

ALASKA LEGISLATURE SPECIAL COMMITTEE/SUBJECT FILES 8672
2738 SCOMM 122: COMMISSION ON PRIVATIZATION. ., 1999

APPENDIX B

CERTIFICATION

The undersigned recognizes that this Proposal is submitted for the express purpose of inducing the New York City Economic Development Corporation ("EDC") and/or the City of New York ("City") to award a contract to the undersigned; acknowledges that EDC or its designated advisors may in their sole discretion determine the truth and accuracy of all statements made herein; acknowledges that intentional submission of false or misleading information may constitute a felony under Penal Code Law §210.40 or a misdemeanor under Penal Law §210.35 or §210.45, and may also be punishable by a fine of up to \$10,000 or imprisonment of up to five years under 18 U.S.C. §1001; and states that the information submitted in this application and any attached pages is true, accurate, and complete.

By submission of this Proposal, the Proposer and each person signing on behalf of the Proposer certifies, and in the case of a joint proposal each party thereto certifies as to his or her own organization, under penalty of perjury, that to the best of his or her knowledge and belief:

- (1) The prices, amounts, and material in this Proposal have been arrived at independently, without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices, amounts, and materials with any other Proposer or with any competitor;
- (2) Unless otherwise required by law, the prices, amounts, and material that have been quoted in this Proposal have not been knowingly disclosed by the Proposer and will not knowingly be disclosed by the Proposer prior to opening, directly or indirectly, to any other Proposer or to any competitor, and
- (3) No attempt has been made or will be made by the Proposer to induce any other person, partnership or corporation to submit or not to submit a Proposal for the purpose of restricting competition.

The Proposer hereby authorizes EDC and its designated advisors to contact the Proposer's banks and credit references and any other persons identified in its Proposal, including, without limiting the foregoing, all persons and entities identified in its Proposer Information form and any sources and uses statement, in connection with the Proposal, and any and all other persons identified in any investigation conducted by or on behalf of EDC and obtain the release of pertinent financial and other information, as well as to obtain verification of information provided on behalf of the Proposer.

Signature of Officer

Title _____

Sworn to before me this
_____ day of _____

Notary Public

APPENDIX C

ACKNOWLEDGMENT OF ADDENDA

TITLE OF THE REQUEST FOR PROPOSALS:

PIN No.:

**John F. Kennedy International Airport
LaGuardia Airport – Request for Proposals for the
Long-term Management, Operation
and Development of the City's Airports**

INSTRUCTIONS: The Proposer is to complete Part I or Part II of this form, whichever is applicable, and sign and date the form. This form serves as the Proposer's acknowledgment of the receipt of the Addenda to this Request which may have been issued prior to the Proposal Due Date set forth at Section I.C. of the Proposal.

PART I

Listed below are the dates of issue for each Addendum received in connection with this Request:

Addendum #1, dated _____

Addendum #2, dated _____

Addendum #3, dated _____

Addendum #4, dated _____

Addendum #5, dated _____

PART II

No Addendum was received in connection with this Request.

Proposer Name: _____

Proposer's Authorized Representative:

Name: _____

Title: _____

Signature: _____

Date: _____

APPENDIX D

RELEASE AND HOLD HARMLESS AGREEMENT

IN CONSIDERATION OF THE CITY OF NEW YORK ("CITY") granting permission to the undersigned ("GRANTEE/RELEASOR") to visit [LaGuardia]^{*} [John F. Kennedy International]^{*} Airport (the "Premises") for the purpose of inspecting the Premises in connection with a Request for Proposals issued by the New York City Economic Development Corporation ("EDC"),

2. (a) GRANTEE/RELEASOR, releases and discharges the CITY, its agencies, instrumentalities, officials, agents, employees, attorneys and representatives (the "City Group") and EDC, its directors, officers, agents, employees, attorneys and representatives (the "EDC Group") from all actions, causes of action, suits, debts, dues, sums of money, accounts, reckonings, bonds, bills, specialties, covenants, contracts, controversies, agreements, promises, variances, trespasses, damages, judgments, extents, executions, claims and demands whatsoever, in law, admiralty or equity, which against the City Group and/or the EDC Group the GRANTEE/RELEASOR's parents, subsidiaries, divisions, predecessors and successors and all related or affiliated legal or business entities, and present and former stockholders, members, partners, officers, directors, agents, employees, attorneys and representatives ever had, now have, or hereafter can, shall or may have by reason of any matter, cause or thing whatsoever resulting from, arising out of, or in any way connected with any site visits or inspections of the Premises by GRANTEE/RELEASOR or its employees, officers, contractors, subcontractors, invitees, and agents howsoever the same may be caused or occasioned.

(b) GRANTEE/RELEASOR acknowledges that it has been advised by competent legal counsel in connection with the execution of this Release and Hold Harmless Agreement and that GRANTEE/RELEASOR understands its respective rights and obligations hereunder. GRANTEE/RELEASOR declares, under penalty of perjury, that it has read this Release and Hold Harmless Agreement in its entirety, fully understands its terms and contents, and freely, voluntarily and without coercion enters into it.

(c) This Release and Hold Harmless Agreement (i) contains the entire agreement between the parties and supersedes any prior written or oral agreements or representations concerning the subject matter hereof; (ii) can be modified only by a writing signed by the parties hereto; and (iii) shall be governed by and construed in accordance with the substantive laws of the State of New York.

^{*} Delete if inapplicable.

2. GRANTEE/RELEASOR hereby agrees to defend, indemnify and hold harmless each and every member of the City Group and the EDC Group from and against any and all claims, actions, suits, judgments, causes of actions, demands, losses, damages, liabilities, costs, charges, and expenses (including, without limitation, attorney's fees) whatsoever, whenever asserted and by whomever, resulting from, arising out of, or in any way connected with any site visits or inspections of the Premises by GRANTEE/RELEASOR or its employees, officers, contractors, subcontractors, invitees, and agents howsoever the same may be caused or occasioned.

IN WITNESS WHEREOF, the GRANTEE/RELEASOR has caused this Release and Hold Harmless Agreement to be executed by a duly authorized individual on this ____ day of _____, 1999,

In presence of:

GRANTEE/RELEASOR: _____

BY: _____

Title: _____

STATE OF NEW YORK)

): ss:

COUNTY OF NEW YORK)

On this ____ day of _____, 1999, before me _____ personally came, to me known, who, by me duly sworn, did depose and say that deponent resides at _____,

that deponent is the _____ of the entity described in, and which executed, the foregoing Release and Hold Harmless Agreement, and that deponent signed deponent's name by order of that entity.

Notary Public

ALASKA STATE LEGISLATURE

News From The Senate and House Majorities

State Capitol
Juneau, AK 99801
Actualty line: 1-800-478-6540

Jerry Ritter (907) 465-3804
Mark Morones (907) 465-3803
web site: <http://www.akrepublicans.org>

FOR IMMEDIATE RELEASE: February 9, 2000

Contact: Sen. Jerry Ward (907) 465-4940
Rep. John Cowdery (907) 465-3879

Finance Committees Hear From Privatization Task Force **Subcommittees to Tackle Recommendations**

(JUNEAU) -- A joint session of the Senate and House Finance Committees Wednesday heard testimony from the Legislature's Commission on Privatization and Delivery of Government Services.

The 11-member commission, which the 21st Alaska Legislature established to examine the possibility of turning some State functions over to private industry, met during the interim (between legislative sessions) and prepared a report to the Legislature before its expiration date, December 31, 1999. More than 300 Alaskans volunteered their time to help the commission.

"A lot of Alaskans put a lot of work into this activity, and while it's up to us to debate and to implement some or all of the Commission's recommendations, the one thing we will not do is ignore them," said Representative Con Bunde (R-Anchorage), Vice Chair of the House Finance Committee. "This was designed to be, and will continue to be, an on-going process."

"The first thing we will do is send these recommendations to the Finance subcommittees for their review and consideration to see what could be implemented," said Senator John Torgerson (R-Kasilof), Co-Chair of the Senate Finance Committee. "We also must figure out whether, and to what extent, the governor will act on these recommendations."

The Commission prepared a list of 20 recommendations which received approval from a majority of commission members. In addition, the Commission forwarded the master list of all 408 recommendations of subcommittees and State commissioners.

"Government services should only be privatized if, by doing so, we can provide the same or a higher level of service to the public for less money," said Senator Jerry Ward (R-Anchorage/Kenai). "This is all about a smaller and smarter State government."

"The State must begin to identify those activities which are inherently non-government activities," said Representative John Cowdery (R-Anchorage). "I anticipate legislation, modeled after federal statutes, which will require agencies and departments to periodically examine their activities and disclose which are inherently governmental and which are not."

ALASKA STATE LEGISLATURE

News From The Senate and House Majorities

State Capitol
Juneau, AK 99801
Actuality line: 1-800-478-6540
For Immediate Release November 2, 1999

Jerry Ritter (907) 269-0167
Mark Morones (907) 269-0257
web site: <http://www.akrepublicans.org>
Contact: Sen. Jerry Ward (907)269-0106
Rep. John Cowdery (907) 269-0222

A D V I S O R Y

Privatization Subcommittee Reports Due **Full Commission to Act on Recommendations**

(JUNEAU) -- The 11-member Commission on Privatization and Delivery of Government Services, established by the Legislature to examine the possibilities of turning some state functions over to private industry, has begun receiving and reviewing the reports of its 18 subcommittees. These subcommittees have been meeting with Executive Branch department heads and evaluating programs which might be candidates for privatization.

A schedule, subject to change, of subcommittee report filing days, is attached. The schedule is also available at the Commission's website, "www.privatizealaska.org." The site also has photos and contact information for commission members, along with links to resource material about privatization and news items from the Commission.

The full commission will submit a written report to the governor and the legislature by January 1, 2000.

###

Attached schedule of committee meetings is subject to change.

Full Commission Schedule & Department Reviews

DATE	Dept Review	Dept Review	Dept Review	Dept Review	Dept Review
October 28	Revenue				
November 4	Corrections	Labor	DEC		
November 10	Legislature	Admin	Courts		
November 18	CED	DOT	Rev:AHFC	Law	
November 24	Education	HESS	Public Safety	Fish & Game	University
November 30	Governor	DMVA			
December ?					
December 13					

Note: Schedule is subject to change

CORRECTION

**THE FOLLOWING DOCUMENT(S)
HAVE BEEN REFILMED TO
ASSURE LEGIBILITY OR PAGINATION**



Rev. 6/98

Central Microfilm Services
Department of Education & Early Development
State of Alaska

ALASKA STATE LEGISLATURE

News From The Senate and House Majorities

State Capitol
Juneau, AK 99801
Actualty line: 1-800-478-6540

Jerry Ritter (907) 465-3804
Mark Morones (907) 465-3803
web site: <http://www.akrepublicans.org>

FOR IMMEDIATE RELEASE: February 9, 2000

Contact: Sen. Jerry Ward (907) 465-4940
Rep. John Cowdery (907) 465-3879

Finance Committees Hear From Privatization Task Force **Subcommittees to Tackle Recommendations**

(JUNEAU) -- A joint session of the Senate and House Finance Committees Wednesday heard testimony from the Legislature's Commission on Privatization and Delivery of Government Services.

The 11-member commission, which the 21st Alaska Legislature established to examine the possibility of turning some State functions over to private industry, met during the interim (between legislative sessions) and prepared a report to the Legislature before its expiration date, December 31, 1999. More than 300 Alaskans volunteered their time to help the commission.

"A lot of Alaskans put a lot of work into this activity, and while it's up to us to debate and to implement some or all of the Commission's recommendations, the one thing we will not do is ignore them," said Representative Con Bunde (R-Anchorage), Vice Chair of the House Finance Committee. "This was designed to be, and will continue to be, an on-going process."

"The first thing we will do is send these recommendations to the Finance subcommittees for their review and consideration to see what could be implemented," said Senator John Torgerson (R-Kasilof), Co-Chair of the Senate Finance Committee. "We also must figure out whether, and to what extent, the governor will act on these recommendations."

The Commission prepared a list of 20 recommendations which received approval from a majority of commission members. In addition, the Commission forwarded the master list of all 408 recommendations of subcommittees and State commissioners.

"Government services should only be privatized if, by doing so, we can provide the same or a higher level of service to the public for less money," said Senator Jerry Ward (R-Anchorage/Kenai). "This is all about a smaller and smarter State government."

"The State must begin to identify those activities which are inherently non-government activities," said Representative John Cowdery (R-Anchorage). "I anticipate legislation, modeled after federal statutes, which will require agencies and departments to periodically examine their activities and disclose which are inherently governmental and which are not."

Commission members stressed that privatization efforts contain potential benefits for a wide variety of Alaskans. "There has been a background rumor going around that the Commission's activities and recommendations were somehow 'anti-union,' but nothing could be further from the truth," said Commission member Kathryn Thomas of Kenai. "In fact, many of the private sector businesses which might benefit from privatization, in both urban and rural Alaska, are union companies."

###

Editors note: Copies of the Commission on Privatization and Delivery of Government Services report to the Legislature are available from Legislative Information Offices.

ALASKA STATE LEGISLATURE

News From The Senate and House Majorities

State Capitol
Juneau, AK 99801
Actuality line: 1-800-478-6540
For Immediate Release November 2, 1999

Jerry Ritter (907) 269-0167
Mark Morones (907) 269-0257
web site: <http://www.akrepublicans.org>
Contact: Sen. Jerry Ward (907) 269-0106
Rep. John Cowdery (907) 269-0222

A D V I S O R Y

Privatization Subcommittee Reports Due **Full Commission to Act on Recommendations**

(JUNEAU) -- The 11-member Commission on Privatization and Delivery of Government Services, established by the Legislature to examine the possibilities of turning some state functions over to private industry, has begun receiving and reviewing the reports of its 18 subcommittees. These subcommittees have been meeting with Executive Branch department heads and evaluating programs which might be candidates for privatization.

A schedule, subject to change, of subcommittee report filing days, is attached. The schedule is also available at the Commission's website, "www.privatizealaska.org." The site also has photos and contact information for commission members, along with links to resource material about privatization and news items from the Commission.

The full commission will submit a written report to the governor and the legislature by January 1, 2000.

###

Attached schedule of committee meetings is subject to change.

Full Commission Schedule & Department Reviews

DATE	Dept Review	Dept Review	Dept Review	Dept Review	Dept Review
October 28	Revenue				
November 4	Corrections	Labor	DEC		
November 10	Legislature	Admin	Courts		
November 18	CED	DOT	Rev:AHFC	Law	
November 24	Education	HESS	Public Safety	Fish & Game	University
November 30	Governor	DMVA			
December ?					
December 13					

Note: Schedule is subject to change



and Delivery of Government Services

Co-Chairs:
Representative John Cowdery
Senator Jerry Ward

Senator Al Adams
Bill Allen
Representative Tom Brice
Tom Fink
Michael Harper
Emil Notti
Kathryn Thomas
Don Valesko
George Wuerch

House Majority Press Office: 269-0167
Senate Majority Press Office: 269-0257

For Immediate Release: November 18, 1999

CONTACT: Sen. Jerry Ward (907) 269-0106
Rep. John Cowdery (907) 269-0222

More Privatization Subcommittees Report **Consolidation of AIDEA and AHFC, Efficient** **Permitting, Comprehensible Budget Recommended**

(ANCHORAGE) -- The Commission on Privatization and Delivery of Government Services, established by the Legislature to examine the possibilities of turning some state functions over to private industry, has now received recommendations from 12 of its 15 subcommittees.

Among the Subcommittee recommendations are:

- Merge the Alaska Industrial Development & Export Authority into the Alaska Housing Finance Corporation, producing anticipated savings of \$2.5 million;
- Require the State budget to be comprehensible to Alaskans and establish firm timelines for development and reporting of the budget;
- House and Senate Finance Committee hearings should be held into privatization of misdemeanor prosecutions and of the Department of Law's Office of Special Prosecutions and Appeals;
- Department of Natural Resources permitting should be codified and timely, fees should be standardized, and minor permitting should be rapid and routine;
- Airports, ports, and harbors should be transferred to municipalities or port authorities, road maintenance should be performed by the lowest level of local government, and a demonstration project for privatized road maintenance should be established.

The full 11-member commission will accept reports from its remaining subcommittees through the end of November. After hearing from interested and affected parties and receiving public input, the commission will vote on subcommittee recommendations. The commission will submit a written report to the governor and the legislature by January 1, 2000.

The complete subcommittee recommendations will be available to the public from Local Legislative Information Offices and on the commission's web site,

"www.privatizealaska.org."

###



and Delivery of Government Services

Co-Chairs:
Representative John Cowdery
Senator Jerry Ward

House Majority Press Office: 269-0167
Senate Majority Press Office: 269-0257

For Immediate Release: November 24, 1999

Senator Al Adams
Bill Allen
Representative Tom Brice
Tom Fink
Michael Harper
Emil Notti
Kathryn Thomas
Don Valesko
George Wuerch

CONTACT: Sen. Jerry Ward (907) 269-0106
Rep. John Cowdery (907) 269-0222

Final Privatization Subcommittees Report **UAF Utilities, Electronic Fish Tickets, Independent DFYS Oversight Board Among Recommendations**

(ANCHORAGE) -- The Commission on Privatization and Delivery of Government Services, established by the Legislature to examine the possibilities of turning some state functions over to private industry, Wednesday received recommendations from 5 of its 20 subcommittees.

