



University of Alberta  
Edmonton

Department of Agricultural Engineering

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Inventory of Archival Component  
of the Macgregor Smith/MacHardy  
Stephanson Collection.

Prepared by: Keith Hart,  
Librarian.

UPDATE TO SEPTEMBER, 1987.

Note: June 28, 2017  
Now housed at RAM Westaskawyn



THE MACGREGOR SMITH/MACHARDY/STEPHANSON COLLECTION

Box	File	Description of Items	Date
1	1	I. Records of Committees, Reports, Misc.	
		1. Alberta Agricultural Engineering Committee	
		Minutes of meetings	1946-1950
		2. Western Agricultural Engineering Committee.	
		Minutes of meetings	January 25, 1936-May 5, 1942
		Minutes of meetings	October 17, 1942-Septeml 15, 1944
		Farm Machinery Brief	February 23, 1944
		3. National Committee on Agricultural Engineering	
		a. National Section	
		Report of discussions, First Conference on Agricultural Engineering	September 9, 1941
		Proceedings of the First Conference of the National Committee on Agricultural Engineering	September 18 20, 1944
		Proceedings of the National Committee on Agricultural Engineering	June 24-25, 1954
		Report of National Committee on Agricultural Engineering	February 6- 7, 1962
		Minutes of meetings	January 12- 13, 1968
		Reports of the National Committee on Agricultural Engineering to the National Advisory Committee on Agricultural Services	1946, 1949- 1950, 1952- 1954



THE MACGREGOR SMITH/MACHARDY/STEPHANSON COLLECTION

Box	File	Description of Items	Date
1		a. National Section (Cont'd)	
	8	Report of activities of National Committee on Agricultural Engineering	1944
	9	Minutes of meeting, Farm Building Subcommittee	May 29-31, 1945
		Selected bibliographies on Agricultural Engineering and related topics	1946, 1948
		Selected bibliography of agricultural engineering publications in Canada	1957
	10	Proceedings National Committee on Agricultural Engineering and separate supplement listing Agricultural Engineering Research and Developmental Projects	June 20-21, 1952
	11	Development projects in agricultural engineering in progress or completed in Canada	1943-1952
	12	Standing Recommendations of the National Committee on Agricultural Engineering	n.d
		Report of the National Committee on Agricultural Engineering of the Canadian Agricultural Services Co-ordinating Committee	February 2-4, 1965
		1961 List of Engineering Projects for Agriculture	1961
		List--Farm Building Plan Sub-committees	November, 1954
		Minutes of meetings--Farm Building Sub-committee	May 29-31, 1945, May 20, 1946
		Extract from "Notes on Proceedings of Meetings of National Advisory Committee"	November 29 1950



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Box	File	Description of Items	Date
		b. Eastern Section.	
	13	Minutes of meetings	November 29-30, 1943, July 12-13, 1945, February 28, March 1-2, 1949
	14	Minutes of meetings	March 6-8, 1950, April 26-27, 1951, April 8-9, 1953
	15	Agricultural Engineering Research and Development Projects	April, 1952
		c. Western Section.	
	16	Minutes of meetings	1936-1937, 1939-1942
	17	Minutes of meetings	1945-1946, 1950-1953
	18	Agricultural Engineering Research Projects for Western Canada	March, 1952
		d. Interprovincial Farm Machinery Committee	
	19	C.G.E. Downing--Machinery Zoning Survey	March 6, 1941
	20	Correspondence--Interprovincial Farm Machinery Committee	May 4-July 10, 1940
	21	Report of Interprovincial Meeting to Consider the Handling of Farm Implements	April 23, 1940
		Report of E.A. Hardy and W.J. MacDonald to the Interprovincial Farm Machinery Committee	June 10, 1940



THE MACGREGOR SMITH/MACHARDY/STEPHANSON COLLECTION

Box	File	Description of Items	Date
		e. Regional Committee on Soil Drifting	
	22	Minutes of meetings	1935, 1937-1938
	23	Minutes of meetings	1940, 1943
	24	Soil Drifting Control in the Prairie Provinces	1940?
		Summary of Replies to Questionnaires on Soil Drifting in the Prairie Provinces of Canada	June, 1942
		f. Miscellaneous	
	25	Summerfallowing with the Noble Blade Weeder--Dominion Experimental Station, Swift Current, Sask.	February, 194
		Report of Activities under the Prairie Farm Rehabilitation Act	November 15 1935
		Memorandum on Agricultural Engineering	January, 194



THE MACGREGOR SMITH/MACHARDY/STEPHANSON COLLECTION

Box	File	Description of Items	Date
		<u>J. Macgregor Smith</u>	
2	1	Correspondence	Dec. 27, 1930-Apr 4, 1957.
	2	Certificates--Canadian Society of Technical Agriculturalists	Apr. 6-7, 1920
		--Agricultural Institute of Canada	May 21, 19
	3	Obituaries--J. Macgregor Smith	1950
	4.	Notebook of J. Macgregor Smith	June-July, 1920
	5.	Course lecture notes of J. Macgregor Smith as student, East of Scotland College of Agriculture	Jan. 1- Feb. 1, Oct. 20- Dec. 20, 1905.
	6.	Manuscripts--"A Thesis on Good Roads." --"Agricultural Engineering in the Canadian North West." --"The Plowing Match."	March 1, 1913. January 27 1921. Feb. 15, 1922.
	7.	Manuscripts--"George MacLachan Sold on Power Equipment." --"Technical Agriculture in Canada." --"Combine Effective in Harvesting Drouth or Hail-damaged Grain." --"Canadian Individual Thresher Owners on the Increase." --"Mixed Farming the Only Way." --"Power Farming."	Feb., 19 May 6, 193 n.d. n.d. n.d. n.d.
	8.	Manuscripts--"Agriculture--Yesterday, Today and Tomorrow." --"Plows and Plowing."	March 22, 1946. n.d.



