature which traces the evolution of best practices in trade and technical training, and professional development. It provides a valuable reminder of the cumulative wealth of knowledge and understandings on which the HVACR builds in responding to the demanding training and human development challenges of the Industry in the early years of the 21st century. The stories told are of the evolution of manual and industrial training in pre-renaissance times, the rise of the handicraft and apprenticeship movements, the contribution of modern Science to our understandings of best practices in teaching and learning, the world change in trade, technical and vocational training that came with WWII, the push for increasing professionalism, the contribution of educational psychology, and the emergence of the "educational technology" movement of the 1960's

BOX CONTENTS, HVACR ARCHIVAL LITERATURE – Vocational and Technical Training Curriculum Materials

- File 5.2.1 "An Analysis of the Refrigeration and Air Conditioning Trade", 152 pp. G. L. Oliver, Ontario College of Education, Vocational Training Department, Toronto 1964, Unpublished.
- File 5.2.2 "A Course of Study in Refrigeration and Air Conditioning for the Four-Year Science, Technology, and Trades Secondary School Program"; 60 pp. G. L. Oliver, 1964, Unpublished.
- File 5.2.3 "An Introduction to Refrigeration, Air Conditioning and Heating, a shop manual for Use in Grades 9 and 10", Prepared for the Board of Education, Township of Etobicoke, 1965, 250 pp. G. L. Oliver, 1965, Unpublished.
- File 5.2.4 "Air Conditioning. and Refrigeration Course of Study Outline, Grade 9. Prepared for Etobicoke Collegiate Institute, Technical Division, Air Conditioning and Refrigeration Dept.", 350 pp. G. L. Oliver, 1965, Unpublished.
- File 5.2.5 "An Introduction to Refrigeration, Air Conditioning and Heating", Manuscript material prepared for McGraw Hill publication, 150 pp. G. L. Oliver, c. 1966, Unpublished.
- File 5.2.6 "Mechanical Systems for Buildings", Ryerson Polytechnical Institute, Dept. of Extension, Course No. 282, 1964-1965, 250 pp., G.L. Oliver, 1964, Unpublished.
- File 5.2.7 "Chronological Listing of Major Events in the Development of Vocational-Technical Education in Ontario 1835-1925" G.L. Oliver, c.1965, Unpublished.
- File 5.2.8 "Assignment -The Development of Vocational-Technical Education in Ontario 1835-1925" G.L. Oliver, 1965, Unpublished

ARCHIVE SUBJECT MATTER GROUP:

Group No. 6 – Science and Technology, and Canadian Society and Culture

GROUP BOX NO. 6.1 APPROXIMATE NUMBER OF ENTRIES: 57 LINEAR INCHES: 18.5

SUBJECT MATTER DESCRIPTION:

This Subject Matter Group contains an archival sampling of popular commercial journalism. It's a journalism that begins to tell the many stories of the socio-cultural impact of early to mid-20th Century science and technology, on the evolving consumer market place, and on the life and times of Canadians. These stories of science and technology, and the devices and human interest they engendered, would prove to be important precursors and leading indicators of significant social and cultural change. Over the course of the 20th century and on into the 21st these new driving forces would, among other things, progressively reshape the lives and values of Canadians and the Canadian economy from a "resource-base" to a "consumer-base".

BOX CONTENTS, Popular Commercial Journalism – Popular Culture:

Popular Science (Popular Science Publishing Co., New York, NY)

1920, Vol. 96, No. 5 (Missing front and back cover)

1939, Vol. 135, No. 5 (Missing front and back cover)

1941, Vol. 138, Nos. 1, 2, 5, 6 (No. 2 missing covers)

1941, Vol. 139, No. 4

1945, Vol. 146, Nos. 5, 6

1945, Vol. 147, Nos. 1, 2, 3, 5

1946, Vol. 148, No. 3

1968, Vol. 192, Nos. 2-5

1968, Vol. 193, Nos. 1-6

1969, Vol. 194, Nos.1-3, 5-6

1969, Vol. 195, Nos. 2-6

1970, Vol. 196, No. 1

(Note: Size change in effect starting at No. 2)

ARCHIVE SUBJECT MATTER GROUP:

Group No. 6 – Science and Technology, and Canadian Society and Culture

GROUP BOX NO. 6.2 APPROXIMATE NUMBER OF ENTRIES: 43 LINEAR INCHES: 14.25

SUBJECT MATTER DESCRIPTION:

This Subject Matter Group contains an archival sampling of popular commercial journalism. It's a journalism that begins to tell the many stories of the socio-cultural impact of early to mid-20th Century science and technology, on the evolving consumer market place, and on the life and times of Canadians. These stories of science and technology, and the devices and human interest they engendered, would prove to be important precursors and leading indicators of significant social and cultural change. Over the course of the 20th century and on into the 21st these new driving forces would, among other things, progressively reshape the lives and values of Canadians and the Canadian economy from a "resource-base" to a "consumer-base".