Among the Subcommittee recommendations reported today are:

- Investigate privatization of the power plant, telephone system and other utilities at the University of Alaska, Fairbanks;
- Urged the Dept. of Fish and Game to adopt electronic fish tickets to monitor catch volumes and tax collections; use private contractors to safeguard wildlife viewing areas; and, use volunteer stream guards manned with cell phones to assist fisheries enforcement on popular fishing streams;
- The subcommittee on the Department of Public Safety told the Commission that the Civil Air Patrol can avail itself of up to another \$500,000 from the federal government for anti narcotics operations. But, the CAP must be called upon by the Department before they become eligible for the money;
- The Education subcommittee called for legislation doubling the number of charter schools, lengthening charter school contracts and establishing accounting guidelines. They voted for less administrative paperwork and to include gun safety education in the school programs. They favored a school voucher program for public and private schools. A minority report was filed by members of the teachers union objecting to the voucher proposal and others.
- An Independent Oversight Board for the Division of Family and Youth Services was one recommendation made by the subcommittee on Health and Social Services. They also favored contracting out to local hospitals some of the services now performed by

CORRECTION

**THE FOLLOWING DOCUMENT(S)
HAVE BEEN REFILMED TO
ASSURE LEGIBILITY OR PAGINATION**



Rev. 6/98

Central Microfilm Services
Department of Education & Early Development
State of Alaska



and Delivery of Government Services

Co-Chairs:
Representative John Cowdery
Senator Jerry Ward

Senator Al Adams
Bill Allen
Representative Tom Brice
Tom Fink
Michael Harper
Emil Notti
Kathryn Thomas
Don Valesko
George Wuerch

House Majority Press Office: 269-0167
Senate Majority Press Office: 269-0257

For Immediate Release: November 24, 1999

CONTACT: Sen. Jerry Ward (907) 269-0106
Rep. John Cowdery (907) 269-0222

Final Privatization Subcommittees Report **UAF Utilities, Electronic Fish Tickets, Independent DFYS Oversight Board Among Recommendations**

(ANCHORAGE) -- The Commission on Privatization and Delivery of Government Services, established by the Legislature to examine the possibilities of turning some state functions over to private industry, Wednesday received recommendations from 5 of its 20 subcommittees.

Among the Subcommittee recommendations reported today are:

- Investigate privatization of the power plant, telephone system and other utilities at the University of Alaska, Fairbanks;
- Urged the Dept. of Fish and Game to adopt electronic fish tickets to monitor catch volumes and tax collections; use private contractors to safeguard wildlife viewing areas; and, use volunteer stream guards manned with cell phones to assist fisheries enforcement on popular fishing streams;
- The subcommittee on the Department of Public Safety told the Commission that the Civil Air Patrol can avail itself of up to another \$500,000 from the federal government for anti narcotics operations. But, the CAP must be called upon by the Department before they become eligible for the money;
- The Education subcommittee called for legislation doubling the number of charter schools, lengthening charter school contracts and establishing accounting guidelines. They voted for less administrative paperwork and to include gun safety education in the school programs. They favored a school voucher program for public and private schools. A minority report was filed by members of the teachers union objecting to the voucher proposal and others.
- An Independent Oversight Board for the Division of Family and Youth Services was one recommendation made by the subcommittee on Health and Social Services. They also favored contracting out to local hospitals some of the services now performed by

Anchorage Psychiatric Institute, and, called for an audit of the Medicaid Rate Advisory Commission.

"The Commission will be accepting reports from the remaining 4 subcommittees in the very near future," said Commission Co-Chair Representative John Cowdery (R-Anchorage). "We look forward to the process of hearing from interested and affected parties and receiving public input, and then finally voting on the subcommittee recommendations."

The Commission will submit a written report to the governor and the legislature by January 1, 2000.

The complete subcommittee recommendations will be available to the public from Local Legislative Information Offices and on the commission's web site,

"www.privatizealaska.org."

###

ALASKA STATE LEGISLATURE

News From The Senate and House Majorities

State Capitol
Juneau, AK 99801
Actuality line: 1-800-478-6540
For Immediate Release: July 20, 1999

Jerry Ritter (907) 269-0167
Wendy Lindskoog (907) 269-0257
web site: <http://www.akrepublicans.org>
Contact: Sen. Jerry Ward (907)269-0106
Rep. John Cowdery (907) 269-0222

Privatization Commission Meets **Subcommittees Named; Website Unveiled**

(JUNEAU) -- The 11-member Commission on Privatization and Delivery of Government Services, established by the Legislature to examine the possibilities of turning some state functions over to private industry, held an organizational meeting Tuesday in Anchorage.

The Commission unveiled a new website, "www.privatizealaska.org." The site has photos and contact information for commission members, along with links to resource material about privatization, meeting schedules, and news items from the Commission. The website is designed to allow the public to keep abreast of Commission activities.

As part of the organizational meeting, members of the public signed up for subcommittees.

"There are fifteen subcommittees, one for each department of the government, and response was so great that eight of them are already filled," said Representative John Cowdery (R-Anchorage), Commission Co-Chair. "These subcommittees will meet with Executive Branch department heads and evaluate programs which might be candidates for privatization."

"The Commission could not hope to finish its work on time without the help of the volunteer subcommittees," said Senator Jerry Ward (R-Anchorage/Kenai), Commission Co-Chair. "This is where a good deal of the Commission's 'nuts-and-bolts' work will take place."

The commission will submit a written report to the governor and the legislature by January 1, 2000.

###

ALASKA STATE LEGISLATURE

Media Advisory

State Capitol
Juneau, AK 99801-1182
(907) 269-0167
(907) 465-0257
Actuality line: 1-800-478-6540

Privatization Commission to Meet in Anchorage **July 20, 1999 -- 8:00 a.m.**

(ANCHORAGE) -- The Commission on Privatization and Delivery of Government Services will meet Tuesday, July 20, 1999, at 8:00 a.m. in the 2nd Floor Conference Room of the Anchorage Legislative Information Office, 716 West 4th Avenue. The meeting will be teleconferenced. Members of the public and press are invited to attend.

The 11-member commission, created by the Legislature this year, is co-chaired by Senator Jerry Ward (R-Anchorage/Kenai) and Representative John Cowdery (R-Anchorage). The commission will examine the possibilities of turning some State functions over to private industry.

###

ALASKA STATE LEGISLATURE

News From The Senate and House Majorities

State Capitol
Juneau, AK 99801
Actuality line: 1-800-478-6540
For Immediate Release: September 20, 1999

Jerry Ritter (907) 269-0167
Wendy Lindscoog (907) 269-0257
web site: <http://www.akrepublicans.org>
Contact: Sen. Jerry Ward (907)269-0106
Rep. John Cowdery (907) 269-0222

Privatization Commission Meets

Focus Shifts to Possible Elimination of Services

(JUNEAU) -- The 11-member Commission on Privatization and Delivery of Government Services, heard Monday from representatives of the nation's military, which has had an ongoing and successful privatization program in operation for several years. The Commission was established by the Legislature to examine the possibilities of turning some state functions over to private industry.

"Last week's vote against using Permanent Fund Dividend money to support State government means that the Privatization Commission's work is taking on added importance," said Commission Co-Chair Rep. John Cowdery (R-Anchorage). "Before, we were just talking about contracting out some services. Now, we have to look more at eliminating some services," Cowdery said.

"It is clear that we must place more emphasis on management issues, said Sen. Jerry Ward (R-Anchorage/Kenai), Commission Co-Chair, responding to a staff report that was partially critical of the Administration's participation. "We need managers who know what is important and what is not important," Ward said.

Calling the Privatization Commission's mission, "serendipitously fortunate," Commission member Kathryn Thomas of Kenai said: "We're just lucky that we are training ourselves about methods to reduce government costs and increase production at a time when the voters are saying that's what they want done. When we took on this job, the commission was only supposed to have a 6 month life span," Thomas said. "It's beginning to look like we're going to live longer than we bargained for."

Commission members spent the morning listening to a polished presentation from the US Army, Alaska about privatization practices in the military. "The Army literally wrote the book on privatization," said Marco Pignalberi, the Commission's Director, who arranged the briefing. "There is a substantial body of literature on this subject and it all points to seminal work done by the Office of Management and Budget and the Department of the Army," said Pignalberi.

-- More --

The public can contact the Commission anonymously with suggestions for privatizing or eliminating State government services by calling toll-free 1-888-562-7474 or, in Anchorage, 269-0226. In addition, the Commission has established a website, "www.privatizealaska.org." The site has photos and contact information for commission members, along with links to resource material about privatization, meeting schedules, and news items from the Commission. The website is designed to allow the public to keep abreast of Commission activities.

The commission will submit a written report to the governor and the legislature by January 1, 2000.

###

ALASKA STATE LEGISLATURE

News From The Senate and House Majorities

State Capitol
Juneau, AK 99801
Actuality line: 1-800-478-6540
For Immediate Release: July 12, 1999

Jerry Ritter (907) 269-0167
Wendy Lindscoog (907) 269-0257
web site: <http://www.akrepublicans.org>
Contact: Sen. Jerry Ward (907) 269-0106
Rep. John Cowdery (907) 269-0222

Members Appointed to Privatization Task Force **Panel to Hold First Meeting July 20 in Anchorage**

(ANCHORAGE) -- Senate President Drue Pearce and Speaker of the House Brian Porter Monday announced appointment of the 11-member Commission on Privatization and Delivery of Government Services.

The commission is authorized by Senate Bill 33, sponsored by Senator Jerry Ward (R-Anchorage/Kenai), which the Governor signed into law last month. The members will examine the possibilities of turning some state functions over to private industry. The commission will submit a written report to the governor and the legislature by January 1, 2000.

Senator Pearce appointed Senator Ward as Co-Chair. Other Senate appointees are: Senator Al Adams (D-Kotzebue); Mr. Bill Allen, General Manager of Doyon Properties, Inc. of Fairbanks; and Mr. William Prosser, Chairman of Cook Inlet Region, Inc.

Speaker Porter appointed Representative John Cowdery (R-Anchorage) as Co-Chair. Other House appointees are: Representative Tom Brice (R-Fairbanks); former House Speaker and Anchorage Mayor Tom Fink; and Ms. Helvi Sandvik, President of NANA Development, Inc.

The remaining three committee members authorized by SB 33 are: Anchorage Assembly Chair George Weurch, appointed by the Alaska Municipal League; Ms. Kathryn Thomas of Kenai, appointed by the Alaska State Chamber of Commerce; and Mr. Don Valesko, appointed by the AFL-CIO.

Senator Ward and Representative Cowdery announced that the Commission's first meeting will be at 8 a.m. July 20, 1999, in the 2nd Floor Conference Room of the Anchorage Legislative Information Office, 716 West 4th Avenue. The meeting will be teleconferenced. Members of the public and the press are invited to attend.

###

Subject: PTF Releases**Date:** Fri, 28 Jan 2000 09:55:38 -0900**From:** Jerry Ritter <Jerry_Ritter@legis.state.ak.us>**Organization:** Alaska State Legislature**To:** Marco Pignalberi <Marco_Pignalberi@legis.state.ak.us>

Marco

I believe this is everything I released. I don't know if Sen. Ward put out anything on his own hook.

JR

 PTFSubSched.doc	Name: PTFSubSched.doc Type: Winword File (application/msword) Encoding: base64 Download Status: Not downloaded with message
 PTF 11-10.doc	Name: PTF 11-10.doc Type: Winword File (application/msword) Encoding: base64 Download Status: Not downloaded with message
 PTF 11-18.doc	Name: PTF 11-18.doc Type: Winword File (application/msword) Encoding: base64 Download Status: Not downloaded with message
 PTF 11-24.doc	Name: PTF 11-24.doc Type: Winword File (application/msword) Encoding: base64 Download Status: Not downloaded with message
 PTF Mtg 7.20.doc	Name: PTF Mtg 7.20.doc Type: Winword File (application/msword) Encoding: base64 Download Status: Not downloaded with message
 PTF Mtg 7.21.doc	Name: PTF Mtg 7.21.doc Type: Winword File (application/msword) Encoding: base64 Download Status: Not downloaded with message
 PTF Mtg 9.20.doc	Name: PTF Mtg 9.20.doc Type: Winword File (application/msword) Encoding: base64 Download Status: Not downloaded with message

 <u>PTFMembers.doc</u>	Name: PTFMembers.doc Type: Winword File (application/msword) Encoding: base64 Download Status: Not downloaded with message
---	---

 <u>PRIVATIZATION PROCESS UNDERWAY.doc</u>	Name: PRIVATIZATION PROCESS UNDERWAY.doc Type: Winword File (application/msword) Encoding: base64 Download Status: Not downloaded with message
---	---

PRIVATIZATION PROCESS UNDERWAY

Co-Chairs Pleased by Overwhelming Response

Approximately 300 Alaskans have volunteered their time to help the Commission on Privatization and Delivery of Government Services. The full 11-member commission, which the 21st Alaska Legislature established to examine the possibilities of turning some State functions over to private industry, held its first meeting July 20.

One subcommittee has been established for each department in State government, plus the court system, the university system, and the Legislature, itself. The Governor has assigned a departmental liaison from each department.

The subcommittees began meeting in late July and will continue their work throughout the late summer and early fall. Commission Co-Chairs, Senator Jerry Ward (R-Anchorage) and Representative John Cowdery (R-Anchorage), say they expect subcommittee reports to start coming in by late October.

In addition to Ward and Cowdery, Commission members include: Senator Al Adams (D-Kotzebue); Representative Tom Brice (D-Fairbanks); former Speaker of the House and Anchorage Mayor Tom Fink; Anchorage Assembly Chair George Weurch; Bill Allen, General Manager of Doyon Properties, Inc. of Fairbanks; William Prosser, Chairman of Cook Inlet Region, Inc.; Helvi Sandvik, President of NANA Development, Inc.; Kathryn Thomas of Kenai, appointed by the Alaska State Chamber of Commerce; and Don Valesko, appointed by the AFL-CIO.

"It's gratifying to see so many Alaskans take the time to volunteer their time for this important work," said Senator Ward. "The true 'nuts-and-bolts' work relating to privatization will take place in these subcommittees and it's these volunteers who are shouldering the load."

"Every dollar we can save through privatization actually does double-duty," said Representative Cowdery. "Not only is it a dollar that doesn't come out of the State's treasury, but it's a dollar that actually goes into the private sector, which is, of course, what drives the state's economy."

The subcommittees' reports will be reviewed by the full committee, which may or may not make amendments before making a comprehensive written report to the Legislature and the Governor by January 1, 2000.

###

How to contact the Privatization Task Force:

Mailing address:

Commission on Privatization and Delivery of Government Services
716 West 4th Avenue
Anchorage, AK 99501

Phone:

(907) 269-0222

Fax:

(907) 269-0223

E-Mail:

xxxxxxxxxxxxx

On the web:

www.privatizealaska.org

CO-CHAIRS' CORNER

by Senator Jerry Ward and Representative John Cowdery

Some 300 Alaskans have volunteered to work with the Commission on Privatization and Delivery of Government Services. In light of the supposed popular attitude that cynicism about - and distrust in - government are prevalent in our society, this overwhelming response is more than gratifying. It is an affirmation that Alaskans still believe in grass roots democracy and are willing to give of themselves to make it work the way it's supposed to work.

Time and space constraints do not permit us to thank each and every volunteer who stepped forward and gave of his or her time. But we do want to acknowledge that effort in some public, albeit small, was. So, to each and every one of you we say "thank you."

The Commission, popularly known as the "Privatization Task Force," is examining all aspects of State government. 18 subcommittees are examining each of the State's 15 government departments, the university, and the court system. That's 17. The 18th? That's the legislature, itself, and there is a subcommittee examining it, as well.

The idea is not to conduct a "witch hunt" or to "get" anyone or any particular program. The idea is for people who are not involved in the day-to-day operation of government to examine what it does with a fresh, unprejudiced eye. Is this a necessary service? If not, why are we providing it? If so, is it a service which could be more efficiently provided by the public sector? When the examinations are over, each subcommittee will submit a report to the full Commission which, in turn, is charged with preparing a final report to the Legislature and the Governor by January 1, 2000.

Every member of the Legislature is eagerly anticipating this final report. For the first time we will have written evidence, based upon first-hand examination and study, of what services the public, wants and needs from State government. We'll see where you think money and effort is being spent wisely and, perhaps, not-so-wisely. In addition, we'll have some consensus opinions on how those services can be made better and more efficient.

Again, we want to thank the Commission members and all the Alaskans who have volunteered for subcommittee work, to wish them well in their efforts, and we urge all Alaskans to contact the Commission, either directly or through the subcommittees, with your ideas and proposals.

QUESTIONNAIRE

What areas of government should be privatized?

1 _____

2 _____

3 _____

Comments: _____

(fold)

Would you be willing to volunteer?

/ / Yes / / No

If "yes," in what capacity? _____

What hours are you available? _____

Special skills: _____

How to reach me: _____

(fold)

(Return address)

**Public Versus Private Initiative in Arctic Exploration:
The Effects of Incentives and Organizational Structure**

Jonathan M. Karpoff
Norman C. Metcalfe Professor of Finance
School of Business
University of Washington
Seattle, WA 98195
206-685-4954
karpoff@u.washington.edu

First draft: January 6, 1999
Current revision: February 26, 1999

I thank Peter Conroy for research assistance, and Helen Adams, Mike Buessler, Wayne Ferson, Alan Hess, Paul Malatesta, Jeff Pontiff, Ed Rice, and participants at the University of Washington finance seminar for helpful comments.

**Public Versus Private Initiative in Arctic Exploration:
The Effects of Incentives and Organizational Structure**

Abstract

From 1818 to 1909, 35 government and 56 privately-funded expeditions sought to locate and navigate a Northwest Passage, discover the North Pole, and make other significant discoveries in arctic regions. Most major arctic discoveries were made by private expeditions. Most tragedies were publicly funded. By other measures as well, publicly-funded expeditions performed poorly. On average, 5.9 (8.9%) of their crew members died per outing, compared to 0.9 (6.2%) for private expeditions. Among expeditions based on ships, those that were publicly funded used an average of 1.63 ships and lost 0.53 of them. Private ship-based expeditions, in contrast, used 1.15 ships and lost 0.24 of them. Of public expeditions that lasted longer than one year, 46.7% were debilitated by scurvy, compared to 13.2% for private expeditions.