THE MACGREGOR SMITH/MACHARDY/STEPHANSON COLLECTION

Box	File	Description of Items	Date
		J. Macgregor Smith (Cont'd).	
2	9.	Course grades of J. Macgregor Smith at Iowa State College Address--"A Toast to the bride." Scorecards and Letter re: Plowing Matches Miscellaneous letter	1924, 1931. Feb. 14, 1944 Jul. 8, 1929. March 22, 193
	10.	Publications--Master Farmers of Canada	1930-31, 1935
	11.	<del>Diary, Dept. of Agricultural Engineering, University of Alberta</del> See Box 3, File 41. Miscellaneous Publications--Dept. of Agricultural Engineering, University of Alberta Tribute to Ernest Albert Howes Publication--Exhibits at the Agricultural Engineering Laboratory Miscellaneous newspaper clippings	<del>1921-40.</del> 1942, 1950. March, 1940. June 22-25, 1931. 1950-51, n.d.
	12.	Tributes to Prof. John Percy Sackville	1947. n.d.
	13.	Blueprints (Unidentified) Circular letter to Iowa State College Alumni	n.d. May 9, 1931.
	14.	Radio Talks : "Plows, Plowing and Plowing Matches." "A Tale of Yesterday, Today and Tomorrow." "Some Aspects of the Importance of Modern Farm Machinery and of Power Farming--Part I." "Some Aspects of the Importance of Modern Farm Machinery and of Power Farming--Part II."	Feb. 28, 1927. Nov. 15, 1927. Feb. 23, 1928. Mar. 1, 1928.



THE MACGREGOR SMITH/MACHARDY/STEPHANSON COLLECTION

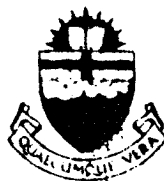
Box	File	Description of Items	Date
2	14.	<u>J. Macgregor Smith (Cont'd)</u>	
		Radio Talks--"Plows and Plowing."	Mar. 15, 1928
		--"Better Plowing."	Mar. 29, 1928
		--"The Evolution of Harvesting Machinery."	Nov. 8, 1928
	15.	--"A Stitch in Time for Your Farm Machinery."	Nov. 22, 1928
		Radio Talks--"Power--The Backbone of Farming."	Jan. 24, 1929
		--"The Future of Power Farming."	Feb. 21, 1929
		--"Plows and Plowing."	Apr. 4, 1929
		--"Land Clearing Problems."	Feb. 21, 1930
		--"Some Observations in Power Farming."	Mar. 28, 1930
		--"Better Plowing."	Apr. 11, 1930
		--"Some Recent Developments in Farm Machinery."	Nov. 21, 1930
		--"The Evolution of the Wheel."	Mar. 20, 1931
		--"A British Viewpoint of Our Agricultural Machinery."	Dec. 9, 1931
		--"Harvesting Methods."	Dec. 16, 1931
		--"The Future of the Harvester-Thresher in England."	1931-32
		--"Harvesting by Binder, Combine Compared."	1931-32
		--"The Influence of Machinery on Soil Drifting."	Mar. 2, 1932





THE MACGREGOR SMITH/MACHARDY/STEPHANSON COLLECTION

Box	File	Description of Items	Date
2	15.	<u>J. Macgregor Smith (Cont'd)</u>	
		Radio Talks--"The World's Largest Dairy Farm."	1932
		--"The Contribution of Scientific Research to Agriculture--in the Field of Agricultural Engineering."	Nov. 16, 1932
		--"The Header Barge Method of Harvesting."	1932-33
	16.	--"Appraising Improvements in Farm Machines."	1933
		Radio Talks--"A Stitch in Time for Your Farm Machinery."	Mar. 3, 1933
		--"Agricultural Engineering in 1933."	Dec. 29, 1933
		--"Farm Machinery--Its Repair and Adjustment."	Apr. 20, 1934
		--"Appraising Improvements in Farm Machines."	Nov. 16, 1934
		--"The Advance of Mechanization."	1934-35
		--"Brain v. Brawn in Agriculture."	1934-35
		--"Lucerne Meal Production in England."	1934-35
		--"Problems of Draft and Hitches with Horse Drawn Implements."	Mar. 20, 1935
		--"Some Aspects of the Application of Power to Agriculture."	Feb. 28, 1936
		--"Recent Developments in Farm Mechanization in Great Britain."	Nov. 25, 1936
		--"Rubber Tired Equipment in Agriculture."	Mar. 3, 1937
		--"Ventilation of Farm Buildings."	Oct. 13, 1937
		--"The Regional Use of Farm Machinery."	Mar. 16, 1938



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Box	File	Description of Items	Date
2	16.	<u>J. Macgregor Smith (Cont'd)</u>	
		Radio Talks--"The Tractor of Yesteryear, Today and Tomorrow."	Nov. 16, 1938
		--"Ventilation of Farm Buildings."	Jan. 24, 1939
		--"Ventilation of Farm Buildings."	Nov. 15, 1939
		17. Radio Talks--"Tillage Machinery."	Mar. 8, 1940
		--"Tractor Operation and Maintenance."	Feb. 16, 1940
		--"The Development of a Farm Machine."	Sept. 3, 1941
		--"The Regional Use of Farm Machinery."	Oct. 27, 1941
		--"Ventilation of Farm Buildings."	Apr. 25, 1941
		--"Mechanization in Post-war Agriculture."	Jan. 5, 1943
		--"The Care of Farm Machinery."	Mar. 22, 1943
		--"Care and Repair of Seeding Machinery."	Mar. 29, 1943
		--"Haying and Harvesting Equipment."	June 23, 1943
		--"Alberta Farm and Home Forum."	Oct. 4, 1943
		--"Ventilation of the Farm Barn."	Nov. 24, 1943
		--"The Road Ahead for Farm Machinery in 1944."	Nov. 26, 1943
		--"The One-way Disc--Its Maintenance and Operation."	Apr. 10, 1944



THE MACGREGOR SMITH/MACHARDY/STEPHANSON COLLECTION

Box	File	Description of Items	Date
2	25.	<u>J. Macgregor Smith (Cont'd)</u>	
		Manuscripts--"Labor Economy in Dairy Management."	Aug., 1928
		--"The Engineer and Civilization."	1929
		--"Electric Dairy Refrigerator."	Jan., 1929
		--"Take the Backache Out of Haying."	May, 1929
		--"Dairy Barn Equipment Cuts Labor Costs."	June, 1929
		--"Heading Off Hard Luck in the Dairy Barn."	Feb., 1930
		--"The Last Word in Milking Efficiency."	Dec., 1930
		--"Disk Blades for Disk Plows, Harrows, Drills, Listers and Cultivators."	Jan., 1931
		--"The Problem of Mechanising Agriculture: Report of the Official Mission to Canada and the United States."	Apr., 1931
	26.	--"Preliminary Trials of a New Type of Mower."	May, 1931
		--"Mechanical Power--The Basis of the Next Agricultural Revolution."	June, 1931
		--"Development of the Grain Combine."	June, 1931
		--"Engineering Possibilities of the Combine Idea."	June, 1931
		--"Better Times Ahead for Agriculture."	Oct., 1931
		--"The Romance of Engineering Throughout the Ages."	Nov. 1, 1931