BOX CONTENTS, Popular Commercial Journalism – Popular Culture, Page 1 of 2:

Popular Science (Popular Science Publishing Co., New York, NY)

1970, Vol. 196, Nos.2-6 1970, Vol. 197, Nos. 1, 2, 5, 6 1971, Vol. 198, Nos. 1-6 1971, Vol. 199, Nos. 1-6 1972, Vol. 200, Nos. 1-6 1972, Vol. 201, Nos. 1, 3, 4, 6 1973, Vol. 202, Nos. 1-3 1973, Vol. 203, Nos. 2-5 Canadian Geographical Journal (The Canadian Geographical Society, Montreal, PQ) 1930, Vol. 1, Nos. 1, 5 (No. 5 is missing covers) 1931, Vol. 2, Nos. 5, 6 (May, June) 1933, Vol. 7, No. 1 (July)

1941, Vol. 23, Nos. 2, 3

See 6.2, Page 2, Continued

ARCHIVE SUBJECT MATTER GROUP:

Group No. 6 – Science and Technology, and Canadian Society and Culture

GROUP BOX NO. 6.2 APPROXIMATE NUMBER OF ENTRIES: 43 LINEAR INCHES: 14.25

SUBJECT MATTER DESCRIPTION:

This Subject Matter Group contains an archival sampling of popular commercial journalism. It's a journalism that begins to tell the many stories of the socio-cultural impact of early to mid-20th Century science and technology, on the evolving consumer market place, and on the life and times of Canadians. These stories of science and technology, and the devices and human interest they engendered, would prove to be important precursors and leading indicators of significant social and cultural change. Over the course of the 20th century and on into the 21st these new driving forces would, among other things, progressively reshape the lives and values of Canadians and the Canadian economy from a "resource-base" to a "consumer-base".

BOX CONTENTS, Popular Commercial Journalism - Popular Culture, PAGE 2 OF 2:

National Geographic (National Geographic Society, Washington, D.C.)

1917, Vol. 32, No. 4

1919, Vol. 36, No. 6

1921, Vol. 37, No. 3

1922, Vol. 41, Nos. 2, 5, 6

1922, Vol. 42, Nos. 2, 6

1923, Vol. 44, No. 2

1924, Vol. 45, Nos. 2, 5

1926, Vol. 49, Nos. 4-6

1927, Vol. 51, Nos. 1, 4

1927, Vol. 52, Nos. 3, 5, 6

6.2 Continued from Page 1

Group No. 6 – Science and Technology, and Canadian Society and Culture

GROUP BOX NO. 6.3 APPROXIMATE NUMBER OF ENTRIES: 36 LINEAR INCHES: 13.75

SUBJECT MATTER DESCRIPTION:

This Subject Matter Group contains an archival sampling of popular commercial journalism. It's a journalism that begins to tell the many stories of the socio-cultural impact of early to mid-20th Century science and technology, on the evolving consumer market place, and on the life and times of Canadians. These stories of science and technology, and the devices and human interest they engendered, would prove to be important precursors and leading indicators of significant social and cultural change. Over the course of the 20th century and on into the 21st these new driving forces would, among other things, progressively reshape the lives and values of Canadians and the Canadian economy from a "resource-base" to a "consumer-base".

BOX CONTENTS, Popular Commercial Journalism – Popular Culture:

National Geographic (National Geographic Society,	1937, Vol. 71, No. 4
Washington, D.C.)	1937, Vol. 72, No. 1
1930, Vol. 57, No. 2	1938, Vol. 73, No. 3
1930, Vol. 58, Nos. 2, 4, 6	1938, Vol. 74, No. 3
1931, Vol. 59, No. 6	1939, Vol. 75, No. 5
1931, Vol. 60, Nos.1, 2, 4	1940, Vol. 77, Nos. 2, 6
1932, Vol. 61, Nos. 2,	1940, Vol. 78, No. 2
1932, Vol. 62, No. 6	1941, Vol. 80, Nos. 1, 2
1933, Vol. 63, No. 2	1942, Vol. 81, No. 3
1933, Vol. 64, Nos. 2, 3 (No.3 has loose covers)	1942, Vol. 82, No. 3
1935, Vol. 67, Nos 1, 2, 6	1943, Vol. 84, Nos. 3, 5, 6
1935, Vol. 68, Nos. 1, 3, 4	1944, Vol. 85, No. 2