Multivariate tests indicate that these differences are not due to differences in the exploratory objectives sought, country of origin, the number of previous expeditions on which the leader served, or the decade in which the expedition occurred. Rather, they are due to systematic differences in the ways public and private expeditions were organized. Historical accounts indicate that, compared to private expeditions, public expeditions: (1) employed leaders that were relatively unmotivated and unprepared for arctic exploration; (2) separated the initiation and implementation functions of executive leadership; and (3) adapted slowly to new information about clothing, diet, shelter, modes of arctic travel, organizational structure, and optimal party size.

Public Versus Private Initiative in Arctic Exploration: The Effects of Incentives and Organizational Structure

I. Introduction

Politicians and researchers continue to debate the relative merits of public and private enterprise. Proponents of schemes to privatize government-owned businesses claim that private companies run more efficiently. The evidence, however, is mixed. Boardman and Vining (1989) report that government-owned companies are less profitable than private firms, and Megginson, Nash, and Van Randenborgh (1994) report that newly privatized companies have significant performance improvements. Kole and Mulherin (1997), in contrast, find that large blockholdings by the U.S. government do not correspond to poor corporate performance. Similarly, Caves and Christensen (1980) conclude that publicly-owned Canadian railroads do not perform worse than their private counterparts. Dewenter and Malatesta (1998) find that government-run companies tend to improve performance *before* they are privatized, but not afterwards.

Eckel, Eckel, and Singal (1997) point out that attempts to compare the performances of public and private enterprises encounter problems from differences in accounting, market environments, regulations, and objectives. In this paper I propose an alternative way to investigate the relative efficiencies of public and private enterprise: by examining historical data on arctic exploration in the 19th century.

Much like space exploration in the 20th century, arctic exploration in the 19th century dominated popular culture in Europe and the United States. There are many parallels between exploration of outer space last decade and of arctic regions last century. Both involved competitive races for major geographic prizes: the first manned orbit and lunar landing in one, and the Northwest Passage and North Pole in the other. In both cases, returning explorers became symbols of national pride. Disasters and deaths triggered widespread mourning and calls for cutbacks in exploration activity.

In one important area, however, the analogy between 19th and 20th century exploration breaks down. The twentieth century space race involved primarily the bureaucracies of two national governments. Nineteenth century polar expeditions, in contrast, were conceived, initiated, and funded by both national governments and private organizations. The public and private expeditions shared a common goal: geographic discovery without loss of life or ship. Initiators of both expedition types were rewarded for discovery through public adulation, awards,

promotions, cash prizes, book sales, lecture fees, and larger budgets. They also were penalized for failure, through lost funding opportunities, smaller budgets, and fewer personal rewards. In extreme cases, failure also meant death from accidents, exposure, scurvy, or starvation.

Because goals, prospective rewards, and penalties were in most cases similar, it is possible to make meaningful comparisons between the successes of public and private arctic expeditions. I find that, compared to private expeditions, government-sponsored expeditions tended to be large and well-funded. By most measures, however, the government expeditions fared poorly. They made fewer major discoveries, introduced fewer technological innovations, were subject to higher rates of scurvy, lost more ships, and had more explorers die.

To be sure, most leaders of government-funded expeditions performed courageously -- U.S. Army Captain Adolphus W. Greely, for example, personally cared for his dwindling number of starving men in the winter of 1884, and British Navy Lt. John Franklin literally ate his boots to stay alive in 1821.¹ Many made notable discoveries -- Fridtjof Nansen, for example, relied on government funding to implement his plan to *purposefully* get his ship stuck in the polar ice, thereby floating most of the way to a new furthest north in 1895. Also, many privately funded expeditions were fiascos -- Evelyn Baldwin, for example, so alienated his crew that his 1901 attempt at the North Pole achieved nothing, despite lavish financial support from industrialist William Ziegler.

On average, however, public expeditions represent few of the major arctic discoveries and a large share of the fiascos. In section II below, I present case histories of several famous arctic expeditions that illustrate this conclusion. To provide a more systematic analysis, sections III through VI compare the characteristics of 35 public and 56 private arctic expeditions from 1818 - 1909. Section III summarizes the data from these 91 expeditions. Sections IV and V report on univariate comparisons of the public and private expeditions' characteristics and outcomes. Section VI presents multivariate tests that examine the determinants of expedition success or failure.

The evidence indicates that the source of initiation and funding is strongly related to expedition performance. For example, an average of 5.9 crew members died on public

¹In a passage typical of his casual description of his crew's desperate fight for life, Franklin writes, "We drank tea and ate some of our shoes for supper" (Franklin 1988, p. 307).

expeditions, compared to 0.9 on private expeditions. Public ship-based expeditions lost 0.53 ships, on average, compared to 0.24 for private expeditions. Debilitating scurvy struck 46.7% of all public expeditions lasting longer than one year, compared to 13.2% for private expeditions. Not only did private expeditions take most of the major arctic prizes, but they also made arctic discoveries using relatively few crew members and vessel tonnage.

Finally, in section VII, I examine the reasons for public expeditions' poor performance. Compared to their private counterparts, public expeditions: (1) had poorly motivated and prepared leaders; (2) separated the initiation and implementation functions of executive leadership; and (3) were slow to exploit new information about clothing, diet, shelter, modes of arctic travel, organizational structure, and optimal party size.

II. Arctic Exploration During the Heroic Age: 1818 - 1909

II.A. Major arctic prizes

Nineteenth century arctic exploration focused on two major goals: to discover and navigate the Northwest Passage, and to discover the North Pole. A third goal, to discover the fate of the lost Franklin expedition of 1845, rose to prominence in the 1850's.² Each of these prizes promised riches "beyond his wildest dreams" to the person who achieved it (Berton 1988, p. 21). The British government, for example, posted a £ 15,000 award for the discovery of a Northwest Passage. Successful explorers also anticipated, and typically received, knighthoods, political positions, and/or honorary treatment around the world, not to mention a lucrative income from books and lecture tours.

In terms of accomplishing these major quests, private explorers fared much better than those who relied primarily upon public funds. Running a shoestring budget, Roald Amundsen first navigated the Northwest Passage from 1903-06 after sailing from Norway in the middle of the night to prevent a creditor from confiscating his ship. Robert Peary, backed by a council of such

²A fourth major arctic goal was the crossing of Greenland, accomplished by Fridtjof Nansen during 1888-89. Nansen's primary competitors were Robert Peary and A.E. Nordenskiöld, who failed in previous attempts to cross Greenland. Because it did not involve a long-running competition between public and private expeditions, the crossing of Greenland may not rise to the level of the three major arctic quests. Nevertheless, I include it in some empirical tests below.

wealthy investors as J.P. Morgan, laid the first credible claim to the North Pole in 1909.³ And despite enormous public expenditures by the British government from 1847 to 1855 to locate John Franklin's missing crew, Franklin's fate was determined almost exclusively through private efforts: John Rae first discovered relics and remains of some crew during 1853-54, and Francis M'Clintock in 1858 discovered the sole written record ever found from the ill-fated expedition. Later (private) expeditions by Charles Francis Hall and Frederick Schwatka discovered additional relics and interviewed Inuit Natives to help complete the narrative.

The sole portion of a major arctic prize that can be credited to a publicly-sponsored expedition is the initial verification that a Northwest Passage exists. Traveling east around Alaska in 1850, British Navy Captain Robert McClure's ship was beset in ice near the northern shore of Banks Island. In 1853, with four out of 66 crew members dead and the rest near death by starvation, McClure was saved by a sledging crew from a British naval expedition that entered the Canadian archipelago from the Atlantic Ocean. McClure abandoned ship and returned to England via the Atlantic with his rescuers, but in doing so generally is credited with having discovered the first Northwest Passage.^{4,5}

³Frederick Cook's claim to have reached the North Pole in 1908 was thoroughly discredited by 1911. Peary's claim also has been criticized, although historians agree that he reached much further north than any predecessor; unlike later North Pole explorers, he also *returned* without air or other assistance (e.g., see Rawlins 1972; Herbert 1989). Richard Byrd's claim to have flown to the North Pole in 1926 also is disputed (e.g. see Fisher 1992, pp. 192-200). The first undisputed claim to the North Pole is by Roald Amundsen, who flew by dirigible in 1926. Cook, Byrd, and Amundsen's expeditions all were privately funded.

⁴Another publicly-funded expedition, the one led by Franklin in 1845, also may have found a Northwest Passage. Franklin's ships sailed through and eventually got stuck in ice in a portion of the Canadian archipelago that now is called Franklin Strait. It is possible that, before their death, the crew traveled by foot over the last remaining unexplored stretch of a Northwest Passage via Rae Strait and Queen Maud Gulf.

⁵Although I focus on arctic exploration, the experiences of many antarctic explorers of this period are similar. For example, Roald Amundsen's private expedition to the South Pole was so finely managed that, traveling over entirely new terrain, he and his men actually gained weight during their excursion to the Pole. Robert Falcon Scott, in contrast, displayed less adaptability to antarctic conditions. Although Scott's last expedition was largely financed by private sources, Scott maintained the rigid naval conventions that characterized his previous and nearly-disastrous antarctic expedition in 1901-03, for which he was selected by the British Navy. Scott and four crew members died after getting beat to the South Pole by Amundsen (see, e.g., Huntford 1979).

II.B. Major arctic tragedies

Although publicly-sponsored expeditions achieved few of the major discoveries, they comprise the major tragedies of arctic exploration. The most famous tragedy is the 1845 Franklin expedition. Initiated through the efforts of Sir John Barrow, the undersecretary of the British Navy, this expedition was outfitted with two large converted war ships. It carried a crew of 129 and stocked a three-year supply of provisions. To lead the expedition, Barrow picked John Franklin, a national hero from two overland expeditions in northern Canada from 1819-27. By 1845, however, Franklin was 60 years old and recovering from a personally and politically devastating stint as Governor of Van Diemen's Land (Tasmania). Citing letters from Franklin's friends, Berton argues that Franklin was chosen as a personal favor, to help him reestablish political respectability, rather than because of any arctic leadership abilities.⁶

Franklin's ships left London with orders to circumnavigate the earth after sailing through a Northwest Passage. After last being seen by Baffin Bay whalers in 1845, however, Franklin's ships were never seen again. Subsequent reports from John Rae and Francis M'Clintock indicate that the ships were trapped in ice and destroyed, and that crew members died trying to walk south to safety. "They fell down and died as they walked along," reported an old Inuit woman to M'Clintock (Courtauld 1958, p. 290). Evidence of cannibalism indicates that most crew members starved to death.

A second famous tragedy resulted from a U.S. Government-sponsored expedition during 1881-84 led by Adolphus Greely, an officer in the Army Signal Corps. Greely's men were deposited on a northern shore of Ellesmere Island, from where sledging parties established a record for a furthest north. But when no relief ship appeared by 1883, Greely, following orders given him at the start of the expedition, abandoned his base and traveled south on foot, hoping to be picked up by a rescue ship. Nineteen of Greely's crew of 25 died before rescuers found the six starving survivors huddled under a fallen canvas tent near the southern part of Ellesmere Island.

Among private expeditions, the greatest tragedy involved an attempt by Navy Lieutenant George Washington De Long from 1879-81 to reach the North Pole by travelling north of Siberia.

⁶"If you don't let him go the man will die of disappointment," wrote Edward Parry to the British Navy about Franklin. Writing to James Clark Ross about Franklin's possible appointment, Jane Franklin claimed, "I think he will be deeply sensitive if his own department should neglect him . . . I dread exceedingly the effect on his mind ..." (quotes from Berton 1988, pp. 141-2).

(The expedition was "... indorsed (sic) by special act of Congress", which "authorized the Secretary of the Navy to take charge of the expedition and to appoint De Long to its command" (Miller 1930, pp. 187, 189). It was staffed by Navy personnel and conducted under Navy discipline. But since a majority of financial support came from James Gordon Bennett, the publisher of the New York *Herald*, I classify this as a private expedition.) His ship trapped and damaged by ice, De Long and his crew headed south to Siberia in three small boats. When a storm overtook them, one boat disappeared, a second reached safety, and a third reached shore only to have most of its members die of starvation. In all, 20 of the 33 crew members died, including De Long.

III. Data

As the De Long tragedy illustrates, privately-funded expeditions were not uniformly successful. Likewise, many significant discoveries were made by expeditions that used government funds. To examine more systematically the determinants of expedition success and failure, I use data on 91 different arctic explorations from 1818 through 1909. Appendix #1 lists these 91 expeditions. I begin my analysis in 1818, when the British Navy first exploited renewed interest in arctic discovery to forestall calls for military downsizing. The sample period ends in the year Robert Peary claimed to reach the North Pole. After 1909, technological changes -- especially in air travel -- and the increasing diversity among explorers' goals make difficult any direct comparisons between public and private expeditions. Viljhammer Stefansson's expeditions starting in 1913, for example, sought new arctic lands and a mythical tribe of "Blond Eskimos." In 1926, Roald Amundsen and (possibly) Richard Byrd each reached the North Pole by air (see Clarke 1964; Fisher 1992, pp. 192-201).⁷

The expeditions listed in Appendix #1 were identified from Holland (1994a) and Berton (1988). Data on the expedition's initiator, the leader's prior experience, primary sources of funding, ships and vessel tonnages, crew sizes, deaths, incidence of scurvy, and other outcomes

⁷Anecdotal evidence from the years after 1909, however, is consistent with the evidence reported in this paper. An expedition sponsored by the Canadian government and led by Viljhammer Stefansson from 1913 - 18, for example, was marked by poor organization and conflicting incentives among the leaders and scientists on the trip. The expedition lost both its ship and the lives of 11 of 25 members (see Struzik 1991, pp. 133-5). The last great arctic tragedy, involving the *Italia* dirigible in 1928, was sponsored by Mussolini's Italian government. Eight of the 16 crew died and the airship was lost (see Fisher 1992, pp. 202-9).

were collected from a variety of additional sources listed in the references and Appendix #2. The information from these sources sometimes is inconsistent. For example, two different sources may report slightly different crew sizes or vessel tonnages. When conflicts arise, I use the information provided in Holland (1994a), if available, then Berton (1988), then the source that by date or author identity seems closest to the expedition in question.

During the 1818-1909 period, hundreds of voyages were taken to arctic regions. Most, however, were commercial whaling and sealing ventures, or trips to resupply the Hudson Bay Trading Company's outposts in northern Canada. I focus instead on expeditions made primarily - in many cases exclusively -- for geographic discovery, focusing primarily on the Northwest Passage, Greenland, and North Pole. I exclude expeditions seeking the Northeast Passage (across the Russian arctic) or exploring the Bering Sea and Alaska.

Some expeditions, particularly during the Franklin search period of 1847-1859, involved coordinated efforts from more than one ship. As an example, Horatio Thomas Austin commanded four ships during a 1850-51 effort to find Franklin. In general, I list such efforts as single expeditions. In isolated cases I treat ships that were dispatched together as separate expeditions. The most notable example of this involves Robert McClure in 1850-54. McClure's *Investigator* originally was supposed to be part of a larger search coordinated by Richard Collinson aboard the companion ship *Enterprise*. Through a combination of miscommunication and deception, however, McClure effectively established separate command, and his is treated as a separate expedition in this study. (While such treatment involves judgment calls on my part, the major empirical results reported below do not change if I treat these cases as parts of their original expeditions.)

Data on vessel tonnages are reported only occasionally in most popular accounts of arctic travel. When popular or first-hand accounts do not provide vessel tonnage data, I rely on Hartman's (1983) *Guinness Book of Ships and Shipping*, Kemp's (1976) *Oxford Companion to Ships and the Sea*, and various issues of *Lloyd's Register of Shipping* (1850, 1851, 1875, 1900, 1905). I can find no information on the tonnage weights for 10 vessels. For tests reported in this paper, I estimated tonnages for these 10 vessels using a technique described by Maddala (1977, p. 204). Using data from all expeditions with complete records, I first estimated an ordinary least squares regression using tonnage as the dependent variable and crew size and expedition year as

independent variables. Coefficients estimated from this regression were then used to fit values for vessel tonnage for the 10 cases. The results reported here are not sensitive to this procedure, and tests in which these 10 expeditions are excluded yield similar conclusions.

Table 1 reports the distribution of the expeditions by nationality and the decades in which they began. A majority -- 49 -- were British, 24 American, and 18 from continental Europe, including Austria, Denmark, Germany, Italy, Norway, Russia, and Sweden. Until an American expedition led by Lt. Edwin DeHaven in 1850, all expeditions had British origins. The decade of the 1850's has the largest number of expeditions, due largely to the intensive search for the lost Franklin expedition. Many expeditions also occur in the latter decades, reflecting the increased interest in arctic exploration from the United States and continental Europe.

Panel B of Table 1 shows how the goals of arctic exploration changed over time. From 1818 through 1846, 14 of 16 expeditions sought the Northwest Passage. Expedition leaders' stated goals changed after Franklin's disappearance in 1845. Of the 28 expeditions from 1847 through 1864, 27 ostensibly were to search for Franklin. There is little doubt, however, that in many cases the Franklin search was a thinly veiled excuse for further discovery, most often to seek the Northwest Passage. Following the discovery of a passage in 1854 and of Franklin's demise by 1859, the Franklin search wound down and the focus of arctic exploration shifted to the North Pole. Thirty-four of the 47 expeditions between 1868 and 1909 sought the Pole. During this period, 10 expeditions had other primary motives, most involving Greenland. These include Fridtjof Nansen's 1888-89 first crossing of Greenland, and Robert Peary's 1891-92 and 1893-95 expeditions to northern Greenland (largely to determine Greenland's northernmost reach).