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Box	File	Description of Items	Date
2	26.	<u>J. Macgregor Smith (Cont'd)</u>	
		Manuscripts--"Which Way to Jump."	Dec. 22, 1932
		--"Books and the Farmer."	1933
		--"Are Tractors and Machines Ruining Agriculture?"	Feb. 16, 1933
		--"Economic Aspects of Farm Mechanization."	Feb. 16, 1933
		--"Tractor Demand."	Jan. 31, 1936
		--"Cost of Producing Wheat."	n.d.
		--"Speeding the Stacking."	n.d.
	27.	Miscellaneous--"Reasons Why Farming So Often Proves Unprofitable."	Apr. 1, 1765
		--Agenda Paper, Session B, Minute 11, Conference (Unidentified), Saskatoon, Saskatchewan	May, 1942
3.	28.	Miscellaneous material on plowing matches, including scorecards and the Ontario Plowmen's Association	1935- 1941, n.d.
	29.	Materials on plowing, including photographs	1914, 1924 n.d.
	30.	Data sheets, Agricultural Motor Competition, Winnipeg.	1911-1913.
	31.	Data sheets, Agricultural Motor Competition, Winnipeg.	1911-1913.
	32.	Laboratory exercises, Agricultural Engineering, University of Saskatchewan.	December 24, 191.
	33.	Farm Machinery and Farm Motors Laboratory Manuals University of Alberta and Saskatchewan.	n.d.



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Box	File	Description of Items	Date
3.	34.	Course material, Department of Agricultural Engineering, University of Alberta	n.d.
	35.	Notebooks of J. Macgregor Smith	1918
	36.	Notebooks of J. Macgregor Smith	1925, 1929
	37.	Mathematical and trigonometrical tables for approximate calculation / J.T. Bottomley	c.1904-5
		A rudimentary treatise on land and engineering surveying / Baker and Dixon (Poor condition)	1913
	38.	Problems and assignments in connection with course no. 361B, Second Summer Session, Iowa State College	1931
	39.	Index to filing system - Dept. of Agricultural Engineering, University of Alberta	1938
	40.	Department of Agricultural Engineering organizes new collection on history of farm mechanization / Keith Hart. <u>Folio</u> (U. of A.)	1984
		<u>Agriculture &amp; Forestry Bulletin</u> 8no. 1(March) - Special issue on the Department of Agricultural Engineering, University of Alberta	1985
		"John Macgregor Smith : Western Canadian agricultural engineer." / Keith Hart. Unpub. mss.	1985
		"History of the Department of Agricultural Engineering at the University of Alberta." <u>Self Study Report : Department of Agricultural Engineering, University of Alberta</u>	1986
		"History of Agricultural Engineering in North America." <u>Self Study : Department of Agricultural Engineering, University of Alberta</u>	1986
	41.	Departmental diary, Dept. of Agricultural Engineering, kept by J. Macgregor Smith - Photocopy - original deposited in University of Alberta Archives	1920-46
		Manuscript and ill. re: grain binder / E.C. Hallman	c1932
	42.	Winnipeg Motor Competition articles	1910-13
		"Salina show a real power farming demonstration." <u>Farm Implement News</u>	1917-18?



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Eox	File	Description of Items	Date
		<u>B.T. Stephanson</u>	
1S	1.	Correspondence	Aug. 26, 1944- Dec. 15, 1952
	2.	Correspondence	Mar. 24, 1953- Jan. 18, 1968, n.d.
	3.	Correspondence re: Propane Gas Fuel	Jan. 13, 1949- Mar. 5, 1951
	4.	L.P.G. Truck/Tractor Questionnaires	1951
	5.	Construction Engineering Section Memorandum: Application of L-P Gas to Farm Tractors	Feb. 23, 1951
		Summary--Case L.A. L.P. Ensign Carburetor Tractor	1950
	6.	Correspondence and Miscellaneous Materials re: Horse Pulling Contests	Sept. 13- Dec. 15, 1944
	7.	Correspondence and Miscellaneous Materials re: Thermal Agriculture Research Survey	June, 1965
	8.	Correspondence re: Rammed Earth Walls	June 14- Sept. 25 1945
		Correspondence and Manuscript--"Experiments in Rammed Earth Construction."	Oct. 22, 1945
		Manuscript--"Rammed Earth Walls." by R.M. Hardy	n.d.
	9.	Correspondence and Press Release--"Canadian Homes Survey."	Oct. 1, 1945
	10.	Biography of Bjarni (Barney) Thorvador Stephanson, including photo negatives for retirement party	1982



THE MACGREGOR SMITH/MACHARDY/STEPHANSON COLLECTION

Box	File	Description of Items	Date
1S	11.	<u>B.T. Stephanson</u>	
		"Farm safety." / Paul Lawrence and B.T. Stephanson <u>Agricultural Institute Review</u>	1955
		"Farm safety - a challenge." / B.T. Stephanson. CSAE Paper	1965
		"Tractor operator roll over protection." / B.T. Stephanson <u>Canadian Agricultural Engineering</u>	1968
	12.	"The Tractor anti-roll frame - who needs it?" / B.T. Stephanson. Unpub. mss.	n.d.
		Farm safety excerpts from <u>Canadian Agricultural Engineering</u>	1968
		"The Radioactive piston-ring technique for evaluating engine wear." / B.T. Stephanson. ASAE Conference Paper	1964
	13.	"Influence of gasoline and propane fuels on spark-ignition engine wear rates during low-temperature operation." / B.T. Stephanson and John Strait. Reprint from <u>ASAE</u> <u>Transactions</u>	1965
		"Agricultural engineering work in Canada - present and future : educational aspects." / B.T. Stephanson. Panel discussion to Agricultural Engineering Section, Agricultural Institute of Canada Convention	1958
		One-way disc maintenance and operation / E.B. Martin and B.T. Stephanson. (Pamphlet).	1947



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Box	File	Description of Items	Date
1M		<u>F.V. MacHardy</u>	
	1.	Correspondence	Aug. 2, 1961- June 12, 1967
	2.	Correspondence re: Materials Handling	Jan. 6, 1959- July 12, 1962
	3.	"Analysis of a Farm Materials Handling System." <u>Agricultural Engineering Materials Handling Conference Issue</u>	1957 Sept., 1958
	4.	Conference Paper--"Systems Engineering in Agriculture."	Dec. 17- 19, 1958
	5.	Plans--Bulk Feed Bin	May 21, 1957
		Plans--Bulk Feed Bin	1959
		Conference Paper--"Theoretical Concepts of Materials Handling."	June 23, 1959
	5.	Manuscript--"Materials Handling on the Beef Farm." by J. Pos and F.V. MacHardy	Sept., 1959
	6.	Conference Paper--"Materials Handling as a Planning Base for Farm Development."	June 20- 23, 1965
		--"Economics of Materials Handling Systems."	Dec. 7- 10, 1965
		--"Equipment--The Key Around Which Systems Function."	Dec. 7- 10, 1965
		--"Systems and Materials Handling--The Over-all Concept."	Dec. 7- 10, 1965