ARCHIVE SUBJECT MATTER GROUP:

Group No. 6 – Science and Technology, and Canadian Society and Culture

GROUP BOX NO. 6.4 APPROXIMATE NUMBER OF ENTRIES: 68 LINEAR INCHES: 8.75

SUBJECT MATTER DESCRIPTION:

This Subject Matter Group contains an archival sampling of popular commercial journalism. It's a journalism that begins to tell the many stories of the socio-cultural impact of early to mid-20th Century science and technology, on the evolving consumer market place, and on the life and times of Canadians. These stories of science and technology, and the devices and human interest they engendered, would prove to be important precursors and leading indicators of significant social and cultural change. Over the course of the 20th century and on into the 21st these new driving forces would, among other things, progressively reshape the lives and values of Canadians and the Canadian economy from a "resource-base" to a "consumer-base".

BOX CONTENTS, Popular Commercial Journalism – Popular Culture:

Maclean's (Maclean-Hunter Publishing Company Ltd., Toronto, ON)

1962, Vol. 75, Nos. 15, 16 (2 Issues)

1963, Vol. 76, Nos. 6-11, 13, 16, 19-23 (13 Issues)

1964, Vol. 77, Nos. 2, 4, 5, 7-13, 15, 22-24 (14 Issues)

1965, Vol. 78, Nos. 1, 3-5, 7, 9-14 (11 Issues)

1966, Vol. 79, Nos. 21-24 (4 Issues)

1967, Vol. 80, Nos. 1-12 (Note Change to Monthly Issues)

1968, Vol. 81, Nos. 1-12

ARCHIVE SUBJECT MATTER GROUP:

Group No. 6 – Science and Technology, and Canadian Society and Culture

GROUP BOX NO. 6.5 APPROXIMATE NUMBER OF ENTRIES: 56 LINEAR INCHES: 12

SUBJECT MATTER DESCRIPTION:

This Subject Matter Group contains an archival sampling of popular commercial journalism. It's a journalism that begins to tell the many stories of the socio-cultural impact of early to mid-20th Century science and technology, on the evolving consumer market place, and on the life and times of Canadians. These stories of science and technology, and the devices and human interest they engendered, would prove to be important precursors and leading indicators of significant social and cultural change. Over the course of the 20th century and on into the 21st these new driving forces would, among other things, progressively reshape the lives and values of Canadians and the Canadian economy from a "resource-base" to a "consumer-base".

BOX CONTENTS, Popular Commercial Journalism – Popular Culture, Page 1 of 2:

The Strand Magazine (Newnes & Pearson, Kensington, UK) 1935, March

Popular Mechanics (The Hearst Corp., NY)

1935, Vol. 63

1938, Vol. 69

1964, Vol. 121

Mechanix Illustrated (Fawcett Publications, Inc., Louisville, KY)

1942, Vol. 28, No. 4 (August)

1944, Vol. 33, Nos. 1, 2 (November, December)

1945, Vol. 33, Nos. 3-6 (Jan-April)

1945, Vol. 34, Nos. 1, 2, 5 (May, June, Sept.)

1945, Vol. 35, Nos. 1, 2 (Nov., Dec.)

1946, Vol. 35, No. 6 (April, Front is at 70% Loss)

1946, Vol. 36, Nos. 2, 4 (June, August)

1966, Vol. 62, No. 461 (October)

See 6.5, page 2, continued

ARCHIVE SUBJECT MATTER GROUP:

Group No. 6 - Science and Technology, and Canadian Society and Culture

GROUP BOX NO. 6.5 APPROXIMATE NUMBER OF ENTRIES: 56 LINEAR INCHES: 12

BOX CONTENTS, Popular Commercial Journalism – Popular Culture, Page 2 of 2:

House & Garden's New Complete Guide to Interior Decoration. Simon & Schuster, New York. 1953. (One vol.)

Ontario Homes & Living (Mitchell Press Ltd., Vancouver, BC)

1963, Vol. 2, Nos. 5-11 (7 Issues)

1964, Vol. 3, Nos. 1, 3-11 (10 Issues)

1965, Vol. 4, Nos. 1-11 (11 Issues)

1966, Vol. 5, Nos. 1, 3, 4, 6-9 (7 Issues)

6.5, continued from Page 1



HVACR Heritage Centre Canada

HHCC

Collections and Curatorial Services

The HVACR Archival Trade, and Technical Literature Collection

The Embryonic and Early Development Years of the Industry in Canada

A Preliminary User's Guide to the Collection as Boxed, Labelled & Received

April 1, 2019

- 1) An Introduction to the Collection P. 2
- 2) The Organization of the Collection by Subject Matter Group P. 3
- 3) Boxing and Labeling by Subject Matter Group P. 3
- 4) Preliminary Access to the Collection by Subject Matter Group P. 4
- 5) Searching the Collection by Subject Matter Box Number P. 4
- 6) What the Collection Teaches P. 8
- 7) The Applications and Uses of the Collection as Historic Knowledge P. 10