Many expeditions relied on combinations of public and private support. As shown in Panel C of Table 1, however, 35 relied primarily (i.e., more than 50%) upon government funding, while 56 were supported primarily from private funds. Government-supported expeditions generally are more common in the first half of the sample period, and privately-supported expeditions are more common in the latter half. In most decades, however, public and private expeditions competed directly with each other.

Finally, Panel D of Table 1 reports on the primary mode of transportation used in the expeditions. Sixty-three were primarily ship-based, in which ships were navigated in search of the

Northwest Passage, Franklin, or the North Pole. Of the remaining 28, 24 relied primarily on overland or ice travel, and four relied primarily on helium balloons in attempts to reach the North Pole. The distinction between land and ship-based expeditions sometimes is ambiguous. Many overland expeditions were supplied by ships, and most ship-based expeditions deployed teams that traveled over land and ice. I classify those for which the ship was used as most crew members' primary home as ship-based. If the ship deposited the explorers and returned to civilization, I classify the expedition as land-based. As reported in Panel D, the mix of ship-based versus other travel modes is roughly constant over time.

IV. Characteristics of public versus private expeditions

Anecdotal evidence suggests that public expeditions were much better financed than private expeditions. This is consistent with the evidence reported in Table 2. Sixty-three of the 91 expeditions -- 30 public and 33 private -- were based on ships. Of these, publicly-funded expeditions employed an average of 1.63 ships, private expeditions an average of 1.15 ships. The difference in means is statistically significant at the 1% level using both parametric and Wilcoxon rank sum test statistics. Public expeditions not only employed more ships, they also used larger ships. The mean tonnage per vessel on public expeditions is 365.8, compared to 260.6 for vessels on private expeditions. The mean tonnage of all vessels used, per expedition, is 596.2 tons for public expeditions and 276.9 tons for private expeditions. This difference is statistically significant at the 1% level.

Public expeditions also employed more people. The average crew size for all 35 public expeditions, including both land and ship-based trips, is 69.7. For private expeditions, it is 16.2. (Crew data are not available for two private expeditions: an 1871 North Pole excursion by Benjamin Leigh Smith and a 1900 German North Pole expedition led by Oskar Bauendalh.) Thus, public expeditions used more and larger ships, and employed substantially more people, than private expeditions. This indicates that the typical public expedition was much more costly than the typical private expedition.⁸

⁸Many illustrations exist of the relative frugality of private expeditions. As one example, to save money and weight, John Rae carried no tobacco on his 1853-4 search for Franklin. Rae's total load weighed less than the tobacco Franklin carried with him in 1845 (Struzik 1991).

Also reported in Table 2, leaders of public expeditions had been on 1.8 previous arctic or antarctic exploratory expeditions, on average. Their private counterparts previously had been on 1.5 previous polar expeditions. This difference in experience, however, is not statistically significant.

V. Univariate comparisons of expedition outcomes

Unlike profit-seeking businesses, arctic explorations have no single measure -- i.e., wealth creation -- by which to judge success or failure. Instead, I focus on four alternative groups of measures: crew member deaths, loss of ship, incidence of scurvy, and the efficiency with which new discoveries were made.

A. Crew member deaths and death rates

My first measures are the number and percentage of crew member deaths. None of the arctic explorers in my sample displayed anything short of a fervent desire to return home alive. Even for expedition leaders who returned alive, the death of any crew member was treated as both a tragedy and a failure of the expedition. Deaths reflected poorly on the expedition leader, possibly tarnishing his image and decreasing his ability to transform arctic fame into wealth or promotion. Deaths increased the public's perception of the risk of future expeditions, thus making more difficult one's ability to raise money from either public or private sources.⁹

Panel A of Table 3 reports on the average numbers and percentages of deaths for public and private expeditions. On average, 5.9 crew members died on public expeditions, compared to 0.9 on private expeditions. The difference is statistically significant at the 1 percent level using the Wilcoxon measure, but because of the large variance due to the 1845 Franklin disaster, the parametric test statistic is not significant. Omitting the Franklin expedition, the mean number of deaths on public expeditions falls to 2.3, but the t-statistic for the difference in means increases to 1.92.

One reason public expeditions had more deaths is that they deployed more crew. Still, the

⁹The adverse impact of crew members' deaths is reflected in newspaper editorials of the time. For example, responding to Sherard Osborn's 1868 proposal for a British North Pole expedition, *The Times* of London argued, "We must protest in the name of common sense and humanity ... We trust that not a single life may be adventured in another attempt to reach the North Pole" (Berton 1988, p. 412).

death rate as a percentage of crew size is larger for public expeditions, 8.93% versus 6.15% on private expeditions. The difference is statistically significant at the 10% level using the Wilcoxon signed rank test statistic.

V.B. Ships and vessel tonnage lost

Other than losing crew members, the greatest single representation of failure among sea-going expeditions was the loss of ship. The ship was the expedition's link to civilization and safety. Losing it doomed crew members to an extended period of privation and uncertainty over their fate. Even among leaders who survived, shipwrecks could end careers. In the British Navy, for example, the loss of ship triggered an automatic court-martial of the captain (Struzik 1991, p. 97). In my sample, only three leaders returned to lead a subsequent expedition after losing a ship. Even in these cases, shipwrecks appear to have had adverse reputational effects. Edward Parry shifted his attention away from the Northwest Passage and attempted only one more expedition after losing the *Fury* in 1824, and John Ross had to finance his final 1850 expedition largely on his own after losing the *Victory* in 1830. Only Walter Wellman, who lost the *Ragnvald* in 1894, continued to pursue an extended arctic career after his shipwreck.

By this measure also, public expeditions fared poorly. As reported in Panel B, among the 30 ship-based public expeditions, the mean number of ships lost is 0.53. The mean for the 33 ship-based private expeditions is 0.24. Thus, approximately one ship was lost for every two public expeditions or every four private expeditions. These means are significantly different at the 10% level using the parametric t-statistic, but not using the Wilcoxon rank-sum test statistic.

One reason public expeditions lost more ships is that they deployed more of them. Public expeditions lost 33.8% of their ships deployed, compared to 22.7% for private expeditions. This difference, however, is not statistically significant.

Panel B also reports on the vessel tonnage represented by the lost ships. The mean loss for public expeditions is 197.9 tons, compared to 59.7 tons for private expeditions. The difference is statistically significant at the 5% level using the parametric t-test, and at the 10% level using the Wilcoxon test. Public expeditions also lost a greater fraction of their vessel tonnage employed, 34.9% versus 22.3% for private expeditions. This difference, however, is not statistically

significant.¹⁰

Hence, public expeditions lost more ships and more vessel tonnage than private expeditions. This is partly but not wholly because public expeditions used more and larger ships. Public expeditions lost a greater fraction of their ships and vessel tonnage deployed, but not by statistically significant amounts.

V.C. Scurvy

Scurvy -- a debilitating and ultimately fatal disease attributable to a vitamin C deficiency -- contributed to many expeditions' problems. The cause of scurvy was not established until the 20th century. Until then, avoiding it was a central goal of nearly all expeditions. In addition to contributing to crew members' deaths, scurvy's debilitating symptoms severely limited their exploring capabilities. Arctic explorers tried various methods to avoid it, including brisk exercise, diversionary entertainment, lemon juice, and fresh meat. (Of these, only the latter two are anti-scorbutics.)

Scurvy's effects typically became apparent only after several months. Even if scurvy was incipient on expeditions lasting less than one year, its presence usually was undetected. I therefore examine the incidence of scurvy for the 68 of the 91 expeditions that lasted longer than one year. Of these, 19 definitely or probably were affected by advanced forms of scurvy. Twenty others were free of it. The remaining 29 expeditions most likely did not have significant scurvy problems. Panel C of Table 3 reports on two measures of the incidence of scurvy. The first excludes the 29 cases about which I am uncertain, and the second presumes that these expeditions did not have advanced scurvy problems.

Based on the first measure, 14 of 17 (82.4%) of public expeditions had significant scurvy problems. Only five of 22 (22.7%) public expeditions had such problems. Using the second measure, 14 of 30 (46.7%) public expeditions, and five of 38 (13.2%) private expeditions had scurvy. Both differences in proportions are statistically significant at the 1% level.

¹⁰In addition to the 63 ship-based expeditions, I have data on the ships used by 11 of the land-based or balloon expeditions. Ten of these are private and one public. Including data from these 11 expeditions, the differences in means and associated test statistics for each of the measures in Panel B become larger. For example, the mean number of ships lost per public expedition is 0.52, and per private expedition is 0.19. This difference in means is statistically significant at the 5% level using either the parametric or Wilcoxon test statistic.

V.D. Achievements

Panel D reports on three measures of expedition achievement. The first reflects the major arctic prizes: discovery and navigation of the Northwest Passage, discovery of the lost Franklin expedition, and discovery of the North Pole. I include as a fourth major prize the initial crossing of Greenland.¹¹ Of the 35 public expeditions in the sample, only one, or 2.9% (Robert McClure in 1850-54) achieved one of these prizes. Five of the 56 private expeditions accomplished one of the prizes: Rae in 1853-54 and M'Clintock in 1857-59 each claiming a share of the resolution to the puzzle of the missing Franklin expedition, Nansen crossing Greenland in 1888-89, Amundsen navigating the Northwest Passage from 1903-06, and Peary making it to the North Pole (or thereabouts) in 1908-09. However, the success rate for private expeditions of 8.9% is not significantly higher than that for public expeditions.

A second measure of achievement recognizes other major geographic discoveries in addition to the major arctic prizes. I define such major discoveries as consisting of: (i) major island groups (e.g., Weyprecht's discovery of Franz Josef Land during 1872-74), (ii) the establishment of a new farthest north (e.g., Parry in 1827), and (iii) three miscellaneous expeditions. These three are John Ross' discovery of the north magnetic pole during 1829-33, Parry's 1819-20 push into the Canadian archipelago that was not duplicated for over 30 years, and Nordenskiöld's 1868 new furthest north for a ship. Using this criterion, public and private expeditions had similar records of achievement. A total of 7 of 35 (20%) public expeditions, and 11 of 56 (19.6%) private expeditions recorded such major discoveries. The difference in proportions is not statistically significant.

A third measure of achievement includes the major discoveries plus a number of lesser-known but significant accomplishments. I include 14 additional expeditions in this set. Examples include Franklin's 1825-27 charting of 1,000 new miles of the Canadian arctic coast, George Back's 1833-35 discovery and navigation of the Back River, William Kennedy's record-setting sledge trip during 1851-52, and Elisha Kent Kane's 1853-55 push into Smith Sound and the Kane

¹¹ As noted in footnote 3, the initial crossing of Greenland may not rise to the level of a "major arctic prize." Hence, an argument can be made to exclude it from this list. Demoting it to my second measure of achievement ("major geographic discoveries"), however, has little effect on the results reported here.

Basin. As reported in Panel D of Table 3, 12 of 35 (34.3%) public expeditions recorded such achievements. Of the 56 private expeditions, 20 (35.7%) recorded achievements of similar importance.¹²

V.E. Achievement efficiency

Although the rates of achievement do not differ significantly between public and private expeditions, the efficiency with which the achievements were made do. This is because public expeditions tended to be much larger and more costly than private expeditions. Panel E reports on three measures of achievement efficiency. The first is

$$\text{Efficiency measure \#1} = (1 + \text{Major arctic prize}) / \text{Crew size}, (1)$$

where "Major arctic prize" equals one for expeditions achieving a major arctic prize, and zero otherwise. Also,

$$\text{Efficiency measure \#2} = (1 + \text{Major geographic discovery}) / \text{Crew size}$$

$$\text{Efficiency measure \#3} = (1 + \text{Lesser but significant accomplishment}) / \text{Crew size}.$$

These measures use crew size as a proxy for expedition cost. Each has a potential range of 0 to 2. Large expeditions that achieved little have low efficiency measures, whereas small expeditions that made achievements have high measures.

The mean value of the first efficiency measure for private expeditions is 0.137, compared to 0.024 for public expeditions. For the second efficiency measure, the mean value for private expeditions is 0.145 compared to 0.030 for public expeditions, and for the third efficiency measure, the mean value for private expeditions is 0.168, compared to 0.034. The differences are statistically significant at the 1% level for all three measures.

The finding that private expeditions made discoveries at significantly lower cost than public expeditions is not sensitive to the specific efficiency measure. For example, the results are qualitatively similar if I use vessel tonnage, crew member deaths, or ships lost as proxies for an expedition's cost. The results also are similar if I assign different values to "achievement." For example, if "Major arctic prize" in equation (1) is assigned a value of 2, or 10 (instead of one), for

¹²My classification of such significant accomplishments admittedly is subjective. Any reasonable reclassification of the expeditions – for example, excluding Back's navigation of the Back River or including Peary's 1891-92 trek to northern Greenland – does not alter substantially the results in Panels D and E of Table 3.

expeditions achieving a major arctic prize, private expeditions' efficiency measures remain significantly higher than those for public expeditions.

Thus, as shown in Panel D, private expeditions recorded most of the major prizes of arctic exploration. When the definition of arctic achievement is expanded to include major geographic discoveries or other lesser-known but important discoveries, public and private expeditions achieved successes at roughly equal rates. As shown in Panel E, however, private expeditions made discoveries at significantly lower cost than public expeditions.

VI. Determinants of expedition failure and success

VI.A. Determinants of crew member deaths and death rates

The univariate comparisons reported in section V do not control for numerous factors that conceivably contribute to expedition success or failure. In this section I report on multivariate tests that seek to control for the time period, nation of origin, goals, and other expedition characteristics. Table 4 reports on the determinants of crew member deaths and death rates. The number of deaths is highly skewed, so my first measure is the natural log of one plus the number of crew members who died. At least one death occurred on 39 of the 89 expeditions on which I have sufficient data. On the other 50 expeditions, all crew members survived. Because of the large number of cases for which the number of deaths is zero, I use a Tobit censored regression model.

The independent variables include the following:

- PRIVATE is a dummy variable set equal to one for expeditions that were initiated and funded primarily through private sources.
- BRITAIN and USA are dummy variables indicating whether the expedition was from Great Britain or the United States, respectively. Expeditions from continental Europe are reflected in the constant term.
- NORTHWEST PASSAGE, FRANKLIN SEARCH, and NORTH POLE are dummy variables indicating the expedition's main objective. The 10 expeditions in the sample that had other primary objectives (e.g., Greenland) are reflected in the constant term.
- Finally, I include dummy variables representing the decade in which the expedition began. Separate dummies are defined for expeditions in the 1820's, 1830's, 1840's, continuing to the

1900's. The four expeditions initiated in 1818 and 1819 are reflected in the constant term.

The results are reported as Model 1 in Table 4. The coefficient for PRIVATE is -1.39 with a t-statistic of -3.28, and is statistically significant at the 1% level. Thus, private expeditions experienced significantly fewer deaths than public expeditions, even after controlling for the nation of origin, objective, and time period.

None of the other reported coefficients are significantly different from zero. The coefficients for BRITAIN and USA indicate that the number of deaths is not significantly related to nationality of origin. The number of deaths also is not significantly related to whether the expedition's objective was the Northwest Passage, the search for Franklin, or the North Pole. Although not reported in the table, the coefficient for the 1840's dummy variable is positive and significant at the 5% level, reflecting largely the influence of the 1845 Franklin tragedy.¹³

Model 2 in Panel A includes four additional regressors that characterize the expedition's mode of travel, leader's experience, and crew size:

- LAND is a dummy variable set equal to one for each of the 24 expeditions that relied primarily upon land-based exploration.
- BALLOON is set equal to one for each of the four (two each by Salomon Andree and Walter Wellman) that sought to reach the North Pole by helium balloon. If land-based or balloon exploration attempts pose fundamentally different risk than ship-based travel, these variables could be related to the number of deaths.
- EXPERIENCE is equal to the number of previous polar expeditions on which the expedition leader served.
- CREW is the number of crew members. The number of deaths quite plausibly is related to the number of people that embark on the expedition.

As reported in Model 2, the coefficient for LAND is -1.03 with a t-statistic of -1.82, indicating that land-based expeditions had fewer deaths than ship-based ones. The other three additional variables are not significantly related to the number of deaths. The coefficient for PRIVATE is

¹³ Although its 129 deaths far exceed that of any other expedition, the results reported here are not sensitive to the inclusion to the 1845 Franklin tragedy. When this expedition is excluded, the coefficient for PRIVATE (and t-statistic) becomes -1.22 (-2.98) in Model 1, -1.01 (-2.14) in Model 2, and -0.86 (-2.05) in Model 3 of Table 4. The results also are not sensitive to the inclusion of alternate control variables. For example, the coefficient for a measure of capital intensity (equal to vessel tonnage divided by crew size) is not statistically significant, and its inclusion does not substantially affect the coefficient for PRIVATE.

reduced to -1.091, but remains statistically significant at the 5% level. (As reported in Section III, crew sizes are relatively large for public expeditions. Because of this, the inclusion of CREW decreases the coefficient and t-statistic for PRIVATE in all of the model specifications examined.)

One additional factor that may have affected crew member deaths is the size of the expedition's supporting budget. Expedition leaders allocated scarce budgets among many items, including food, equipment, support staff, and travel. In doing so, they traded off safety against expedition amenities and the probability of success. It is reasonable to expect that leaders with less constrained budgets were able to purchase more amenities, success, and safety. Thus, well-funded expeditions should have relatively few deaths.

I do not have budget information on any but a small number of expeditions. One proxy for expedition funding on which data are available, however, is the crew size. Extra crew required extra food, clothing, space, and supplies, so budget-constrained expeditions were unlikely to have large crews. Model 3 in Table 4 reports the results of a Tobit regression model in which observations are weighted by CREW. To the extent that CREW correlates with the expedition budget, the weighted model controls for the additional safety afforded well-funded expeditions. The procedure weights relatively heavily any crew deaths from well-funded expeditions.