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Box	File	Description of Items	Date
		<u>F.V. MacHardy</u>	
1M	6.	Materials handling manual and handbook	n.d.
	7.	Manuscripts re: materials handling	n.d.
	8.	Manuscripts re: materials handling	n.d.
	9.	"Grain handling on the beef farm." - Typescript mss.	n.d.
	10.	Miscellaneous mss. re: materials handling	n.d.
	11.	"The influence of LPG carburetor design on fuel distribution in multi-cylinder engine." / Fenton Vincent MacHardy - Msc. thesis	April, 1958
2M	12.	"The Mechanization and control of farmstead operations." / F.V. MacHardy. CSAE Conf. Paper	1961
		"The Application of mathematical techniques to the problems of agricultural mechanization of areas under-going development." / F.V. MacHardy. Paper for The Congress International Technique Du Machinisme Agricole	1961
		"Programming for minimum-cost machinery combinations." / F.V. MacHardy. CSAE Conference Paper	1965
		"A Method for sizing farm machines for weather dependent operations." / F.V. MacHardy. <u>Canadian Agricultural Engineering</u> and CSAE Conference Paper	1965-66
		"An automatic guidance system for farm tractors." / F.V. MacHardy. <u>Canadian Agricultural Engineering</u> and CSAE Conference Paper	1966-67
		"Economics of farm machinery utilization." / F.V. MacHardy Brief presented to the Barber Royal Commission on Farm Machinery, Edmonton	1967
	13.	"The Influence of the weather on field tractability in Alberta." / F.V. MacHardy and P.L. Rutledge. <u>Canadian Agricultural Engineering</u>	1968
		"Optimum combining time for minimum cost." / F.V. MacHardy and D.G. Russell. <u>Canadian Agricultural Engineering</u>	1970
		"The Influence of machinery inventory, size and price on farm income." / F.V. MacHardy and D.G. Russell. <u>Canadian Agricultural Engineering</u>	1972
		Correspondence, proofs re: "The Influence of machinery inventory, size and price on farm income." / F.V. MacHardy and D.G. Russell.	1972



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Box	File	Description of Items	Date
2M	14.	<p>"Livestock buildings." / F.V. MacHardy. Paper presented to the Agricultural Institute of Canada Convention</p> <p>"Transient heat in piggery floors." / F.V. MacHardy</p> <p>"A Design for a prefabricated cellular granary." / F.V. MacHardy. ASAE Conference Paper</p> <p>Correspondence, plans re: gutter cleaner</p> <p>"The Materials handling field-man's tool chest." / F.V. MacHardy. CSAE Conference Paper</p> <p>"Designing a materials handling system." / F.V. MacHardy. Unpub. mss.</p> <p>"Simplified ration formula for beef cattle." / F.V. MacHardy. Unpub. mss.</p> <p>"A GPSS cost-benefit simulation of forage handling." / F.V. MacHardy and K.W. Lievers. Unpub. mss.</p> <p>"Product terms in mathematical programming." / F.V. MacHardy. <u>Canadian Agricultural Engineering</u></p> <p>"Agrologists have a moral responsibility." / F.V. MacHardy <u>Agricultural Institute Review</u></p>	<p>1955</p> <p>n.d.</p> <p>1960</p> <p>1964</p> <p>1959</p> <p>n.d.</p> <p>n.d.</p> <p>n.d.</p> <p>1968</p> <p>1961</p>



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Box	File	Description of Items	Date
1D	1.	<u>K.W. Domier</u>	
		Correspondence and materials re: research reports done by Reynolds-Alberta Museum	May 18, 1984
		Correspondence re: Agricultural Engineering Advisory Committee of the Alberta Agricultural Co-ordinating Committee	Oct. 5, 1972-May 27, 1974
		Minutes of meeting, Alberta Agricultural Engineering Committee	April 16, 1946
		Minutes of meetings, Agricultural Engineering Advisory Committee of the Alberta Agricultural Co-ordinating Committee	1971-74
		Notice of meeting, Agricultural Engineering Advisory Committee for Alberta	June 19, 1974
		Reports of the Agricultural Engineering Advisory Committee to the Alberta Agricultural Co-ordinating Committee	1971-72
	4.	Correspondence re: research proposals for Agricultural Mechanization Research, Development and Evaluation Program	Feb. 27, 1974



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Box	File	Description of Items	Date
1MCQ	1.	<u>J.B. McQuitty</u>	
		"Grain drying with solar-heated air." / J.J.R. Feddes, J.B. McQuitty and H.P. Harrison	1977
		"Design of an air-speed sensor system." / J.J.R. Feddes and J.B. McQuitty	1978
		"Effects of beef housing systems on gaseous contaminants removed by ventilation." / J.J.R. Feddes and J.B. McQuitty	1973
		"Effects of beef housing systems on moisture removed by ventilation." J.J.R. Feddes and J.B. McQuitty	1973
		"Data acquisition system for measuring environmental variables within confinement animal units." J.J.R. Feddes and J.B. McQuitty	1977
		"Maize storage under hot humid conditions." / D.L. Lamptey and J.B. McQuitty	1980
		"Effects of low temperature on swine performance II. Protein deposition, weight gains." / J.B. McQuitty, et al.	1979
		"Some physical factors affecting dust concentrations in a pig facility." / L.F. Honey and J.B. McQuitty	1979
		"Emergency and longer-term food grain storage alternatives in Pakistan 1976." / J.B. McQuitty	1976
		"Modelling the thermal environment within total confinement livestock housing." / P.J. Barlott and J.B. McQuitty	1976
		"Chemical control of hydrogen sulfide from anaerobic swine manure. II. Iron compounds." / E.M. Barber and J.B. McQuitty	1977



THE MACGREGOR SMITH/MACHARDY/STEPHANSON COLLECTION

Box	File	Description of Items	Date
1MZ	1	<u>Miscellaneous Papers</u>	
		"Dry matter loss during forage harvesting." / Karla Embleton	1987
		"Recommendations for farm grain drying." / Dept. of Agricultural Engineering, University of Alberta	n.d.
		"Standard time data for feeding, cleaning and related piggery operations." / Dept. of Agricultural Engineering, University of Alberta	1963
		"Availability and usefulness of Alberta agricultural data." / D.G. Russell	1967
		"Weed control using high energy methods : literature review of related references." / F.M. Vas	1967
		"Economic considerations in field machinery utilization." / D.G. Russell	1971?
		"The Effects of ballast on the springness of tractor tires." / L.N. Shukla	1967
		"Some notes on cost."	n.d.
		"Panel heating and radiant heating calculation principles."	n.d.
		"Techniques in operations research."	n.d.
		"Analog-computer solution of mathematical programming problems."	n.d.
	2.	"Diary of field operations." / Donald C. Matthews	1968
		Case studies of companies	n.d.