¹ This document contains details of the labeling on the 46 Bankers boxes used to transfer the Collection from the donor to HHCC's custodial care. The labelling is designed to allows immediate, interim access to the collection by subject matter Group, while arrangements are made for archival storage, cataloguing, and the development of a collection management information system [CMIS]

1) An Introduction to the Collection

Dedicated work on the collection was initiated by Leslie Oliver [donor] in 2012. Intended as a gift to the industry, it was to be entrusted to the custodial care of the HVACR Heritage Centre Canada [HHCC]. The Centre was established under national letters patent in 2002 to, among other things: "... further, promote, support and facilitate the study, research and understanding of the history and development of the heating, ventilation, air conditioning and refrigeration industry in Canada..."

Containing over 2,000 volumes this archival collection profiles much of the work of the Canadian residential and commercial, HVACR industry from the mid-1920's to the 1960's. One step at a time, here we see the industry evolve through its embryonic, and early development years, through WWII, and times of deep economic depression in Canada. Through it all we get insightful glimpses of the industry's role and contribution to Canada's emerging economic, social, and cultural fabric.

As has been recently said, such "Documentary heritage is a cornerstone of all democratic societies and is an essential resource for supporting economic, social, legal, and cultural domains, as well as fostering innovation" ²

A rare, "workingman's" collection, we see in these volumes a kind of on-the-ground legitimacy, and authenticity in the workings of an industry - its documentary heritage moving directly from "shop-floor" to national archive. Over 1200 journals trace the evolution of the industry month by month, identifying many of its movers and shakers as the leading figures and organizations that made it all happen.

Yet, the archival collection is much more than an account of industry trade and technical progress over the study period [See for example Groups 2, 3, and 4]. Set in socio-cultural context it reveals much about the meager applied sciences and engineering fundamentals on which the industry built [See Group 1], the evolving body of trade training and professional development practice on which the industry depended [See Group 5], as well as something of the cultural impact of consumer technologies in the early to mid-years of the 20th century – as seen through popular journalism of the period [See Group 6]³.

For a detailed description of the content, structure, nature and scope of the collection see the following documents, available from HHCC's Data Centre, Public Documents:

• "A Donation Appraisal", Pamela Campbell, HVACR Heritage Centre Canada, December I 2018, document no. HHCC 1812G.pdf, pp.33.

Oliver Associates, Material Culture of Technology, volunteer, HVACR Heritage Centre Canada, Collections and Curatorial Services, Proj. No.114-18, Doc., OA1903E.docx, 3/20/2019, **P.2**

² Library and Archives Canada, "Building a Canadian National Heritage Digital Strategy", Internet May 30, 2018
³ This definitive archival collection follows and parallels the Center's founding artifact collection, covering the same period. Also appraised as cultural property, the artifact collection contains over 350 artifacts, with a 350 page illustrated Catalogue, along with over 2000 pages of background research and documentation which have variously appeared on line in the Centre's virtual museum [website], on its interactive educational web sites, and in its educational materials.[See the Story of the Centre's Founding Collection, HVACR Heritage Centre Canada, document HVACR0610CC, 2006]

- "Deed of Gift, HVACR Heritage Centre Canada", 2018, document no, OA1806SS, 2018, pp. 8
- "Donor Briefing Notes", Oliver Associates, Nov. 2017, document no. OA1711D, pp.24
- "Catalogue of Box Labels, HVACR Archival Trade and Technical Literature Collection", March 2019, Document no. OA1903G [OA1705P, OA1802A, OA1705A, OA1806I, OA1705F, OA1705G], 2019, pp. 49

2) The Organization of the Collection by Subject Matter Group

The collection was boxed and labeled for gifting and transfer to HHCC in a manner that would facilitate immediate interim user access, pending the installation of the collection, the preparation of an exhaustive inventory, and the development of a professional collection management information system [CMIS].

Notwithstanding the ultimate organization of the collection for CMIS purposes, for the sake of boxing, labelling, and gifting, the 2000 or so entries were broken down into 6 interacting and mutually supporting subject matter groups. Each group tells different stories about the work of the industry, its contribution, and consequences for Canadian economy, society, and culture.