The coefficient for PRIVATE in Model 3 is similar to that in Model 2. Coefficients for USA and Franklin search expeditions, however, become significant at the 10% level, while that for land-based expeditions becomes statistically insignificant. In addition, coefficients for the 1840's, 1850's, 1870's and 1880's, while unreported, become positive and statistically significant at the 5% level. In effect, the weighted regression emphasizes the deaths from several large (and presumably well-funded) expeditions in the middle part of the 19th century, particularly those searching for Franklin.

Models 4 - 6 of Table 4 report on three Tobit regressions in which the dependent variable is the death rate, defined as the fraction of the crew members who died while on the expedition. This measure places less emphasis on the Franklin tragedy than the log of the number of deaths. It places greater emphasis on smaller expeditions in which at least one crew member died. For example, the 100% death rate for the 129-man (public) Franklin expedition in 1845 has the same value for the dependent variable as the 100% death rate for the 3-man (private) Andree expedition

in 1897.¹⁴

As reported in Model 4, the survivor rate is negatively and significantly related to PRIVATE. The coefficient implies that, holding other factors constant, private expeditions had a 21% lower death rate than public expeditions. The coefficient for the Northwest Passage dummy variable is positive and significant at the 10% level (as is the 1840's decade dummy variable), reflecting in part the Franklin tragedy.

The coefficients for all of these variables decline slightly in Model 5, in which the EXPERIENCE, BALLOON, LAND, and CREW variables are included. None of the added variables is significantly related to the crew member death rate.

Model 6 reports the results in which the observations are weighted by the size of CREW, thereby placing greater emphasis on larger, better-funded expedition death rates. The coefficient of -0.13 indicates that, controlling for the other regressors, crew members on privately-funded expeditions had a 13-percentage point higher likelihood of staying alive than those on publicly-funded expeditions.

Using a similar interpretation for other statistically significant regressors, crew members on U.S. expeditions had a 18% higher probability of death than crew members on European expeditions (since non-British European expeditions are reflected in the constant term), and those involved with the Franklin search had a 64% lower probability of death than those with "other" objectives (which are reflected in the constant term). Both of these results, however, depend upon the inclusion of decade fixed effects. The coefficients for the 1840's and 1850's dummy variables are 0.89 and 0.81, respectively, and both are statistically significant at the 1% level. The 1840's coefficient reflects in part the Franklin disaster, and most expeditions during the 1850's were British searches for Franklin. Omitting the decade fixed effects, both the USA and FRANKLIN SEARCH coefficients are statistically insignificant. Hence, the results in Model 6 indicate that, among expeditions *after* the 1850's, crew members on U.S. expeditions faced high likelihood of death and those searching for Franklin faced a low likelihood of death.

Overall, the results in Table 4 indicate that both the numbers and rates of crew member

¹⁴Salomon Andree attempted to float to the North Pole in a helium balloon. All three crew members, including Andree, disappeared and were never seen alive again after their balloon left Spitsbergen. The mystery was resolved in 1930 when Andree's remains and journal were discovered on White Island near Spitsbergen. The crew survived the balloon's crash, but died during their attempt to reach civilization.

deaths are significantly lower for private than for public expeditions. Expeditions during the 1840's and 1850's had unusually high death numbers and rates, although the 1840's results reflect in part the 1845 Franklin tragedy. For expeditions outside these two decades, expeditions originating in the U.S. had greater numbers of deaths and death rates.

VI.B. Ships and vessel tonnage lost

Table 5 reports on multivariate tests of the determinants of lost vessel tonnage. Of the 63 expeditions based from ships, 20 lost at least one ship. The sizes of the ships lost vary from 66 to 1082 tons, and the distribution of lost vessel tonnage is skewed. In models 1 - 3 the dependent variable is defined as the natural log of one plus the lost vessel tonnage.

Including all nine decade dummy variables causes multicollinearity problems that prevent the computation of standard errors. I therefore replace the decade dummy variables with a single dummy variable set equal to one for pre-1860 expeditions. The results from Model 1 indicate that lost vessel tonnage is not significantly related to the PRE-1860 dummy, the nation of origin, or the expedition objective. It is negatively related, however, to whether the expedition was primarily privately funded: the coefficient for PRIVATE is -5.41 with a t-statistic of -2.25.

Model 2 includes the EXPERIENCE variable and TONNAGE, which is the total tonnage of all ships deployed on the expedition. TONNAGE reflects both the expedition size and the tonnage that potentially could have been lost. (The LAND and BALLOON variables are omitted because all 63 expeditions included in this regression are ship-based.) In Model 3, observations are weighted by TONNAGE, which serves as a proxy for the expedition's cost. The effect is to weight more heavily any vessel tonnage lost by relatively expensive, and presumably better equipped, expeditions. (The results are virtually unaffected when CREW is used in place of TONNAGE to measure the expedition size or to weight the observations.) The results from Models 2 and 3 are virtually identical to those from Model 1: only PRIVATE is significantly related to the vessel tonnage lost.

The dependent variable in models 4 - 6 of Table 5 is the ratio of vessel tonnage lost to that deployed on the expedition. As before, Models 4 and 5 are unweighted, and in Model 6 observations are weighted by vessel tonnage. (Results using the fraction of ships lost, without regard to the ships' sizes, are similar to those reported.) The coefficient for PRIVATE is negative

in all three regressions, but its t-statistics are lower than in Models 1 - 3, ranging from -1.57 to -1.75. Only in Model 6 is the coefficient statistically significant at the 10% level. The results therefore are consistent with the univariate comparisons: controlling for the nation of origin, objectives, timing, and size, public expeditions lost more and larger ships than private expeditions. Public expeditions also lost a higher fraction of ships and vessel tonnage deployed, although the PRIVATE coefficient is only marginally significant at conventional levels using a two-tailed hypothesis test.

VI.C. Scurvy

Table 6 reports on logistic regressions that examine the determinants of crew health on the 68 expeditions in the sample that lasted longer than one year. In each regression, the dependent variable is set equal to one if the expedition had scurvy problems, and zero otherwise. Models 1 and 2 include only the 39 expeditions for which the presence or absence of scurvy is known. Models 3 and 4 report results for these 39 expeditions plus the 29 additional expeditions for which I infer that scurvy was not a problem. When all nine decade dummy variables are included, multicollinearity among the independent variables prevents computation of standard errors, so I include only the single dummy variable (PRE-1860) to control for the timing of the expedition. For similar reasons, I exclude the USA, NORTHWEST PASSAGE, and NORTH POLE dummies.

In Models 1 and 3, the incidence of scurvy is negatively related to PRIVATE, and the coefficient is statistically significant in Model 1. The coefficient for the PRE-1860 dummy is positive and statistically significant at the 5% level, indicating that scurvy was more prevalent on public than private expeditions and on expeditions before 1860.

Models 2 and 4 include EXPERIENCE and CREW as explanatory variables. In both models the CREW coefficient is positive, and it is significant at the 10% level in Model 4. The coefficient on PRIVATE, however, becomes statistically insignificant. Furthermore, the coefficient for PRIVATE is sensitive to slight changes in model specification. For example, when I include an interaction term involving PRIVATE and PRE-1860 in Models 2 and 4, the PRIVATE coefficient becomes negative and significant at the 1% level. Thus, while scurvy was more prevalent on public expeditions, the incidence of scurvy is not consistently and significantly

related to PRIVATE when I control for such other factors as crew size and the expedition's date.

VI.D. Expedition achievement efficiency

Table 7 reports the results of ordinary least squares regressions that investigate the causes of achievement efficiency. The dependent variable in the first regression is the first efficiency measure as defined in equation (1) in section V.E. The second and third efficiency measures are the dependent variables in the second and third regressions. For all three efficiency measures, the coefficients for PRIVATE are positive and statistically significant at the 1% level, indicating that private expeditions achieved arctic discoveries at significantly lower cost than public expeditions. The positive coefficient for LAND indicates that land-based expeditions also were relatively efficient. Expeditions from the United States, holding other factors constant, were relatively inefficient.

VII. Reasons private expeditions were more successful

Both univariate comparisons and multivariate tests indicate that, despite greater funding, public expeditions achieved fewer major arctic prizes, suffered greater losses, and overall performed more poorly than private expeditions. Case histories indicate that the performance differences are not mere coincidence. Rather, they result from the ways expeditions were organized. In particular, compared to private expeditions, public expeditions exhibited (i) relatively unmotivated and unprepared leaders, (ii) poor leadership structures, and (iii) poor ability to adapt to new information.

VII.A. Leaders' motives and preparation

Evidence reported in Tables 4 - 7 indicate that EXPERIENCE, which is the leader's number of previous previous polar expeditions, is not significantly related to death rates, ship losses, the incidence of scurvy, or achievement efficiency. Case histories, however, indicate that most private expeditions were organized by men who had strong personal interests in arctic exploration, regardless of their previous experience. Roald Amundsen, for example, spent several years training for cold weather travel. To avoid possible conflicts from a divided leadership, he earned a skipper's license so he would not have to rely upon a hired ship's captain for his 1903-06

expedition. Thus, by any reasonable measure he was much better prepared than almost any public expedition leader, even though he had no previous arctic exploratory experience.

Even less prepared private leaders had a passion for high latitudes. Kane's writing reflects an almost religious attitude toward the arctic. Charles Francis Hall was so driven to explore that he sold his business, abandoned his wife and family, and spent ten of his last 13 years in the arctic.

Many leaders of government expeditions, in contrast, had little direct knowledge of or interest in arctic exploration. George Nares, leader of a 1875-76 British Naval North Pole expedition, considered the arctic a "wretched place." He went north not because of any particular interest in the job, but rather, because he had been appointed and he sought promotion (Berton 1986, p. 420). Edward Belcher, leader of a 1852-54 search for Franklin, was so panicked to return to England after two arctic winters that he ordered the abandonment of four undamaged ships that were stuck in ice. One of his abandoned ships was discovered by whalers the following year, floating unharmed in Baffin Bay.

As another example, Berton (1988, p. 65) notes that Franklin was chosen for his initial arctic leadership position in 1819 in part "because he came from a well-placed family. . . . He had no canoeing experience, no hunting experience, no back-packing experience. . . .", all qualities that would have proved useful for his land-based journey, on which 11 of 25 crew members died.

I report these examples because they illustrate a general tendency evident in the case histories of arctic expeditions: private expeditions leaders had specialized knowledge about, or at least an interest in, arctic exploration. Many leaders of government-sponsored expeditions, in contrast, displayed little such knowledge and interest. I infer that the private leaders' interest and knowledge contributed to their successes.

VII.B. Leadership structure

Fama and Jensen (1983) argue that managers in successful modern corporations initiate *and* implement plans of action. In my sample, however, the persons initiating and organizing public expeditions actually led them only 26.5% of the time. For private expeditions, in contrast, the percentage is 78.2%. (This difference in proportions is statistically significant at the 1% level.) Thus, I infer that public expeditions performed poorly partly because the people who lobbied for

and initiated them frequently did not also implement them.¹⁵

Because they did not actually go on the trip, the organizers of public expeditions faced few of the negative consequences of poor planning or erroneous theories. The man behind the 1845 Franklin expedition, Sir John Barrow, for example, directed Franklin to pursue a sailing course that, we now know, is covered mostly by land and ice. If that course proved impassible, Barrow directed Franklin to sail north into a fictitious "Open Polar Sea," which was thought to be unencumbered by ice. Private whalers had advised Barrow that there most likely was no such thing as an "Open Polar Sea." Since Barrow initiated but did not actually undertake arctic expeditions, he had less direct knowledge of the arctic than did the whalers whom he disregarded. He also bore relatively few of the costs of his misguided directions.

The negative consequences of separating the initiation and implementation functions are illustrated by the Nares expedition of 1875-76. George Nares, a British Navy officer, was appointed to lead this expedition after Sir Clements Markham, an honorary secretary of the Royal Geographical Society, and Sherard Osborn, a rear admiral in the British Navy, convinced the British government to fund one more North Pole attempt. Markham, Osborn, and other experts planned the expedition. They ignored evidence about the usefulness of snowshoes, snow houses, light traveling sledges, and native clothing, and downplayed the risk of scurvy. Upon arriving in the arctic and watching his crew become incapacitated from the combination of heavy sledge hauling and scurvy, Nares wrote bitterly about the lack of preparation and information he had been given.

The problem of separating the initiation and implementation functions also is illustrated by the Greely disaster of 1881-84. When relief ships did not reach his quarters at Fort Conger in northern Ellesmere Island, Greely abandoned the safety of Fort Conger and moved his men south, seeking to meet a relief ship before the onset of winter. The subsequent deaths of most of his crew prompted criticism, most notably from Robert Peary, who noted that Fort Conger was well-stocked with supplies and located in an area rich with game. Greely, of course, was just following

¹⁵To examine the importance of separating the initiation and leadership functions, I conducted all tests reported in Tables 4-7 after replacing PRIVATE with a dummy variable (INITIATE) that equals one if the expedition was initiated by the leader. The empirical results are similar to those reported, although in some cases the t-statistics are insignificant. When both PRIVATE and INITIATE are included, the coefficients for PRIVATE generally have higher t-statistics than those for INITIATE. When I replace PRIVATE with a variable that equals one if the expedition was privately funded or initiated by the leader, the results also are similar to those reported.

orders.

VII.C. Adaptation and learning

The official logs, unofficial exposes, and popular descriptions that followed most expeditions provided valuable information to subsequent explorers not only about the physical locations of various land masses, but also about the techniques that facilitated success. Private and public expeditions, however, displayed notably different tendencies in the adoption and use of new information about survival and success at high latitudes.

1. Clothing. British arctic explorers in the early 19th century wore tight-fitting woolen uniforms. Late in the century, British and American public expeditions led by Nares and Greely still were outfitted with woolen clothing. Tight wool clothes cause people to sweat during the day and are stiff and cold when first put on. Amundsen noted that, "in woolen things you have to jump and dance about like a madman before you can get warm" (Berton 1988, p. 540).

Private explorers, including William Kennedy, Elisha Kent Kane, and Robert Peary, were more likely to adopt Native clothing. Inuit parkas consisted of loose-fitting doubled layers of sealskin or other hide, one fur side facing in and another facing out, with attached hoods that protected against heat loss from the neck and face. The loose hide clothing provided an insulating layer of air and prevented body perspiration from condensing against the skin. Beginning with Charles Hall in 1860 and continuing with Robert Peary in 1909, many private explorers adopted an Inuit practice of shedding their outer clothing and sleeping in snow houses under communal hide blankets. Sleeping next to each other enabled them to, in Rae's words, "communicate the heat from one body to another" (Berton 1988, p. 417).

2. Shelter. Rae, Kennedy, Amundsen, and Peary all learned from Inuit Natives to use snow for shelter. A skilled traveller, Rae claimed, could construct a snow house large enough for five men within one hour. The snow house could be used again on the return journey, and was warmer than the canvass tents most explorers carried. As Rae noted, "When you use snow as a shelter your breath instead of condensing on your bedding gets condensed on the walls of the snow house, and therefore your bedding is relieved from nearly the whole of this" (Berton 1988, p. 415).

All of the expeditions in my sample that used snow houses extensively were privately

organized and funded. The others relied on canvass tents and cloth sleeping bags, which would freeze stiff with condensed water vapor. Sledging crew members used their own body heat to thaw themselves into frozen sleeping bags at night. An additional problem was that the tents and sleeping bags were heavy. Berton (1988, p. 418), estimates that on the Nares expedition each man on a sledging team pulled basic gear totalling 80 pounds, twice the basic weight hauled by Rae a generation earlier. Greely (1886, p. 306) reports that his crew hauled one sledge that weighed 217 pounds per man, much of it basic gear. They called the sledge "Nares."

3. Modes of overland travel. By the 1850's Rae and Kennedy had demonstrated the efficacy of dogsled travel over polar ice and snow. Isaac Hayes converted to the use of dogsleds following a harrowing experience during the Elisha Kent Kane expedition of 1853-55. Hayes and several others were easily overtaken while attempting to escape from a group of hostile Natives who were using dogsleds. Hayes used dogs on his subsequent 1860-61 expedition. Other explorers used skis and snowshoes to facilitate overland travel. Skis enabled Nansen to successfully cross Greenland in 1888-89. Amundsen learned dogsled handling techniques during layovers on his 1903-06 navigation of the Northwest Passage, a skill that would enable him to breeze to victory in the 1911 race to the South Pole.

A disproportionate number of public expeditions, in contrast, never used dogsleds, skis, or snowshoes, or used them ineffectually. John Rae persuaded a reluctant friend to take snowshoes with him during the (public) 1875 Nares expedition. "When the snowshoes were brought on board, there 'was a shout of laughter and derision from the gallant but very inexperienced officers.'" Nares' sledge crews wore themselves out plowing through hip-deep snow, while Rae's friend had "many a long and pleasant walk." Without his snowshoes, "I should not have gone half a mile from the ship without much discomfort and labour" (Berton 1988, p. 415).

Even when private explorers did not use dogs and hauled their own sledges, they had greater success with their sledge designs. The sledges used by British Naval expeditions were so large and cumbersome that they required ten to twelve men to pull. They got stuck in heavy snow and did not travel easily over ice hummocks. Rae, in contrast, designed a light sledge with three runners that sank less than 3/4 inch in snow and did not nose-dive into the snow when descending hummocks (Berton 1988, pp. 415-6). Nansen devised a thin sledge for his 1888-89 Greenland expedition that tracked easily behind his skis and snowshoes (Maxtone-Graham 1988,

pp. 107-26).¹⁶

4. Party size. Early in the 19th century, numerous observers suggested that small parties were better able than large parties to move quickly and support themselves in the arctic. Perhaps because they were less well-funded, private explorers immediately put this idea to work. Governments, in contrast, continued to mount large expeditions up until 1875.