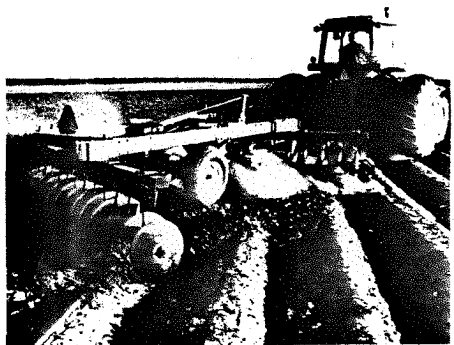


**Figure 3.** A front wheel-assist tractor is usually not needed for this type of activity.

hillsides make them a definite alternative to conventional 2WD tractors.

The extra cost of a FWA option is relatively constant for most models of any particular line of tractors (e.g. approx. \$14,000 for IHC 5088, 5288 and 5488 tractors). Therefore, the extra benefits relative to cost increases as power increases. Whether or not a farmer should purchase a FWA tractor depends upon a number of different factors. If he does a large amount of heavy drawbar work or often works under less than ideal traction conditions then the FWA option is definitely attractive. Also, if he uses any front mounted equipment such as a front end loader, then he should definitely consider a FWA tractor. One must remember that to gain the maximum benefit from either 2WD or FWA, the tractor must be ballasted optimally for that particular mode.

However, if a farmer does a lot of



**Figure 4.** When traction conditions are poor, the front-wheel assist tractor converts more axle power into useful drawbar power.

power-take-off work with his tractor such as pull-type combining or forage harvesting or his drawbar work is not that heavy (such as harrowing or light duty field cultivating) then he may be better off staying with a 2WD tractor of perhaps one size larger. Under lighter loads, he may be able to shift up and throttle back and obtain the advantages of reduced fuel consumption and increased drive train life. He also has reserve power which he can call on if the need arises.

It can be very easy for a farmer to get caught up in the advertising blitz that the tractor manufacturers are currently promoting on FWA tractors. Therefore, before a farmer buys a tractor, he should carefully consider his needs and traction conditions. Only then can he make the right choice regarding his decision of whether or not to purchase a FWA tractor.

#### References

- Domier, K.W. and O.H. Friesen. 1969. Performance parameters of tractors equipped with singles, duals, and four wheel drives. *Canadian Agricultural Engineering*, Vol. 11, No. 1.
- Domier, K.W. and A.E. Willans, 1978. Traction efficiency maximum or optimum? *Trans. of ASAE*, Vol. 21, No. 4, ASAE, St. Joseph, MI.
- Dommel, H.K. and K.W. Race. 1963. Design and performance characteristics of Oliver four wheel drive tractors. ASAE Paper 63-601, ASAE, St. Joseph, MI.
- Dwyer, M.J. and G. Pearson. 1975. A field comparison of the tractive performance of two and four wheel drive tractors. N.I.A.E. Departmental note DN/T/574/1405. National Institute of Agricultural Engineering, Bedford, England.
- Jurek, R.L. and B.C. Newendorp. 1983. In field fuel efficiency comparisons of various John Deere tractors. ASAE Paper 83-1563, ASAE, St. Joseph, MI.
- Renius, K.Th. 1979. European four wheel drive: are technical advantages profitable? ASAE Paper 79-1555, ASAE, St. Joseph, MI.
- Woerman, G.R. and L.L. Bashford. 1983. Performance of a front wheel assist tractor, ASAE Paper 83-1560, ASAE, St. Joseph, MI.

## **The Macgregor Smith/ MacHardy/ Stephanson Collection Project**

**K. Hart**  
*Librarian-Archivist*



**Keith Hart, Librarian-archivist of the Department of Agricultural Engineering.**

During the past summer, the Department of Agricultural Engineering undertook an important and unique project. In co-operation with the Reynolds-Alberta Museum, work was begun on organizing and cataloguing the Macgregor Smith/-MacHardy/Stephanson Collection. This consisted of over 220 boxes of material donated by Professors John Macgregor Smith, Fenton V. MacHardy and Barney T. Stephanson, all long-serving members of the Department. (Since the biographical details are found in the departmental history by Dr. K.W.Domier elsewhere in the Bulletin, it is not necessary to repeat them here).

The collection had been housed in file boxes with some labelling, but over the years the original order for all intents and purposes disappeared. When the material was examined last April, it was found to be in chaos. The first task, then, was to sort the estimated 4,000 pieces and get them in some order. It was decided to classify the collection according to the system developed by the American Society of Agricultural Engineers. This system was published in the *Agricultural Engineers Yearbook*, 1960. It is a numbered classification system, with broad and specific headings. For example, 11.4 is Power and this is further broken down into such headings as Automotive Applications (.41) and Animal Power (.44). These in turn have breakdowns into more specific categories.

Once the classification system was confirmed, the work of sorting the mass of paper commenced. That was not easy, because of the disorderly condition referred to above. Nevertheless, after many hours of sifting through the piles, a recognizable order was established. Each item was given a number according to its classification and filed with like materials. Items are further classified by the first three letters of the author's name. For example, works by John Macgregor Smith would be marked "MAC". The researcher may be confronted by several items with the same three letters. This was done because the collection will not be expanded and it was considered unnecessary to allot individual identifying labels to all the items.

While the sorting and classifying went on, some thought had to be given to the proper storage of the material. The existing system was judged inadequate for a couple of reasons. First, not all the items fit well into the wooden/cardboard boxes. Many of the pieces were oversize and were literally stuffed into too small containers. Retrieving them was a difficult task which invariably led to some damage every time. It would not be long before an item would become ragged and virtually useless. Second, our modern paper contains acid which is an agent of deterioration. There is no perfect method for stopping this process, but certain action can be taken. Thus, it

was decided to acquire acid-free boxes of the type used by archives.

Now that the equipment had been selected, the collection had to be prepared for storage. Using the A.S.A.E. classification system, every piece in the collection was catalogued under the appropriate subject heading. These are similar to those one would find on a card in Cameron Library, for example, albeit much more specific. To detail the process of cataloguing would be tedious reading to those not acquainted with such work. As a result, it will be stated only that it has been done and that the collection is accessible by subject as well as by author entry.