- 1. Applied Sciences and Engineering Fundamentals, Box File Label No. OA1705P, Box numbers 1.1 to 1.3
- 2. HVACR Trade and Technical Journals, Box File Label No. OA1802A, Box numbers 2.1 to 2.19
- 3. HVACR Manufacturer's and Suppliers of Engineering, Applications, Sales and Service Literature, Box File Label No. OA1705D, Box numbers 3.1 to 3.12.
- 4. HVACR Technical and Trade Training Organizations, Box File Label No. OA1806I, Box numbers 4. 1 to 4.5
- 5. Best Practices in Trade Training and Professional Development, Box File Label No. OA1705F, Box numbers 5.1 to 5.2
- 6. Science, Technology, and Canadian Society and Culture, Box File Label No. OA1705G, Box numbers 6.1 to 6.5

3) Boxing and Labeling by Subject Matter Group

The collection, with its 6 groups, is contained in 46 Bankers Boxes. Each box has a $8 \frac{1}{2}$ x 11 inch label. Each label carries the following 6 data descriptors:

- 1. Name of subject matter group
- 2. Group storage box number
- 3. Number of entries in the group
- 4. Cumulative linear inch of storage requirement for the group
- 5. Subject matter description stories told by the group
- 6. Box content representative examples of HVACR archival literature included in the group

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For convenience in handling, box number stickers 1-46 have been added to each box. They are located on the lower right corner of the label. An Excel spread sheet provides summary statistics for each group and for the collection as a whole.

4) Preliminary Access to the Collection by Subject Matter Group

For the purposes of interim storage with reasonable user access, it is recommended that the 16 boxes be stacked in 15 vertical rows with 3 boxes per row [See Table below]. To accommodate the 16th box, the 15th row will have 4 boxes, instead of 3. Some boxes weigh between 40 and 50 lbs. and should be moved with care, with hands on the bottom <u>not</u> in the hand holes on the ends of the box

The following table indicates the relative location of the all 46 boxes by row number [1 to 15], and box number. Boxes are numbered according to their archival subject matter contents [Content group numbers 1-6].

Box subject matter group numbers follow each other in natural sequence from Group 1 to Group 6. The number following the decimal [e.g., Group One, boxes numbered 1.1 to 1.3] indicates the number of the box within the group [3 boxes]. The box numbers run from top left [1.1] to bottom right [6.5] of the table

Row	Row	Row	Row	Row	Row 6	Row	Row	Row	Row 10	Row	Row 12	Row 13	Row 14	Row 15
D	D	D	7	D		D /	D 0	D .	-	D		13 D		
Box	Box	Box	Box	Box	Box	Box	Box	Box	Box	Box	Box	Box	Box	Box
1.1	2.1	2.4	2.7	2.10	2.13	2.16	2.19	3.3	3.6	3.9	3.12	4.3	5.1	6.2
Box	Box	Box	Box	Box	Box	Box	Box	Box	Box	Box	Box	Box	Box	Box
1.2	2.2	2.5	2.8	2.11	2.14	2.17	3.1	3.4	3.7	3.10	4.1	4.4	5.2	6.3

5) Searching the Collection by Subject Matter Group

Beyond useful statistics [approximate number of entries and linear storage requirements] each label highlights the stories told by the Group [See Section 6 below], along with examples of the archival literature content included. The following table provides an overview of the archival content of each of the 6 subject matter groups. For further detail see the Catalogue of Box Labels [doc. OA1903G]

Subject Matter Group	Box Content Archival Literature Included by Box Number
Group 1.0: Applied Sciences and Engineering	 1.1 Applied Science and Engineering [Representative texts] 1.2 Applied Thermodynamics [Representative texts] 1.3 Residential & Commercial Refrigeration & Air Conditioning [Representative texts]
Group 2.0: HVACR Trade and Technical Journals,	2.1 - Refrigeration and Air Conditioning [Representative texts] - Canadian Refrigeration Journal variously 1941-1949
	 2.2 - Canadian Refrigeration Journal variously 1950 to 1954 - Canadian Refrigeration and Air Conditioning Journal variously 1950-1958
	2.3 Canadian Refrigeration and Air Conditioning Journal variously 1959-69
	2.4 The Refrigeration Service Engineer variously 1936-1942
	2.5 The Refrigeration Service Engineer variously 1943-1947
	2.6 - The Refrigeration Service Engineer variously 1948-1951- Refrigeration Service and Contracting variously 1952
	2.7 – Refrigeration Service and Contracting variously 1953- 1959 2.8 - Refrigeration Service and Contracting variously 1960 -1965 2.9 - Refrigeration Service and Contracting variously 1966-70 - Air Conditioning and Refrigeration News variously 1937 - Air Conditioning, Heating and Refrigeration News variously 1962, 1968
	2.10 – The Refrigeration Industry variously 1944 – 1949 - Commercial Refrigeration and Air Conditioning variously 1949, 1950
	 2.11 - Commercial Refrigeration and Air Conditioning variously 1951 - Refrigeration and Air Conditioning Business variously 1958, 1959, 1960, 1961
	2.12 - Refrigeration and Air Conditioning Business variously 1962 - 1970
	2.13 – Refrigerating Engineering variously 1954, 1955, 1956, 1957 2.14 – Ashrae Journal variously 1960 to 2002
	2.15 – Oi-Heat & Propane World 1950 variously through 1957 - Oil and Gas Heat variously 1952, 1953 - Automatic Heating variously 1958
	 2.16 – Heating Plumbing and Air Conditioning Age variously 1951 to 1956 2.17 – Automatic Heating Plumbing and Air Conditioning
	variously 1959 to 1964 - Heating/Plumbing/Air Conditioning variously 1965