One advantage of smaller size was illustrated by John Ross from 1829-33. Rebuffed when he proposed an expedition to the British Admiralty, Ross organized his own private venture using funds donated by Felix Booth, a wealthy distiller of gin. Ross' ship was crushed by ice, but his party was able to survive for four years before being rescued partly because it was small enough to live off the land and receive support from nearby Inuit natives. (Ross also benefited from provisions left by Parry's 1824-25 expedition.) Despite this experience, the British government outfitted the 1845 Franklin expedition with 129 (originally 134) men. Berton (1988, pp. 336-9) argues that one reason Inuit Natives did not help Franklin's starving crew is that there simply were too many of them to feed.

By 1850, Peter Dease, Thomas Simpson, and John Rae had demonstrated the superior overland capabilities of small parties. Dease and Simpson nearly completed the Canadian coastline map during 1837-39 with a party of six. Rae covered 1060 overland miles in 1851 traveling with only 2 other men. Smaller parties also fared well on ship-based expeditions. In 1852, William Kennedy left most of his 16 crew on board and used dogsleds to cover 1265 overland miles in 95 days, outdistancing the later achievements of Francis M'Clintock, the so-called "Father of (man-hauled) arctic sledging." Later explorers, including Frederick Schwatka in 1878 and Robert Peary in 1892, intentionally mimicked these expeditions by choosing traveling parties of two to five men.

Government-sponsored expeditions, in contrast, deployed large crews up through the 1875 Nares expedition, which used 122 men. Crew sizes decrease over my sample period, but the differences between public and private expeditions are statistically significant even controlling for the time period. For example, in an ordinary least squares regression using crew size as the

¹⁶Explaining the British Navy's adherence to man-hauled sledges, Robert F. Scott told the International Geographic Congress in 1899 that using dogs "is a very cruel system." Nansen replied, "[B]ut it is also cruel to overload a human being with work" (Imbert 1992, p. 80).

dependent variable, the coefficients for both PRIVATE and a time trend term are negative and statistically significant.

5. Diet and crew health. As reported in section V.C, more public than private expeditions had scurvy problems (although the results in VI.C suggest that this difference may be attributable to other factors in a multivariate test). As examples, private expeditions by Peter Dease and Thomas Simpson (1837-39), John Rae (1846-47), and Charles Francis Hall (1860-62) were free of scurvy. At roughly the same times, the government-sponsored expeditions of George Back (1836-37), James Clark Ross (1848-49), and Henry Kellett (1852-54) faced debilitating scurvy problems.

The key difference was that private expeditions relied heavily upon fresh meat, which is rich in vitamin C. Many public expeditions relied on salt meat, which has little vitamin C. Many explorers used lemon juice as a source of vitamin C, but typically in insufficient quantities to prevent scurvy.

Once again, the problem was not a lack of information about the importance of fresh meat or vegetables. Scurvy, and ways to prevent it, had been known for centuries. The East India Company, for example, had used lemon juice to prevent scurvy on its ships since 1601 (see Gurney 1997, p. 40). John Ross testified about the importance of fresh meat after his 1929-33 expedition. A meddlesome explorer named Richard King had criticized the British government for its expeditions' inadequate diets *before* the 1845 Franklin disaster. Rather, the problem was that organizers of public expeditions were slow to recognize and use this information. Public criticism of the British government's expeditions became most pronounced after the 1875-76 Nares expedition, which experienced crippling effects from scurvy. When the British government conducted a public inquiry into the expedition's failures, Nares argued that he had been poorly served by misinformation in the accounts of previous government-sponsored expeditions: "I am certain that what is reported in the official papers as being an attack of debility was most decidedly the same as our attack by a more advanced form of scurvy..." (Berton 1988, p. 431).

6. The Open Polar Sea. Some 19th Century geographers promoted a theory that a temperate, ice-free ocean lay beyond the ice that stopped previous expeditions. This view influenced many private expedition leaders, including Elisha Kent Kane in 1853, Isaac Hayes in 1860, and Karl Koldewey in 1869. Public expedition organizers, however, seemed particularly

wedded to this flawed theory, possibly because it helped justify their designs for large and expensive ship-based expeditions. As far back as 1817, William Scoresby, a renowned whaler, advised the British Admiralty that the Open Polar Sea was a myth. The Admiralty nevertheless continued to espouse the theory and send large ships into the arctic ice pack.

The Open Polar Sea was not a uniquely British delusion. Austrian geographer August Petermann theorized that the warm Gulf Stream opened the seas between Greenland and Siberia: "I have no doubt that a sturdy steamship could, in the appropriate season, complete the trip from the Thames to the North Pole and back - or to some land around the Bering Strait - in two or three months" (Holland 1994b, p. 52). Petermann's ideas influenced a 1872 Austrian government expedition led by Karl Weyprecht, which lost its ship after discovering Franz Josef Land.

7. Organizational structure. By its nature, exploration requires frequent adjustment by many crew members to new information and changing circumstances. Fama and Jensen (1983) argue that partnerships and other non-hierarchical organizations are well-suited to such situations. Private expedition leaders appear to have adopted non-hierarchical organizations more frequently than public expedition leaders. Rae, Kennedy, Nansen, and Amundsen, for example, all solicited and used information from their crew, delegated some decision authority to their men, and participated in menial tasks. This is in contrast to the strict hierarchical structures maintained on many government expeditions, including those by Collinson, Belcher, Greely, and Nares.

VI.D. Other possible explanations

It is possible that public expeditions lost many crew members and ships because they assumed greater risks. If so, public expeditions should have achieved a disproportionate share of arctic discoveries as well as a large share of the tragedies. The evidence in Panel D of Table 3, however, indicates that public expeditions achieved arctic discoveries at no greater rate than private expeditions. Thus, it is unlikely that public expeditions' losses result from greater risk-bearing.

Another possibility is that governments funded expeditions with low expected returns, leaving high-return expeditions to private initiative. This could explain private expeditions' success at the major arctic prizes and their efficiency at arctic discoveries in general. However, there is nothing in the histories of these expeditions to support this conjecture. The British

Admiralty did not intentionally look for Franklin in all the wrong places during its 1847-54 searches. North Pole expeditions led by Nares in 1875 and Greely in 1881, funded by the British and U.S. governments, were designed to take advantage of previous discoveries by the private expeditions led by Kane (1853-55), Hayes (1860-61), and Hall (1871-73). That is, the Nares and Greely expeditions attracted public support largely because they had *high*, not low, expected returns.

The conjecture that public expeditions achieved little because they had low expected returns also is inconsistent with their large losses in lives and ships. Even if the expeditions were not expected to make significant discoveries, the loss of life and ship undermined careers and public support for future arctic expenditures (as argued in section IV).

Thus, the conclusion that is consistent with all the evidence presented here -- regarding deaths, ship losses, scurvy, and expedition achievement and efficiency -- is that public expeditions tended to be poorly organized and executed relative to private expeditions. In particular, public expeditions had poorly motivated and prepared leaders, used suboptimal leadership structures, and adapted slowly to new information.

VIII. Conclusions

In this paper I use historical data on arctic exploration to examine the relative efficiencies of public and private initiative, support, and control. Anecdotal evidence suggests that privately-funded expeditions achieved a disproportionate share of the major arctic prizes, while publicly-funded expeditions constitute the greatest tragedies. This conclusion is broadly supported by more systematic evidence from 35 public and 56 private arctic expeditions from 1818 through 1909. In particular, I find that:

- Public expeditions were relatively well funded and large, deploying an average of 69.7 crew members per expedition, compared to 16.2 for private expeditions. Among those based on ships, public expeditions deployed 1.63 ships representing 596 vessel tons, on average, compared to 1.15 ships and 277 vessel tons for private expeditions.

- Public expeditions experienced more deaths and a higher rate of deaths than private expeditions. On average, 5.9 men died on public expeditions, with an average death rate of 8.9%, compared to 0.9 men, or a 6.2% rate, for private expeditions. The differences in deaths and death

rates are statistically significant and remain so in multivariate tests that control for the expedition's size, timing, nation of origin, objectives, and leader's experience.

- Public expeditions lost and destroyed more and larger ships than private expeditions. On average, public expeditions lost 0.53 ships per expedition, representing 198 tons, compared to 0.24 ships representing 60 tons for private expeditions. The difference is partly but not wholly because public expeditions deployed more and larger ships.

- Nearly one-half (46.7%) of all public expeditions lasting longer than one year had significant health problems as indicated by advanced symptoms of scurvy, compared to 13.2% for private expeditions. In multivariate tests, however, the incidence of scurvy is not consistently related to an expedition's source of funding.

- Private expeditions achieved most of the major arctic prizes, including the initial navigation of the Northwest Passage and the first claim to the North Pole. Public and private expeditions achieved a broader set of less significant arctic geographic discoveries at roughly equal rates, although private expeditions achieved their discoveries at significantly lower cost (as measured by crew size or vessel tonnage).

I also find evidence that death rates were relatively high for expeditions seeking the Northwest Passage (due in part to the 1845 Franklin tragedy), that scurvy was a problem particularly before 1860, and that U.S. expeditions were relatively inefficient in achieving arctic discoveries. Overall, however, the most persistent influence on success and failure is whether the expedition was publicly or privately funded. A closer analysis of the expeditions' characteristics suggests that there is nothing magical about the source of funding. Rather, publicly funded expeditions tended to have three specific handicaps: they deployed poorly motivated and prepared leaders, they separated the initiation and implementation functions of leadership, and they adapted slowly to important innovations regarding clothing, diet, shelter, modes of arctic travel, organizational structure, and optimal party size. That is, men died and ships were lost not because of the public nature of the funding *per se*, but rather, because of the perverse incentives, slow adaptation, and ineffective organizational structures that frequently accompanied public funding.

References¹⁷

- Berton, Pierre. *The Arctic Grail: The Quest for the Northwest Passage and the North Pole, 1818-1909*. New York: Penguin Books, 1988.
- Boardman, Anthony E. and Aidan R. Vining. "Ownership and Performance in Competitive Environments: A Comparison of the Performance of Private, Mixed, and State-Owned Enterprises." *Journal of Law and Economics* 32 (April 1989): 1-33.
- Caves, D.W. and L.R. Christensen. "The Relative Efficiency of Public and Private Firms in a Competitive Environment: The Case of Canadian Railroads." *Journal of Political Economy* 88 (October 1980): 958-976.
- Clarke, Basil. *Polar Flight*. London: Ian Allan Ltd., 1964.
- Courtauld, Augustine. *From the Ends of the Earth: An Anthology of Polar Writings*. London: Oxford University Press, 1958.
- Dewenter, Kathryn L. and Paul H. Malatesta. "State-Owned and Privately-Owned Firms: An Empirical Analysis of Profitability, Leverage, and Labor Intensity." University of Washington working paper, July 1998.
- Eckel, Catherine, Doug Eckel, and Vijay Singal. "Privatization and Efficiency: Industry Effects of the Sale of British Airways." *Journal of Financial Economics* 43 (February 1997): 275-298.
- Fama, Eugene F. and Michael C. Jensen. "Separation of Ownership and Control." *Journal of Law and Economics* 26 (October 1983): 301-325.
- Fisher, David E. *Across the Top of the World*. New York: Random House, Inc., 1992.
- Franklin, John, Sir. *Thirty Years in the Arctic Regions*. Lincoln, NE: University of Nebraska Press, 1988 (reprinted from 1859 title by H. Dayton, New York).
- Greely, Adolphus W. *Three Years of Arctic Service (An Account of the Lady Franklin Bay Expedition of 1881-84 and the Attainment of the Farthest North)*, Vol. 1. New York: Charles Scribner's Sons, 1886.
- Gurney, Alan. *Below the Convergence: Voyages Toward Antarctica 1699-1839*. New York: W.W. Norton, 1997.
- Herbert, Wally. *The Noose of Laurels*. New York: Atheneum Press, 1989.
- Holland, Clive. *Arctic Exploration and Development c. 500 b.c. to 1915: An Encyclopedia*. New York and London: Garland Publishing, Inc., 1994a.
- Holland, Clive (ed.). *Farthest North: The Quest for the North Pole*. London: Robinson, 1994b.
- Huntford, Roland. *Scott & Amundsen*. London: Hodder and Stoughton, 1979.
- Imbert, Bertrand. *North Pole, South Pole: Journeys to the Ends of the Earth*. New York: Harry N. Abrams, Inc., 1992.
- Kole, Stacey R. and J. Harold Mulherin. "The Government as Shareholder: A Case from the US." *Journal of Law and Economics* 40 (April 1997): 1-22.
- Maddala, G.S., *Econometrics*. New York: McGraw-Hill, 1977.
- Maxtone-Graham, John. *Safe Return Doubtful: The Heroic Age of Polar Exploration*. New York: Scribner, 1988.
- Meggison, William L., Robert C. Nash, and Matthias Van Randenborgh. "The Financial and Operating Performance of Newly Privatized Firms: An International Empirical Analysis." *Journal of Finance* 49 (June 1994): 403-452.
- Miller, Francis Trevelyan. *The Fight to Conquer the Ends of the Earth*. Philadelphia: The John C. Winston Company, 1930.
- Rawlins, Dennis. *Peary at the North Pole: Fact or Fiction?* New York: R.B. Luce, 1973.
- Struzik, Edward. *Northwest Passage: The Quest for an Arctic Route to the East*. Toronto: Key Porter Books Ltd., 1991.

¹⁷ Additional sources of data used in the empirical tests are listed in Appendix 2.

Appendix 2: Supplementary Data Sources

The following sources each provided at least one datum used in the empirical tests.

-
- Amundsen, Roald. *The Amundsen Photographs* (ed. by Roland Huntford). New York: Atlantic Monthly Press, 1987.
- Barr, William. "Aleksandr Vasil'yevich Kolchak: Arctic Scientist and Explorer." *Polar Record* 20 (129), 1981, 508-18.
- Beechey, Frederick. *Narrative of a Voyage to the Pacific and Bering's Strait, vol. I*. New York: Da Capo Press, 1969.
- Bowen, Elizabeth. *To the North*. New York: Viking, 1934.
- British House of Commons. Copies of instructions to Captain Sir John Franklin ...to any officer or officers appointed by the Admiralty on any expedition in search of Captain Sir John Franklin (microfilm). London: HMSO (House of Commons, Sessional Papers, Accounts and Papers 1847-1848 41; dated March 21, 1848).
- British House of Commons. "Copy or extracts from any correspondence or proceedings of the Board of the Admiralty..." (microfilm), London: HMSO. (House of Commons, Sessional Papers, Accounts and Papers 1850 33; dated 7 February 7, 1851.)
- Caswell, John Edwards. *The Utilization of the Scientific Reports of United States Arctic Expeditions 1850-1909*. Stanford (CA): Distributed by Biology Branch Office of Naval Research; Department of History, Stanford University, 1951.
- Caswell, John Edwards. *Arctic Frontiers: United States Explorations in the Far North*. Norman: University of Oklahoma Press, 1956.
- Credland, Arthur. "Benjamin Leigh Smith: a forgotten explorer." *Polar Record* 20 (125), 1980, p. 127-45.
- di Savoia, Luigi Amedeo. *On the "Polar Star" in the Arctic Sea* (trans. William Le Queux), vols. I-II. London: Hutchinson & Co., 1903.
- Eames, Hugh. *Winner Lose All*. Boston: Little, Brown and Company, 1973.
- Geographical Journal*. "The Wellman Arctic Expedition." *Geographical Journal* 4, 1894. p.178
- Graf, Miller. *Arctic Journeys*. New York: Peter Lang, 1992.
- Hartman, Tom. *The Guinness book of Ships and Shipping*. Enfield, Middlesex: Guinness Superlatives, 1983.
- Headland, R. K. *Chronological list of Antarctic expeditions and related historical events*. New York: Cambridge UP, 1989.
- Inglefield, Edward. *A Summer Search for Sir John Franklin* (microfilm). London: Thomas Harrison, 1853.
- Innes-Lillingston, F.G. *The Land of the White Polar Bear*. London: Simpkins, Marshall & Co.; Portsmouth: J. Griffin, 1876.
- Kemp, Peter, ed. *Oxford Companion to Ships and the Sea*. London: Oxford UP, 1976.
- Kendall, E. J. C. "Scurvy during some British Polar Expeditions, 1875-1917." *Polar Record* 7(51), 1955, p. 467-474.
- Leslie, Alexander. *Arctic Voyages of Adolf Erik Nordenskiöld* (microform). London: Macmillan, 1879.
- Lloyd's register of shipping 1849-50. London: Wyman and Sons, 1850.
- Lloyd's register of shipping 1850-51. London: Wyman and Sons, 1851.
- Lloyd's register of shipping 1872-75. London: Wyman and Sons, 1875.
- Lloyd's register of shipping 1899-1900. London: Wyman and Sons, 1900.