As the summer came to an end, so did the basic work on the collection. The material was boxed, labelled, and placed on the shelves of the Reading Room.

There are three major components to the Macgregor Smith/MacHardy/Stephanson Collection: Archival, Trade Literature, and Main. The Archival Component consists of such items as the minute of meetings and reports of the National Committee on Agricultural Engineering, the Regional Committee on Soil Drifting, and the Alberta Agricultural Engineering Committee. These are original documents of the above-named organizations. Some of the papers of Macgregor Smith were donated to the Provincial Archives of Alberta in the early 1960's. A list of those items is stored with the inventory of the Archival Component. The second component—Trade Literature—is a collection of price lists, catalogues, and advertisements of farm machinery, plus a few miscellaneous products. Last but not least is the Main Component, which is the assortment of pamphlets, reports, conference papers, etc. in the acid-free gray boxes. This material covers not only agricultural engineering but a considerable number of items dealing with automotive engineering. Some date back to the 1890's, with a substantial amount from the 1940's.

As of the time of writing (August), the Macgregor Smith/MacHardy/Stephanson Collection was still being processed, i.e. boxes being labelled and subject headings being applied. Plans call for the catalogue to be entered eventually on SPIRES, which will

provide better and wider access to researchers.

The above project was quite a task, given the initial condition. Supervised by Dr. K.W. Domier, Chairman of the Department, and Mr. John S. Nicks, Research Coordinator, Reynolds-Alberta Museum, Alberta Culture, the work proceeded at a good pace. A note of acknowledgement should be given also to Audrey Davidson, Ida Burns, and Mary McDonald for their valuable support.

The Macgregor Smith/MacHardy/Stephanson Collection is a valuable addition to the resources for the study of the history of agricultural mechanization. Materials cover not only Alberta but much of the rest of Canada and the United States as well. It has been heavily used by researchers in the past and even during the processing. Now that the accessibility is vastly improved, the collection should be utilized more in the future.

## UNIQUE COLLECTION HELD IN THE DEPARTMENT OF AGRICULTURAL ENGINEERING

A unique project has been ongoing in the Department of Agricultural Engineering since April, 1984.

The Macgregor Smith/MacHardy/Stephanson Collection is in the process of being organized. This collection consists largely of pamphlets and papers originally assembled by John Macgregor Smith, first Professor of Agricultural Engineering at the University of Alberta.

John Macgregor Smith arrived on campus late in 1920. A native of Edinburgh, Scotland, he had received his advanced degree from the Manitoba Agricultural College. Macgregor Smith had then accepted a position at the University of Saskatchewan. In 1920, he had been offered the job of head of the Department of Agricultural Engineering by U. of A. President H.M. Tory and Dean of Agriculture E.A. Howes. Macgregor Smith spent the rest of career at the University of Alberta, until he died in 1950. His collection of pamphlets and papers were left to the Department.

Nothing was done with the collection for over three decades, except for hapahazard additions by staff. Departmental moves and time eventually destroyed all semblance of order.

In the early 1980's, the value of the Macgregor Smith materials became readily apparent. At that time, the Reynolds-Alberta Museum, Alberta Culture, began commissioning a series of research contracts on the history of agricultural mechanization in Alberta. The Macgregor Smith collection was discovered to be an extremely valuable source for these projects. Researchers used the materials extensively, but with great difficulty. The problem was that the collection was so disorganized and usage was time-consuming. Finally, in 1984, the Department of Agricultural Engineering decided to do something about it.

The Department hired Mr. Keith Hart, then a first-year U. of A. Library Science student, for the summer. Under the supervision of Dr. K.W. Domier, then Department Chairman, and Mr. John Nicks, then Research Coordinator, Reynolds-Alberta Museum, the task of organizing the collection began.

When he initially examined the collection, Mr. Hart found that this would not be an easy job. To begin with, there was the size. There were



over 220 small cardboard boxes filled to capacity with pamphlets and single sheets of information. Then, there was the condition. The materials had been literally stuffed into these boxes. Retrieval often resulted in damage to items. Finally, the method of organization had to be decided.

For the next four months, Mr. Hart worked on getting the collection sorted in order by subjects. The condition of the collection was found to be worse than anyone had anticipated. At the end of this period, however, much progress had been made.

After sorting, it was decided to organize the collection according to the Agricultural Engineers Classification, published in the Agricultural Engineers Yearbook, 1960. The various subjects--e.g. Machinery, Power, Electrification--were assigned colour-coded labels, a system developed by Mr. Hart. He typed call numbers on the labels and attached the labels to the items in the collection. Access to the materials was limited to author and subject cards. Mr. Hart typed the cards, ending up with some 4,000 author entries alone.

At the same time, some thought was given to the preservation aspect. With the advice of the University Archives and Special Collections, acid-free gray cardboard boxes were selected to house the collection. Over 200 of these were purchased and the catalogued items placed in them.

When this first phase ended in September, 1984, much had been accomplished. Some 2,000 items had been catalogued and an important step towards preservation had been taken. But the disarray still remained. It was clear that the task of organizing this collection would be a long one.

Mr. Hart returned to the Department in April, 1985, this time for seven months. During this period, the collection began to take shape. Most of the uncatalogued pamphlets were processed. In addition, many personal papers of Macgregor Smith were found, including correspondence, his radio broadcasts of the 1930's and even his course marks as a student. Mr. Hart, also a trained archivist, organized these and the Department purchased acid-free file folders for the collection. Seven months was not long enough to do everything, notably the cataloguing of the three hundred or so books. Funding prevented the retention of a librarian and Mr. Hart went to Alberta Agriculture in November.

From November, 1985, to April, 1987, little was done in the Reading Room. Nevertheless, the collection continued to grow and research was still being undertaken by the Reynolds-Alberta Museum. Some of the work completed by Mr. Hart was in danger of deterioration.

Early in 1987, the Department once again hired Mr. Hart, with money from the Alumni Fund. Now, he was able to clear up a two-year cataloguing backlog

and begin a number of new projects. The book collection, which was spread all over, was brought together and catalogued. The system used was the Library of Congress Classification. A Reference Area with non-circulating materials was established. The collection of conference papers was organized. The periodicals were properly organized so that issues could be easily found. Mr. Hart also set up the annual report collection. He catalogued a large collection of materials donated by Professor J.B. McQuitty and the estate of the late Professor A.G.L. Grimmer.