	- Heating Piping and Air Conditioning variously 1965-1966
	2.18 – Heating and Plumbing Engineer variously 1955 to 1961
	2.19 – Heating and Plumbing Engineer variously 1962
	- Mechanical Contracting and Plumbing variously 1962 to 967
	- Mechanical Contracting and Engineering variously 1967 to
	1968
	- Other single issue trade journals variously 1954 to 2002
Group 3.0: HVACR Manufacturers	3.1- Manufacturers, Suppliers and Wholesalers of Refrigeration/AC
and suppliers of Systems,	Components - uncatalogued
Equipment, Components, Parts,	3.2 – Pipe tube and Fitting Manufactures and Suppliers-
Engineering Applications, Service,	uncatalogued
and Sales Literature	3.3 – Automatic oil heating service and installation manuals -
	uncatalogued
	3.4 – Kelvinator: dealer bulletins, newsletters, manuals 1940's to 1960's – uncatalogued
	3.5 – Kelvinator: bulletins, manuals, price lists 1929 to 1941, -
	uncatalogued
	- Exhibit National Museum of Science and Technology 1995
	3.6 – Kelvinator commercial and domestic sales and service
	literature 1929 -1939 – uncatalogued
	3.7 – Frigidaire: commercial service manuals, parts and price lists,
	1930 to 1943- uncatalogued
	3.8 – Personalized Frigidaire Data Book, T.H. Oliver
	- Air conditioning product memos and manuals 1940's to
	1950's - uncatalogued
	- Personalized leatherette service and sales literature binder -
	uncatalogued
	3.9 – Carrier: applied products sales and engineering manuals
	1950's to 1960's, packaged products sales and engineering
	1950's to 1960's - uncatalogued
	3.10 – Carrier System Design Manual 1950
	- Crane System Design Manual and technical papers -
	uncatalogued
	- Bell and Gossett handbook and engineering manual
	- S. A Armstrong Sound Control in Hydronic Piping Systems
	- Carrier construction specification, sheet metal, ducts, piping
	- Carrier Product information comfort, load estimating, data
	standards [T.H. Oliver Aurora reconstructed manual 1956 –
	1958
	3.11 – Canadian General Electric Co. Service Manual Book No. 1,
	Small Appliances Parts and Prices 1960 to 1972 -
	uncatalogued
	- Manufacturer's filing instructions - uncatalogued
	3.12 – Canadian General Electric Co.:
	D., J., 4, 1, 4, 4, 4, 4, 1, 4, 1

- Product sheets- uncatalogued

	Dools 2 Small Appliance Technical data heating and increase
	- Book 2 Small Appliance Technical data, heating appliances,
	service policy - uncatalogued
	- Book 3 Small Appliance Technical data, motorized
	appliances- uncatalogued
	- Book 3 Addendum 1960-1968- uncatalogued
	- Book 3 Addendum 1969-1972 - uncatalogued
Group 4.0 - HVACR Technical and	4.1 – RSES Lecture Courses 1934 to 1946- uncatalogued
Trade Training, Self-Help	- RSES Service Applications Manual, 1950's to 1960's -
Organizations	uncatalogued
	4.2 – RSES Service Applications Manual Supplements
	variously 1950's to 1960's - uncatalogued
	- RSES Question Box 1938 to 1946 - uncatalogued
	- RSES Refrigeration Service Pointers, Bulletins,
	directories, and Guides, variously 1946 1959 - uncatalogued
	4.3 – National Warm Air Heating and Air Conditioning Assoc.
	Canadian Chapter 1950
	- Electric Heating Manual 1960
	- Canadian Refrigeration and Air Conditioning Association
	1960
	4.4 – ASRE, ASHRAE Guide and Data Book variously 1959 to
	1967
	4.5 – ASHHRAE Handbook of Fundamentals 1967
	- ASHHRAE Guide and Data Books Equipment, Systems,
	Applications variously 1967 to 1971 - uncatalogued
Group 5.0 – Trade Training and	5.1 - The early evolution of manual, industrial, trade, and
Professional Development	technical training
	- The emergence of modern pedagogical thought in the
	behavior sciences, educational psychology, and general
	systems theory
	- Emerging of 20 th century thought and practice in teaching
	and learning
	•
	- Early scientific thought and practice in programmed
	learning
	- Post WWII evolution of vocational education and
	manpower training in Ontario
	- Cybernetics and systems thought and the education
	technology movement
	5.2 - An Analysis of the Refrigeration and Air Conditioning Trade, 1964
	- A Course of Study in Refrigeration and Air Conditioning
	for the Four-Year Science, Technology, and Trades
	Secondary School Program, 1964
	- An Introduction to Refrigeration, Air Conditioning and
1	Heating, A shop Manual for Use in Grades 9 and 10,