Appendix 2: Supplementary Data Sources, continued

- Lloyd's register of shipping 1904-05. London: Wyman and Sons, 1905.
- Mikkelsen, Ejnar. *Conquering the Arctic Ice*. London: W. Heinemann, 1909.
- Nansen, Fridtjof. *Farthest North, vol. I* (microform). Westminster (London): A. Constable, 1897.
- National Geographic Magazine* 10 (11), 1899. p. 1351.
- National Geographic Magazine*. "Through Franz Josef Land." Vol 10 (9), 1899. p. 362.
- Peary, Robert. *Northward over the "Great Ice", vol. I*. London: Methuen, 1898.
- Shillinglaw, John. *A Narrative of Arctic Discovery from the Earliest Period to the Present Time*. London: William Shoberl, 1850.
- Smith, D.M. *Arctic Expeditions from British and Foreign Shores from the Earliest Times to the Expedition of 1875-76*. Southampton: Charles H. Calvert, 1877.
- Smucker, Samuel. *Arctic Explorations and Discoveries During the Nineteenth Century* (microform). New York: John W. Lovell Company, 1886.
- United States of America. *Merchant Vessels of the United States 1898*. Washington, D.C.: The Coast Guard, Supt. of Docs., U.S. G.P.O., 1898.
- Weems, John Edward. *Race for the Pole*. New York: Henry Holt and Company, 1960.
- Weems, John Edward. *Peary, the Explorer and the Man*. New York: St. Martin's Press, 1967.
- Wellman, Walter. "The Wellman polar expedition." *National Geographic Magazine* 10 (12), 1899 p. 481-505.
- Willard, Berton. *Russel W. Porter: Arctic Explorer, Artist, Telescope Maker*. Freeport (Maine): The Bond Wheelwright Company, 1976.
- Woodward, F. S. "Joseph Rene Bellot, 1826-53." *Polar Record* 5 (34), 1948. p. 394.
- Young, Allen. *Cruise of the "Pandora"* (microfilm). London: William Clowes & Sons, 1876.
- Young, Allen. *The two voyages of the "Pandora" in 1875 and 1876* (microfilm). London: Edward Stanford, 1879.

Table 1
Description of the sample of arctic explorations, 1818-1909

Breakdown of the sample of 91 arctic expeditions from 1818 - 1909 by nationality, objectives, primary source of funding, and primary mode of travel. "Continental Europe" includes expeditions from Austria, Germany, Denmark, Italy, Norway, Russia, and Sweden. The data are collected from sources listed in the references and Appendix 2.

Decade beginning:	1810	1820	1830	1840	1850	1860	1870	1880	1890
<i>Panel A: Nationality of origin</i>									
Great Britain	4	7	3	8	17	0	6	2	0
United States	0	0	0	0	2	3	3	4	5
Continental Europe	0	0	0	0	0	3	3	2	5
<i>Panel B: Primary exploration objective</i>									
Northwest Passage	3	6	3	2	0	0	1	0	0
Search for Franklin	0	0	0	6	19	2	1	0	0
North Pole	1	1	0	0	0	4	9	6	7
Other	0	0	0	0	0	0	1	2	3
<i>Panel C: Primary source of funding</i>									
Public	4	6	1	6	9	0	4	2	1
Private	0	1	2	2	10	6	8	6	9
<i>Panel D: Primary mode of travel</i>									
Ship	3	6	1	5	16	4	11	4	4
Land	1	1	2	3	3	2	1	4	4
Balloon	0	0	0	0	0	0	0	0	2
Total expeditions	4	7	3	8	19	6	12	8	10

Table 2
Expedition characteristics

Comparisons of expedition characteristics: the number of ships deployed, total gross tonnage of the vessels deployed, crew size, and the number of previous polar expeditions on which the leader served. Data are collected from sources listed in the references and Appendix 2. The far right-hand column reports the t-statistic for the difference in means between public and private expeditions, and (in parentheses) the Wilcoxon signed-rank z-statistic.

		All Expeditions	Publicly-funded Expeditions	Privately-funded Expeditions	Difference in means: t-statistic (Wilcoxon z-statistic)
Number of ships (for ship-based expeditions)	mean	1.38	1.63	1.15	3.31 ^c
	median	1	2	1	(3.25) ^c
	observations	63	30	33	
Vessel tonnage employed (for ship-based expeditions)	mean	440.9	596.2	276.9	3.97 ^c
	median	400	528	225	(4.35) ^c
	observations	63	30	33	
Crew size	mean	37.2	69.7	16.2	6.89 ^c
	median	24	61	16	(6.46) ^c
	observations	8935	54		
Leader's previous polar expedition experiences	mean	1.6	1.8	1.5	0.98
	median	1	1	1	(1.15)
	observations	91	35	56	

^cindicates statistical significance at the 1% level using a two-tailed test.

Table 3
Expedition outcomes

Comparisons of the outcomes of 91 arctic expeditions, 1818-1909. Panel A reports on the number and percentage of crew members who died for 89 expeditions with available data. Panel B reports the number and percent of ships and vessel tonnage lost for 63 ship-based expeditions. Panel C reports on the incidence of scurvy for expeditions lasting longer than one year. Panel D reports on three successively broader measures of geographic achievement (each of which subsumes the previous measure). And Panel E reports on three measures of achievement efficiency, in which accomplishments are weighted by the inverse of crew size. Data are collected from sources listed in the references and Appendix 2. The far right-hand column reports the t-statistic for the difference in means between public and private expeditions, and (in parentheses) the Wilcoxon signed-rank z-statistic.

		All Expeditions	Publicly- funded Expeditions	Privately- funded Expeditions	t-statistic (Wilcoxon z-statistic)
<i>Panel A: Crew member deaths</i>					
Number of deaths	mean	2.88	5.89	0.93	1.34
	median	0	1	0	(3.22) ^c
Percent of crew who died	mean	7.24	8.93	6.15	0.65
	median	0	2.08	0	(1.76) ^a
Number of observations		89	35	54	
<i>Panel B: Ships and vessel tonnage lost (ship-based expeditions only)</i>					
Number of ships lost	mean	0.38	0.53	0.24	1.90 ^a
	median	0	0	0	(1.59)
Percent of ships lost	mean	28.0	33.8	22.7	1.02
	median	0	0	0	(1.15)
Vessel tonnage lost	mean	125.5	197.9	59.7	2.32 ^b
	median	0	0	0	(1.67) ^a
Percent of vessel tonnage lost	mean	28.3	34.9	22.3	1.15
	median	0	0	0	(1.18)
Number of observations		63	30	33	

Table 3 continued on following page

Table 3 - Continued
Expedition outcomes

		All Expeditions	Publicly- funded Expeditions	Privately- funded Expeditions	t-statistic (Wilcoxon z-statistic)
<i>Panel C: Incidence of scurvy (for expeditions lasting more than one year)</i>					
Scurvy status is known	mean (% of cases)	48.7	82.4	22.7	4.51 ^c
	median	0	1	0	(3.94) ^c
Number of observations		39	17	22	
Scurvy status is known or inferred	mean (% of cases)	27.9	46.7	13.2	3.10 ^c
	median	0	0	0	(3.33) ^c
Number of observations		68	30	38	
<i>Panel D: Expedition accomplishments</i>					
Major arctic prize	mean (% of cases)	6.6	2.9	8.9	1.27
	median	0	0	0	(1.13)
Major geographic claims	mean (% of cases)	19.8	20.0	19.6	-0.04
	median	0	0	0	(-0.04)
Lesser but significant accomplishments	mean (% of cases)	35.2	34.3	35.7	0.14
	median	0	0	0	(0.14)
Number of observations		91	35	56	
<i>Panel E: Expedition accomplishment efficiency</i>					
Major arctic prize	mean	0.092	0.024	0.137	4.93 ^c
	median	0.042	0.017	0.071	(6.53) ^c
Major geographic claims	mean	0.100	0.030	0.145	4.82 ^c
	median	0.050	0.019	0.082	(6.24) ^c
Lesser but significant accomplishments	mean	0.116	0.034	0.168	4.63 ^c
	median	0.071	0.020	0.100	(6.02) ^c
Number of observations		91	35	56	

^{a,b,c} indicate statistical significance at the 10%, 5%, and 1% level, respectively, using a two-tailed test.

Table 4

Determinants of crew member deaths and death rates

Tobit regression results using data from 91 arctic expeditions from 1818-1909. The dependent variable in Models 1-3 is the natural log of one plus the number of deaths. In Models 4-6 it is the percent of crew members who died on the expedition. Observations in Models 3 and 6 are weighted by the size of CREW, a proxy for the expedition budget. PRIVATE is a dummy variable equal to one for privately-funded expeditions. BRITAIN and USA reflect the country of origin, and NORTHWEST PASSAGE, FRANKLIN SEARCH, and NORTH POLE reflect the expedition objectives. LAND and BALLOON reflect the primary mode of travel. EXPERIENCE is the number of previous polar expeditions on which the leader served, and CREW is the number of crew members deployed on the expedition. Data are collected from sources listed in the references and Appendix 2. t-statistics are in parentheses.

	Dependent variable:					
	Ln (1 + # deaths)			Percent of crew members who died		
	Model 1	Model 2	Model 3 (weighted)	Model 4	Model 5	Model 6 (weighted)
PRIVATE	-1.39 (-3.28) ^c	-1.09 (-2.21) ^b	-1.01 (-2.33) ^b	-0.21 (-2.32) ^b	-0.20 (-1.91) ^a	-0.13 (-1.86) ^a
BRITAIN	-0.37 (-0.50)	-0.32 (-0.42)	0.40 (0.59)	-0.17 (-1.11)	-0.14 (-0.84)	-0.04 (-0.34)
USA	0.51 (0.93)	0.84 (1.42)	1.13 (1.80) ^a	0.05 (0.46)	0.12 (1.01)	0.18 (1.81) ^a
NORTHWEST PASSAGE	1.37 (1.39)	1.25 (1.29)	0.77 (0.73)	0.39 (1.87) ^a	0.35 (1.70) ^a	0.18 (1.00)
FRANKLIN SEARCH	-0.52 (-0.47)	-0.37 (-0.34)	-2.23 (-1.90) ^a	-0.06 (-0.24)	-0.09 (-0.40)	-0.64 (-3.23) ^c
NORTH POLE	-0.21 (-0.34)	-0.61 (-0.90)	-0.81 (-1.07)	0.03 (0.24)	-0.07 (-0.50)	-0.12 (-0.96)
LAND		-1.03 (-1.82) ^a	-0.32 (-0.56)		-0.13 (0.28)	0.03 (0.35)
BALLOON		-0.22 (-0.23)	-0.23 (-0.11)		0.24 (1.30)	0.17 (0.64)
EXPERIENCE		-0.01 (-0.11)	0.01 (0.11)		-0.00 (-0.13)	-0.00 (-0.40)
CREW (x 10 ²)		0.36 (0.58)	0.42 (1.17)		0.01 (0.07)	0.03 (0.49)
Decade fixed effects	YES	YES	YES	YES	YES	YES
χ^2	22.3	28.1	55.2	19.2	22.7	71.3
p-value	0.10	0.08	0.00	0.20	0.25	0.00
Pseudo R ²	0.10	0.13	0.21	0.24	0.28	1.01

^{a,b,c} indicate statistical significance at the 10%, 5%, and 1% level, respectively, using a two-tailed test.

Table 5
Determinants of vessel tonnage lost or destroyed

Tobit regression results using data from 63 ship-based arctic expeditions from 1818-1909. The dependent variable in Models 1-3 is the natural log of one plus the gross tonnage of lost or destroyed ships. In Models 4-6 it is the fraction of vessel tonnage deployed that was lost or destroyed. Observations in Models 3 and 6 are weighted by the size of TONNAGE, a proxy for the expedition budget. PRIVATE is a dummy variable equal to one for privately-funded expeditions. BRITAIN and USA reflect the country of origin, and NORTHWEST PASSAGE, FRANKLIN SEARCH, and NORTH POLE reflect the expedition objectives. EXPERIENCE is the number of previous polar expeditions on which the leader served, and TONNAGE is the gross vessel tonnage deployed. PRE-1860 is a dummy variable equal to one for pre-1860 expeditions. Data are collected from sources listed in the references and Appendix 2. t-statistics are in parentheses.

	<i>Dependent variable:</i>					
	<i>Ln (1 + tonnage lost)</i>			<i>Percent of tonnage lost</i>		
	Model 1	Model 2	Model 3 (weighted)	Model 4	Model 5	Model 6 (weighted)
PRIVATE	-5.41 (-2.25) ^b	-6.44 (-2.33) ^b	-8.13 (-2.54) ^b	-3.08 (-1.57)	-4.11 (-1.67)	-5.12 (-1.75) ^a
BRITAIN	-0.25 (-0.07)	0.00 (0.00)	-3.74 (-0.85)	0.91 (0.42)	1.25 (0.57)	-0.90 (-0.35)
USA	5.27 (1.59)	5.62 (1.66)	4.86 (1.27)	4.80 (1.65)	5.33 (1.70) ^a	4.91 (1.51)
NORTHWEST PASSAGE	2.86 (0.44)	2.12 (0.33)	3.15 (0.44)	1.02 (0.25)	0.55 (0.14)	0.59 (0.14)
FRANKLIN SEARCH	3.45 (0.51)	2.62 (0.39)	3.47 (0.47)	1.58 (0.37)	0.95 (0.23)	1.16 (0.27)
NORTH POLE	1.24 (0.27)	0.47 (0.10)	-2.82 (-0.67)	0.09 (0.03)	-0.45 (-0.16)	-2.60 (-0.95)
PRE-1860	-3.67 (-0.68)	-3.93 (-0.74)	-4.93 (-0.77)	-2.58 (-0.73)	-3.01 (-0.85)	-3.49 (-0.84)
EXPERIENCE		-0.07 (-0.11)	-0.03 (-0.04)		-0.18 (-0.46)	-0.16 (-0.46)
TONNAGE (x 10 ²)		-0.31 (-0.78)	-0.52 (-1.51)		-0.24 (-0.89)	-0.32 (-1.29)
χ^2	8.6	9.3	13.0	8.9	10.2	13.7
p-value	0.29	0.41	0.16	0.26	0.33	0.14
Pseudo R ²	0.05	0.05	0.16	0.09	0.10	0.14

^{a,b,c} indicate statistical significance at the 10%, 5%, and 1% level, respectively, using a two-tailed test.

Table 6
Determinants of the incidence of scurvy

Logistic regression results using data from 68 arctic expeditions lasting more than one year from 1818-1909. The dependent variable in Models 1 and 2 equals one for expeditions known to have had significant scurvy problems, and zero for expeditions known not to have such problems. In Models 3 and 4, the dependent variable is set equal to zero for 29 additional expeditions for which I infer scurvy was not a major problem. PRIVATE is a dummy variable equal to one for privately-funded expeditions. BRITAIN equals one for expeditions originating in Great Britain, and NORTHWEST PASSAGE equals one for expeditions seeking the Northwest Passage. EXPERIENCE is the number of previous polar expeditions on which the leader served, and CREW is the number of crew members deployed. PRE-1860 is a dummy variable equal to one for pre-1860 expeditions. Data are collected from sources listed in the references and Appendix 2. t-statistics are in parentheses.

	<i>Expeditions included if:</i>			
	<u>Scurvy status is known</u>		<u>Scurvy status is known or inferred</u>	
	Model 1	Model 2	Model 3	Model 4
PRIVATE	-2.62 (-2.48) ^b	1.38 (0.80)	-1.16 (-1.48)	-0.52 (-0.52)
BRITAIN	-0.37 (-0.625)	-5.09 (-0.45)	-0.94 (-0.96)	-1.01 (-0.67)
NORTHWEST PASSAGE	-1.04 (-0.93)	-0.87 (-0.59)	0.80 (1.00)	0.80 (0.96)
PRE-1860	3.83 (2.39) ^b	13.21 (0.97)	4.03 (2.40) ^b	3.76 (2.33) ^b
EXPERIENCE		0.07 (0.11)		0.06 (0.24)
CREW		0.19 (1.60)		0.02 (1.66) ^a
χ^2	25.3	41.9	30.9	33.6
p-value	0.00	0.00	0.00	0.00
Pseudo R ²	0.47	0.78	0.38	0.42

^{a,b,c} indicate statistical significance at the 10%, 5%, and 1% level, respectively, using a two-tailed test.

Table 7
Determinants of expedition achievement efficiency

Ordinary least squares regression results using data from 89 arctic expeditions from 1818-1909. The dependent variable in each regression is $(1 + \text{ACHIEVEMENT})/\text{CREW}$, where CREW is the number of crew members deployed on the expedition. In the first regression, ACHIEVEMENT equals one each of five expeditions achieving a major prize in arctic discovery. In the second regression it equals one for the 18 expeditions achieving either a major prize or other major geographic claim. In the third regression, it equals one for these 18 expeditions plus 14 others achieving lesser-known but significant discoveries. PRIVATE is a dummy variable equal to one for privately-funded expeditions. BRITAIN and USA reflect the country of origin, and NORTHWEST PASSAGE, FRANKLIN SEARCH, and NORTH POLE reflect the expedition objectives. LAND equals one for land-based expeditions. PRE-1860 is a dummy variable equal to one for pre-1860 expeditions. EXPERIENCE is the number of previous polar expeditions on which the leader served. Data are collected from sources listed in the references and Appendix 2. t-statistics are in parentheses.

	<i>Dependent variable - efficiency measure based on:</i>		
	Major arctic prize	Major geographic claim	Lesser but significant accomplishment
PRIVATE	.074 (3.08) ^c	.073 (2.99) ^c	.081 (2.88) ^c
BRITAIN	-.035 (-0.97)	-.051 (-1.37)	-.060 (-1.37)
USA	-.069 (-2.20) ^b	-.077 (-2.35) ^b	-.080 (-2.10) ^b
NORTHWEST PASSAGE	-.013 (-0.26)	-.012 (-0.24)	.049 (0.82)
FRANKLIN SEARCH	.034 (0.70)	.033 (0.65)	0.117 (1.99)
NORTH POLE	.000 (0.01)	.014 (0.37)	.026 (0.59)
LAND	.135 (5.39) ^c	.147 (5.63) ^c	.182 (5.95) ^c
PRE-1860	-.044 (-0.97)	-.035 (-0.75)	-.077 (-1.39)
EXPERIENCE	-.000 (-.07)	.004 (0.54)	.003 (0.38)
Constant	.061 (1.61)	.062 (1.55)	.046 (1.00)
F statistic	7.93	7.93	8.71
p-value	0.00	0.00	0.00
Adjusted R ²	0.41	0.41	0.44

^{a,b,c} indicate statistical significance at the 10%, 5%, and 1% level, respectively, using a two-tailed test.