Now, three years later, the Department has a collection which is probably unique in Canada. The agricultural pamphlet collection dates from 1898 and contains a wealth of historical information. Indeed, it can be said that the history of agricultural mechanization in Western Canada is contained there. Agricultural engineering is the main subject, but items on horticulture, plant science and animal science, to name a few, can be found. Also in the collection are most of the pamphlets written by John Macgregor Smith. There are about 5,000 pamphlets in the gray boxes.

Added to the above is the Archival Component. As indicated before, these consist mainly of papers of Macgregor Smith. But there are other items such as records of the Alberta Agricultural Engineering Committee (1946-1950), the Western Agricultural Engineering Committee (1936-1944), and the National Committee on Agricultural Engineering (1941-1965). To the above have been added materials dealing with the history of the Department and the Winnipeg Motor Competitions. In addition, papers of Barney Stephanson, who was with the Department from 1946 to 1982, have been added. Here are mostly publications, but also, for example, correspondence regarding propane gas fuel. Professor Fenton MacHardy, who was in the Department during 1950-84, is represented here as well. Of particular note is the number of papers on materials handling.

The Department of Agricultural Engineering Reading Room is now functional. It contains a unique historical collection and a good variety of more contemporary materials, all of which are accessible. There are about 400 books, Departmental theses and undergraduate special projects. The Reading Room has the U. of A. Library microfiche catalogue (1985-86), the Alberta Agriculture Library microfiche catalogue (1986) and the Agriculture and Food Engineering Bibliography.

Prepared by: Keith Hart,

Librarian, Dept. of  
Agricultural Engineering,  
University of Alberta,  
September, 1987.

Report on the Reading Room and  
Macgregor Smith/MacHardy/  
Stephanson Collection, Dept. of  
Agricultural Engineering,  
University of Alberta,  
September, 1987.

## BACKGROUND

The Reading Room project of the Department of Agricultural Engineering began in April, 1984. At that time, the collection was, to say the least, disorganized. There had been no attempt to implement a formal system and the materials were literally stuffed wherever they could fit. As a result, no one could use the items. This was unfortunate because, as was subsequently discovered, there were a lot of valuable items of archival and contemporary value in the Reading Room.

During 1983-84, the Reynolds-Alberta Museum, Alberta Culture, began to make extensive use of the older pamphlets and books housed in the Reading Room. The Department had discussed getting the area organized for years, but this apparently was the catalyst for action. Mr. Keith Hart, then a first-year Library Science student, was hired to commence the work.

When the task started in April, 1984, it was soon discovered that it would not be easy. The pamphlet collection was jammed into small cardboard boxes and had no subject order. None of the items were marked or classified as a library collection needs to be. This phase went on until September, 1984, when Mr. Hart returned to his program. For the next eight months the collection stayed in the processing stage while incoming materials built up on the shelves. The Reading Room continued to be used, but the disarray had not been completely cleared up. In all fairness, it must be stated that this job was a massive one and completion in one summer was not possible.

Mr. Hart returned for seven months in April, 1985, and once more set about organizing. A considerable amount was done, and the Department ended up with between 4,000 and 5,000 pamphlets catalogued. The collection was housed in gray boxes built with acid-free materials to help ensure preservation of the items. In addition, Mr. Hart found papers of Macgregor Smith, Stephanson and MacHardy. Here were materials relating to agricultural committees of the 1920's-1950's, a diary of the Department and correspondence, to name a few. It was a rich find regarding the history of the Department, Western Canadian agriculture and indeed the Faculty. These materials are unique and cannot be found elsewhere.

During the period, April, 1984, November, 1985, the Reading Room collection began to take shape. As stated, the acid-free gray boxes were acquired, as well as acid-free file folders for the archival papers. An inventory was prepared for the archival collection, which now consisted of three large boxes. The pamphlets were organized according to the Agricultural Engineering Classification, published in the Agricultural Engineers Yearbook, 1960. The various subjects--e.g. Machinery, Power, Electrification were assigned colour-coded labels, a system developed by Mr. Hart. He typed call numbers on the labels and attached a label to each pamphlet. Access to the pamphlet collection is by author and subject cards. Mr. Hart typed some 4,000 author cards. The University Library allowed him to make photocopies of each for the Subject Catalogue, thus saving considerable time and effort. He spent six days at the Cataloguing Dept. in the University Library doing the photocopying. Once that was done, Mr. Hart typed subject headings on these cards.

At the same time, the pamphlet collection especially was heavily used. The Reynolds-Alberta Museum researchers worked in the Reading Room. Staff and students asked reference questions and made use of what had been catalogued. It was clear that there was a lot of merit in getting the collection established in some order.

Funding problems prevented the employing of a full-time staff person, and Mr. Hart left to work for Alberta Agriculture. When he departed, the Department had the beginnings of a working library. But much remained to be done. There was a large book collection that required cataloguing. More shelving was needed. The periodicals were not organized. Any incoming items had to be simply put somewhere on the shelves. The massive job of organizing the pamphlet collection was still not complete.

From November, 1985, to April, 1987, little was done in the Reading Room. Our collection continued to grow and some research was undertaken by the Reynolds-Alberta Museum. Some of the work completed by Mr. Hart was deteriorating into chaos again. Finally, funding was obtained and Mr. Hart returned to the Department in April, 1987. He found a mess, including a two-year backlog of cataloguing.

This time, Mr. Hart was able to clear up the pamphlets left over and begin several new projects. The book collection, which was spread all over, was brought together and catalogued. The system used was the same as that in the University Library. A reference shelf with non-circulating items was built. The periodicals were properly organized so that the issues can now be easily found. He also organized the annual report collection, added to the archival component. Mr. Hart got hold of copies of the U. of A. Library microfiche (1985-86), the Alberta Agriculture Library catalogue and a microfiche tray for storage. Cataloguing for the books was provided by the University Library. Other materials important to cataloguing were donated by several Alberta government libraries.

The Department of Agricultural Engineering Reading Room can now function as a working library. It holds about 400 books, fairly complete runs of a few relevant journals, an annual report collection, a reference collection, Department theses, the pamphlet collection, and the University and Alberta Agriculture Library catalogues. Users have access to these catalogues via a microfiche reader acquired this year.

Since the third phase of organization began this year, there has been a significant increase in interest in the collection. Reference inquiries have been very frequent. In all cases, help has been possible, either by referring a person elsewhere or by consulting the materials held in the Reading Room. Perhaps the whole situation can be summed up by the comment "We now know what is there and we can use it."

Of course, the collection is not yet finished. Materials are always coming in and these need cataloguing. Also, Mr. Hart is still finding items in corners and there is other material stored elsewhere in Department facilities. But there is a working order, and new items can be easily integrated for use by staff and students.