	Prepared for the Board of Education, Township of
	Etobicoke ,1965,
	- Air Conditioning and Refrigeration Course of Study
	Outline, Grade 9, 1965
	- An Introduction to Refrigeration, Air Conditioning and
	Heating, Manuscript material, circa 1966
	Mechanical Systems for Buildings, Ryerson Polytechnical
	Institute, Dept. of Extension, Course, 1964
Group 6.0 – Science and	6.1 – Popular Science, variously from 1920 to 1970 - uncatalogued
Technology, Canadian Society and	6.2 – Popular Science, variously from 1970 to 1973 - uncatalogued
Culture	- Canadian Geographic Journal variously from 1930 to 1941 -
	uncatalogued
	- National Geographic, variously from 1917 to 1927 -
	uncatalogued
	6.3 - National Geographic, variously from 1930 to 1944 -
	uncatalogued
	6.4 - Maclean's variously 1962 to 1968 - uncatalogued
	6.5 – The Strand Magazine March 1935
	- Popular Mechanics variously 1935 to 1964 - uncatalogued
	- Mechanix Illustrated variously 1942 to 1966 - uncatalogued
	- Ontario Homes and Living variously 1963 to 1966 -
	uncatalogued
	- House and Garden's New Complete Guide to Interior
	Decoration

6) What the Collection Teaches

Viewed as "Canadian cultural property", the Collection teaches much, through it's many stories of Canada's rich cultural, social, and economic life over the early and mid-years of the 20th century. The 6 subject matter groups each tell their own story. All groups tell mutually complementary and supporting stories of their times:

Group No. 1 - Applied Sciences and Engineering: tells of the scant formal knowledge-base that existed in the applied sciences and engineering, on which the Canadian HVACR industry was dependent in the first half of the 20th century, extending to the early post WWII years.

Beyond "trial and error", it tells the stories of the limited codified, textbook knowledge of science and practice on which the design, construction, production, operation, performance standards, service, and safety of the residential, commercial, and industrial HVACR industry would be largely dependent in its embryonic and early development years.

Yet looking back, by the 1950's, it was a literature that was about to explode in nature and kind. It would document the results of the rapid increase in research and development which followed the expanding economy and buoyant consumer market of the post WWII years.

Group No. 2 - HVACR Trade and Technical Journals: These early to mid- 20th century HVACR commercial, trade and technical journals provided Canadian HVACR workers with an "on-the-ground" view of the on-going work in their chosen field of endeavor. Month by month these journals variously told the essential stories of the "movers-and-shakers", the dominant issues of the day, the directions, challenges, and accomplishments of the industry.

With expanding markets following WWII would come an increasing proliferation of commercial journals documenting the immense creativity, innovation, entrepreneurialism, productivity, and market penetration on which the success of the field desperately depended throughout those critical founding and early developmental years in Canada. Historically they tell the essential stories, like know other, of the "how-when-and why" of the HVACR industry's growth and evolving role and contribution to the Canadian economy, society, and culture.

Group No. 3 - HVACR Manufacturers and Suppliers of Systems, Equipment, Components, Parts, Engineering Applications, Service, and Sales Literature: Tells of the critical role and contribution of manufactures and their agents in the early developmental years of the industry. It was a literature highly valued by workers, as an authoritative and reliable source of consumer and technical information on which they could and would depend.

For it was a period, too, in which academic and scholarly texts were few and far between, and few dedicated HVACR education and training schools existed. Yet, paradoxically, this was a critical period of "incubation" in the evolution of the industry. It was a moment in time on which workers in the field were desperately dependent on the "mid-wife" role played by the manufacturers and suppliers of the innovative equipment and devices that provided the foundation stones on which the Canadian industry would build.

Group No. 4 - HVACR Technical and Trade Training, Self-Help Organizations: Contains representative trade training and professional development materials produced by independent HVACR technical and trade training organizations. The stories told are of the centrality of such organizations that sprang up, variously established by the trade itself, as it responded reflexively to the needs and conditions of the times. Beyond the support provided by manufactures in the early developmental years of the industry [Group 3], these organizations would be a central player in trade training and professional development.

They would be part of the great "self-improvement movement" of the early 20th century, whose business definition typically centered on the development of individual, personal talents, interests, and on economic and intellectual self-improvement. Along with the support in training and business development provided by manufactures, these organizations helped to give the industry the added "jump-start" it desperately needed to develop the specialized skill pool and labor force required to help ensure the survival of the industry in often lean times. The idea of "self-help" in training and development would come to be a significant marker of the HVACR trade culture in Canada. Among other things, it would delay the establishment of formal training programs and apprenticeship until the latter part of the 20th century.

Group No. 5 - Trade Training and Professional Development: Further in the matter of trade training and development [See Groups 3 and 4], this Subject Matter Group contains an archival

literature which traces the evolution of best practices in trade and technical training, and professional development. It provides a valuable reminder of the cumulative wealth of knowledge and understandings on which the HVACR Industry builds in responding to the demanding training and human development challenges of the early years of the 21st century.

The stories told are of the evolution of manual and industrial training in pre-renaissance times, the rise of the handicraft and apprenticeship movements, the contribution of modern science to our understandings of best practices in teaching and learning, the world change in trade, technical and vocational training that came with WWII, the push for increasing professionalism, the contribution of educational psychology, and the emergence of the "educational technology" movement of the 1960's

Group No. 6 – Science and Technology, and Canadian Society and Culture: Contains an archival sampling of popular commercial journalism. It's a journalism that begins to tell the many stories of the socio-cultural impact of early to mid-20th Century science and technology, on the evolving consumer market place, and on the life and times of Canadians.

These stories of science and technology, and the devices and human interest they engendered, would prove to be important precursors and leading indicators of significant social and cultural change. Over the course of the 20th century and on into the 21st these new driving forces would, among other things, progressively reshape the lives and values of Canadians and the Canadian economy from a "resource-base" to a "consumer-base".

Section 7: The Uses and Applications of the Collection as Historic Knowledge

A number of Canadian writers have written about the use and application of historic knowledge and its centrality to human learning and development. Canadian writer and historian Margaret McMillan, 4 concludes:

- We are all products of our individual histories, including our geographic place, our time, our social class, and family background]
- We make use of our history constantly to help understand ourselves, and others
- History does not lie safely in the past for us to look at when the mood takes us
- It's not a pool of artefacts, so much as it's a pool of idea and thoughts that silently shapes our institutions, our ways of thought, our likes and dislikes
- It's what we call on for purposes of validation, for lessons well learned, and as solid timetested advice for others

Canadian author Paul Schafer ⁵, Director of the World Culture Project, concludes from his research:

"Our own past is moving away from us at a frightening speed, and if we want to keep open the lines of communication which permit us to understand the greatest creations of mankind

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⁴ See "The uses and Abuses of History", Margaret MacMillan, 2008

⁵See "Culture Beacon of the Future", D. Paul Schafer, 1998

we must study and teach the history of culture more deeply and more intensely than was necessary a generation ago...If cultural history did not exist, it would have been invented now".

Similarly, Canadian futurist Ruben Nelson⁶ points out that:

As a 21st century, Western, post-industrial learning society we live in history. Here our central task is coming to a new human maturity, achieving a new sustainable, dynamic prosperity for all. History is the stage on which human learning takes place; it's an account of human progress - the ideal future always being ahead, never behind

Nelson contrasts this 21st century view of history, held by a **learning society**, with views of a traditional people:

For a traditional people, the best one can do is to reject the present and return to the wisdom of the past and what it teaches.

It may be safely concluded from the above that collections of Canadian cultural property which tell essential stories associated with Canadian history, cultural heritage, and national life, will find perennial applications and use:

- As a pool of idea and thoughts that silently shape us [McMillan]
- Facilitate the study and teaching of our history and culture more deeply and more intensely [Schafer]
- Help us to live in history, coming to a new human maturity, achieving a sustainable, dynamic prosperity; recognizing history is an account of human progress, as the stage on which human learning takes place, the ideal future always being a head, never behind. [Nelson]

⁶ See "The Post Industrial Futures Project", Ruben Nelson, Working Papers, un-published, 1998