The Reading Room is in effect a Resource Centre, where users can find information and get referrals. Also, they can get things that might not be readily available. Most libraries either dispose of pamphlets (new or old) or just put them away out of sight where no one can access them easily. Thus, a great deal of potentially valuable information is lost to researchers. But Mr. Hart catalogues each pamphlet, assigning a call number and making author and subject cards. This provides ready access to a vast storehouse of information. He has also developed a system for storing the ASAE/CSAE conference papers so that they can be used with ease. Back issues of periodicals have been placed in marked file boxes and a record of holdings is being prepared. There are machinery catalogues, manuals and advertising flyers (mostly for machinery) stored in file cabinet drawers. A system for accessing these is under development. As stated before, staff and students can consult most of the U.A. Library catalogue and the Alberta Agriculture Library catalogue. The last is supplemented by the monthly Alberta Agriculture Library Recent Additions. Mr. Hart is a registered user of the Alberta Agriculture Library and thus can get needed materials on interlibrary loan. Mr. Hart also has an extensive knowledge of the University and Alberta Government library systems and can provide referrals.

Externally, the Reading Room has begun to become known as a research centre. Mr. Mark Hislop, who writes historical articles on a regular basis for Western People (Western Producer), is interested in doing work here. Included among his proposed future articles is a biography of John Macgregor Smith. He has made extensive inquiries by phone and letter. The Western Development Museum, Saskatoon, has shown some interest in our collection as well.

According to all indications, the establishment of the Department collection has been a wise decision. Having such a resource centre organized has resulted in

staff/students having needed information readily accessible. In addition, users know what is there and this has been very beneficial, in some cases. For example, one graduate student was looking for a federal report on automatic control in agriculture. He would have had to go through interlibrary loan and wait 4-6 weeks. Mr. Hart found two copies of the report stuffed away when he was cataloguing.

In addition to the above, the Reading Room promises to fulfil an even more important function in the future. Through no fault of its own, the University Library will be unable to buy as much as it did in past years. That means a reduction of the number of books acquired and the soaring cost of periodicals might make many cancellations necessary. As a result, there will be a decline in materials to support teaching and research. Departments will have to become more dependent on their own resources to engage in their activities. Having an established library will help that situation to a great degree. This does not mean that Departments will necessarily have to allocate substantial parts of their budgets to library collections. If the case of the Department of Agricultural Engineering is any indication, this is not true. Once the organization began and throughout, people tended to donate materials that were just sitting around. Also, staff moving would drop items off for the Reading Room. Probably the spending of a Department on its library would be small comparatively. But a Department doing as Agricultural Engineering did would find that a useful, easily accessible collection would build up quickly.

Added to the above, the Department has a resource person who can watch for pamphlets, etc. that the University Library would not collect. These often contain useful information and are usually free. That means that material often overlooked ends up being made available to users.

Initially, setting up a resource centre such as the Agricultural Engineering Reading Room might seem to be quite a task. It certainly is, but the end product is worth it. The experience of our Department is that the ready availability of materials and catalogues is of great benefit. Also, now that <sup>it</sup> is set up, people do use the facilities.

Sept. 14/87

Keith Hart  
Archivist  
Department of Agricultural Engineering  
University of Alberta

Dear Keith;

Thank you for the archival lists and the letter, they were greatly appreciated. There are a number of things I wish to write you about, however I am composing this letter before work and time is limited; I'll try to dash another off this week.

Below is a list of files that are of interest to me. I have divided them into two categories, photocopy and research. The items on the first one can just be photocopied and forwarded to me. The items on the second list are usually minutes and proceedings and should be examined - if you have the time - for references to Hardy and the U of S.

#### PHOTCOPYING

#### THE MACGREGOR SMITH/MACHARDY/STEPHANSON COLLECTION

- Box 1 File 4 Farm machinery Brief Feb 23/44  
National Committee on Ag Engineering  
File 8 Report of activities of National committee on Ag Engineering 1944  
File 10 Proceedings National Committee on Ag Engineering and separate supplement listing Ag Engineering Research and Development projects June 20-21/52  
File 11 Development projects in Ag Engineering in progress or completed in Canada  
File 12 Report of the national committee on Ag engineering of the Canadian Agricultural Services Coordinating Committee  
File 15 Ag Engineering Research and Development Projects for western Canada Mar/52  
File 21 Report of the interprovincial meeting to consider the handling of farm implements Apr23/40  
  
Report of E.A. Hardy and W.J. MacDonald to the interprovincial Farm Machinery Committee June 10/40  
File 25 Memo on Ag Engineering Jan/44  
Box 2 File 6 "Agricultural Engineering in the Canadian Northwest" Jan27/21  
File 7 "Technical Agriculture in Canada" May 6/31  
"Power Farming" n.d.  
File 15 "The contribution of scientific research to agriculture--in the field of ag engineering"  
Nov16/32  
File 16 "Ag Engineering in 1933" Dec29/33

File 25 "The engineer and civilization" 1929  
"The problem of mechanising agriculture:report of  
the official mission to Canada and the US. Apr/31  
Box 3 File 31 Laboratory exercise, Ag Engineering, Univ. of  
Sask. Dec24/14

PARKINSON COLLECTION PART II

File 5 "An economic analysis of farm power in Sask." 1936  
File 8 "REport of an inquiry into changes in quality  
values of farm machines between 1910-14 and 1932"  
June/33

RESEARCH

MACGREGOR SMITH/MACHHARDY/STEHANSON COLLECTION

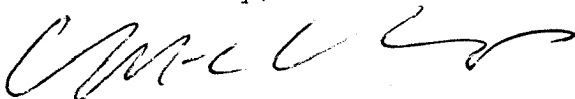
Box 1 File 1 Minutes of meetings, Western Ag Engineering  
Committee 1946-50  
File 5 proceedings of the first conference of the  
National Committee on Ag Engineering Sept18-20/44  
File 7 Reports of the National Committee on Ag  
Engineering to the National Advisory Committee on  
Agricultural Services

ACCESSION #66.14

Item 28 Correspondence between John MacGregor-Smith and various  
agencies and people 1932-34  
29,30 Minutes of the Ag Engineering Committee (Western  
Section) Meetings 1936-44  
31a-d Unbound minutes of the Committee meetings 1944-46  
33a-c Agricultural Engineering Group, Agricultural  
Institute of Canada. minutes and reports 1946-48

Well, that's it Keith! Do what you can and what you can't leave  
for me when I can find the time to make a trip to Edmonton.  
Again, thanks for your generous cooperation, it certainly is  
appreciated.

Sincerely,



Mark W. Hislop