Appendix 1: Arctic expeditions 1818-1909

(Abbreviation legend below)

<u>Leader</u>	<u>Years</u>	<u>Nationality</u>	<u>Objective</u>	<u>Primary funding</u>
Ross, John R.N.	1818	GB	nwp	gov
Buchan, David	1818	GB	np	gov
Parry, William Edward	1819-20	GB	nwp	gov
Franklin, John	1819-22	GB	nwp	gov
Parry, William Edward	1821-23	GB	nwp	gov
Lyon, George Francis	1824	GB	nwp	gov
Parry, William Edward	1824-25	GB	nwp	gov
Franklin, John	1825-27	GB	nwp	gov
Beechey, Frederick William	1825-28	GB	nwp	gov
Parry, William Edward	1827	GB	np	gov
Ross, John R.N.	1829-33	GB	nwp	pvt
Back, George	1833-5	GB	nwp	pvt
Back, George	1836-7	GB	nwp	gov
Dease, Peter and Thomas Simpson	1837-39	GB	nwp	pvt
Franklin, John	1845-47	GB	nwp	gov
Rae, John	1846-7	GB	nwp	pvt
Richardson, John	1847-49	GB	fs	gov
Ross, James Clark	1848-49	GB	fs	gov
Kellett, Henry	1848-50	GB	fs	gov
Shedden, Robert	1849	GB	fs	pvt
Saunders, James	1849-50	GB	fs	gov
Forsyth, Charles Codrington	1850	GB	fs	pvt
Austin, Horatio Thomas	1850-51	GB	fs	gov
Penny, William	1850-51	GB	fs	gov
Ross, John R.N.	1850-51	GB	fs	pvt
De Haven, Edwin J.	1850-51	USA	fs	pvt
Rae, John	1850-51	GB	fs	pvt
Collinson, Richard	1850-55	GB	fs	gov
McClure, Robert	1850-54	GB	fs	gov
Kennedy, William	1851-52	GB	fs	pvt
Inglefield, Edward A.	1852	GB	fs	pvt
Belcher, Edward	1852-54	GB	fs	gov
Kellett, Henry	1852-54	GB	fs	gov
Pullen, Wm John Samuel	1852-54	GB	fs	gov
Maguire, Robert	1852-54	GB	fs	gov
Inglefield, Edward A.	1853	GB	fs	gov
Rae, John	1853-54	GB	fs	pvt
Kane, Elisha Kent	1853-55	USA	fs	pvt
Anderson, James	1855	GB	fs	pvt
McClintock, Francis	1857-59	GB	fs	pvt
Hayes, Isaac	1860-61	USA	np	pvt
Hall, Charles Francis	1860-62	USA	fs	pvt
Hall, Charles Francis	1864-69	USA	fs	pvt
Nordenskiöld, Adolf Erik	1868	SWE	np	pvt
Koldewey, Karl	1868	GER	np	pvt
Koldewey, Karl	1869-70	GER	np	pvt
Smith, Benjamin Leigh	1871	GB	np	pvt
Weyprecht, Karl	1871	AUS	np	pvt
Hall, Charles Francis	1871-73	USA	np	gov
Smith, Benjamin Leigh	1872	GB	np	pvt
Nordenskiöld, Adolf Erik	1872-73	SWE	np	gov
Weyprecht, Karl	1872-74	AUS	np	gov
Smith, Benjamin Leigh	1873	GB	np	pvt

<u>Leader</u>	<u>Years</u>	<u>Nationality</u>	<u>Objective</u>	<u>Primary funding</u>
Young, Allen	1875	GB	nwp	pvt
Nares, George	1875-76	GB	np	gov
Young, Allen	1876	GB	oth	pvt
Schwatka, Frederick	1878-80	USA	fs	pvt
De Long, George Washington	1879-81	USA	np	pvt
Smith, Benjamin Leigh	1880	GB	np	pvt
Berry, Robert Mallory	1881-82	USA	np	gov
Smith, Benjamin Leigh	1881-82	GB	np	pvt
Greely, Adolphus	1881-84	USA	np	gov
Hovgaard, Andreas Peter	1882-83	DEN	np	pvt
Peary, Robert	1886	USA	oth	pvt
Gilder, William Henry	1886-87	USA	np	pvt
Nansen, Fridtjof	1888-89	NOR	oth	pvt
Peary, Robert	1891-92	USA	oth	pvt
Peary, Robert	1893-95	USA	oth	pvt
Nansen, Fridtjof/Otto Sverdrup	1893-96	NOR	np	gov
Wellman, Walter	1894	USA	np	pvt
Andree, Salomon August	1896	SWE	np	pvt
Andree, Salomon August	1897	SWE	np	pvt
Sverdrup, Otto	1898-02	NOR	oth	pvt
Wellman, Walter	1898-99	USA	np	pvt
Peary, Robert	1898-02	USA	np	pvt
Di Savoia, Luigi Amedeo, Duke of Ab	1899-00	ITA	np	pvt
Bauendahl, Oskar	1900-01	GER	np	pvt
Toll, Eduard Vasil'yevich	1900-03	RUS	oth	gov
Baldwin, Evelyn	1901-02	USA	np	pvt
Mylius-Erichsen, Ludvig	1902-04	DEN	oth	pvt
Fiala, Anthony	1903-05	USA	np	pvt
Amundsen, Roald	1903-06	NOR	nwp	pvt
Peary, Robert	1905-06	USA	np	pvt
Harrison, Alfred Henry	1905-07	GB	oth	pvt
Wellman, Walter	1906-07	USA	np	pvt
Mylius-Erichsen, Ludvig	1906-08	DEN	oth	gov
Leffingwell, Ernest de Koven	1906-08	GB*	np	pvt
Cook, Frederick	1907-09	USA	np	pvt
Peary, Robert	1908-09	USA	np	pvt
Wellman, Walter	1909	USA	np	pvt

*Joint GB-USA expedition

Abbreviations:

Nationality: AUS-Austria, DEN-Denmark, GER-Germany, GB-Great Britain, ITA-Italy,

NOR-Norway, RUS-Russia, SWE-Sweden, USA-United States

Objective: nwp - Northwest Passage, np-North Pole, fs-Franklin search, oth-other (mainly Greenland)

Primary funding: gov - government, pvt - private sources

Looming Shortage of Qualified Construction Workers



by **Dick Cattnach,**
Executive Director



Approximately 6,500 students graduated from Alaska high schools in 1998. From 1996 to 2006 the Alaska Department of Labor forecasts more than 12,300 Alaskan job openings annually, thereby creating a shortage of almost 6,000 workers annually.

Of high school graduates, about 40 percent will pursue a post-secondary education, magnifying the shortage even more. Informal discussions with labor and business leaders suggest graduating students are ill prepared academically to enter the work force, are ignorant of career options, and are unaware of the rigors of full-time employment. Where will we find new workers for the construction trades? Will they have adequate training to fill the openings? How will our industry identify and who will train the 800 new workers it needs each year?

Secondary schools, in conjunction with involved parents, support an emphasis on college preparation in their curricula. This emphasis tends to put the majority of students that don't go to college at a disadvantage. Does the educational system intentionally shortchange these individuals or is it the consequence of ill-conceived programs? Do these students deserve an educational safety net to allow them to explore career opportunities available after high school? What secondary and post-secondary programs exist for students interested in a vocational education? Do the State and its political sub-

divisions have an educational commitment to these students, or does the commitment extend only to college-bound students?

By default, labor unions provide most craft training in Alaska. When

originally created, craft training consisted of selecting knowledgeable students and training them to be useful, contributing employees. Over the past 20 years the quality of students entering training programs has deteriorated significantly, leading inevitably to fewer well-prepared workers entering the work force.

Historically workers were imported to Alaska to fill labor shortages that couldn't be filled by trained residents. Today however, since the historical wage rate differential has largely evaporated, outside workers no longer see the 49th state as the pot of gold at the end of the rainbow.

As real as this problem seems, imagine the consequences of another major construction project. If the announced buildup of the anti-missile defense system becomes reality, the shortage of skilled craftsmen will be felt throughout the entire economy. To proactively deal with the problem we need commitments from the State, the legislature and local school districts. The citizens of Alaska and the graduating students deserve more from our educational system, and the consequences of further delays are untenable. This problem deserves immediate, top-level attention statewide. 🐼

Alaska State Legislature
Select Committee on
Legislative Ethics

Annette

716 W. 4th, Suite 230
Anchorage, AK
(907) 258-8172
FAX: 258-2106

Mailing Address:
P.O. Box 101468
Anchorage, AK
99510

October 28, 1999

ADVISORY OPINION 99-03

RE: Are volunteer members of a legislative advisory council covered by the Legislative Code of Conduct.

You are a legislative employee and are covered by the legislative ethics code. You have requested an advisory opinion concerning facts and circumstances that you have related. The committee relies on facts that you have described in answering your questions. You have waived confidentiality under AS 24.60.160.

Statement of Facts

Last session the legislature enacted a Commission on Privatization and Delivery of Government Services in the legislative branch of government to review and evaluate recommendations for transferring the provision of government services to other entities. Sections 2 and 5, ch. 61, SLA 1999. Subsection 2(b) of that Act authorizes the commission to appoint an advisory council to assist it in carrying out its duties. You ask whether the members of the advisory council, who are not compensated for their services or eligible for reimbursement of travel expenses or per diem, are subject to any restrictions imposed by the Legislative Code of Ethics. You note that allegations have been made that some of the members of the advisory council may have conflicts of interest because their recommendations on privatizing activities could, if accepted and acted upon, benefit them personally.

Discussion

Generally, the Legislative Code of Ethics (AS 24.60) applies to members of the legislature, legislative employees, and the public members of the ethics committee itself. AS 24.60.020(a). "Legislative employee" is defined at AS 24.60.990(10) as "a person, other than a legislator, who is compensated by the legislative branch in return for regular or substantial personal services . . ." It is clear from the privatization commission legislation

that the members of the advisory council are not entitled to receive compensation from the legislative branch. Therefore they do not fall within the definition of legislative employee and are not covered as employees by the Legislative Ethics Code. The Code does make certain restrictions applicable to volunteers. Under AS 24.60.080(i),

(h) A legislator, a legislative committee other than the Select Committee on Legislative Ethics, or a legislative agency may accept (1) a gift of volunteer services for legislative purposes so long as the person making the gift of services is not receiving compensation from another source for the services or (2) a gift of the services of a trainee who is participating in an educational program approved by the committee if the services are used for legislative purposes. The committee shall approve training under a program of the University of Alaska and training under 29 U.S.C. 1501 - 1792b (Job Training Partnership Act). A legislative volunteer or educational trainee shall be considered to be a legislative employee for purposes of compliance with AS 24.60.030 - 24.60.039, 24.60.060, 24.60.080, 24.60.085, 24.60.158 - 24.60.170, 24.60.176, and 24.60.178. If a person believes that a legislative volunteer or educational trainee has violated the provisions of one of those sections, the person may file a complaint under AS 24.60.170. The provisions of AS 24.60.170 apply to the proceeding.

The ethics code does not define "volunteer" or describe who is intended to be included in the term. The committee believes that it is clear from the context of subsection (h) and the focus of the ethics code on employees and legislators that the term is meant to apply to individuals who are either in training as employees (under programs like the JTPA) or performing employee-like functions. The inclusion of volunteers is aimed at situations in which an individual legislator, legislative committee, or legislative agency may benefit from the activities of the volunteer (by an increase in staff support, for example). The members of the advisory council are acting in a different capacity, as advisors to the legislative branch of government. Their role is different from that of the volunteers who are intended to be covered by AS 24.60.080(h). The committee holds that members of the advisory council are not subject to the requirements of that subsection. The fact that a member might receive a personal benefit if the council's recommendations were accepted by the privatization commission, forwarded to the legislature, and implemented through legislation does not change this result.

Conclusion

For the reasons stated above, the committee finds that volunteer members who are not compensated for their services or eligible for reimbursement of travel expenses or per diem of the advisory council of the Commission on Privatization and Delivery of Government Services are not subject to AS 24.60 (the Legislative Code of Ethics).

Adopted by the Select Committee on Legislative Ethics on October 28, 1999.

Members present and concurring in this opinion were:

**Shirley McCoy, Chair
Representative Al Kookesh
Senator John Torgerson
Dennis Cook, public member
H. Connor Thomas, public member
Curt D. Wallace, public member**

Members absent were:

**Representative Pete Kott
Senator Lyman Hoffman
Ed Granger, public member**

**TC:glc
99-350.glc**

LEGAL SERVICES**DIVISION OF LEGAL AND RESEARCH SERVICES
LEGISLATIVE AFFAIRS AGENCY
STATE OF ALASKA**

(907) 465-3867 or 465-2450
FAX (907) 465-2029
Mail Stop 3101

130 Seward Street, Suite 409
Juneau, Alaska 99801-2105

MEMORANDUM

September 7, 1999

SUBJECT: Application of conflicts of interest provisions (CCS SB 33)

TO: Representative John Cowdery
Attn: Marco Pignalberi

FROM: Tamara Brandt Cook
Director

You have asked how conflicts of interest provisions might apply to members of an advisory council appointed under CCS SB 33. That act establishes the Commission on Privatization in the legislative branch and authorizes the Commission to appoint an advisory council. These members "are not eligible for compensation, per diem, or payment of travel or other expenses by the state." (Ch. 61, SLA 1999 (CCS SB 33), Sec. 3(b))

AS 24.60 (Standards of Conduct) generally applies to the legislative branch of government and it contains several provisions that address conflicts of interest issues. (AS 24.60.030, AS 24.60.040, AS 24.60.050, AS 24.60.070, AS 24.60.080, AS 24.60.085, AS 24.60.090, AS 24.60.100) All these conflicts of interest provisions apply to a legislator or legislative employee. (AS 24.60.020) The term "legislative employee" is defined in AS 24.60.990(10). Because compensation is required as part of the definition and the advisory council members appointed under CCS SB 33 are not compensated, in my opinion the majority of the conflicts of interest provisions do not apply to these members. A few of the conflicts of interest provisions do apply to another person who is acting on behalf of a legislator or legislative employee (see AS 24.60.030(d) for example), and a few apply to a member of the immediate family of a legislator or legislative employee (see AS 24.60.040 for example). However, serving on an advisory council alone will not bring a person within the coverage of even these provisions.

In conclusion it is my opinion that the conflicts of interest provisions of AS 24.60 do not apply to members of an advisory committee appointed under CCS SB 33, but be aware that the Select Committee on Legislative Ethics has authority to construe and apply AS 24.60 and that my opinion will not bind or influence the Select Committee. Advice can be requested directly from the Select Committee. (AS 24.60.158, AS 24.60.160)

TBC:pl
99-125.plm

Fatal flaws claimed in state study

Conflicts of interest alleged in privatization committees

By MARTHA BELFISLE
Daily News Journal Bureau

JUNEAU — Sweetheart deals, conflicts of interest and vote-packing tainted the work done by hundreds of Alaskans who volunteered to find ways to turn some government functions over to businesses, according to some who worked on the six-month effort.

An appointed panel, drawing on advice from volunteers who served on subcommittees, delivered a list of 20 recommendations to the governor and Legislature earlier this month. Backers of the ideas call the criticisms unfounded, say the process was proper, and believe the recommendations will make Alaska government more efficient and better serve citizens.

But some members of the panel and subcommittees are condemning the privatization commission's work, arguing that monetary interests pushed self-serving goals that will ultimately benefit a narrow few.

"The end result is a reflection of personal agendas, not a plan for the good of the people of Alaska," said Rep. Tom Brice, a commission member



Sen. Jerry Ward



Rep. John Cowdery

and Democrat from Fairbanks.

"The result was a fatally flawed product. It should be put on a shelf to collect dust."

During the six months the commission and its subgroups were in operation:

- A panel headed by a former head of a private prison company called for the state to do more business with private prison com-

- panies.
- Another group headed by a private school director recommended public funding for private schools.

- A man involved in a long dispute with the state Department of Environmental Con-

See Back Page, PRIVATIZE

Continued from Page A

servation, was placed in charge of reviewing it. His group recommended major changes in the agency.

A report concluding that one state agency was doing a good job was tossed out and replaced with recommendations mirroring those of one of the lawmakers who helped create the privatization panel.

And, in at least one case, a privatization committee recommended adding a new government agency.

Sen. Jerry Ward and Rep. John Cowdery, both Anchorage Republicans, launched the Commission on Privatization and Delivery of Government Services last June after lawmakers approved a bill directing a study on moving government functions to the private sector to save the state money.

"The overriding principle behind being prime sponsor of this bill," Ward told a Joint Finance Committee hearing earlier this month, "was if it could be done (in the private sector) at the same level of service for less money, then it ought to be done. If it can't be done for less money, then we shouldn't do it."

Both Ward and Cowdery said the groups were given a huge task in a choking time frame, but managed to produce a fair, balanced report that lawmakers can use when deciding new directions for government services.

Sen. Sean Parnell, R-Anchorage, co-chairman of the Senate Finance Committee, said he has asked the budget subcommittee to review all 408 recommendations from the privatization panels and final 20 from the commission.

House Speaker Brian Porter, R-Anchorage, said he had heard of some conflict of interest concerns, but thought it was necessary to bring in people who specialized in specific fields with knowledge of how certain areas worked. Porter said he had not heard of any inappropriate behavior in the commission.

CHAIRMAN ASSIGNMENTS MYSTERIOUS

Eleven commissioners were appointed by a combination of legislative leaders and heads of municipal, business and labor organizations. The commission divided state agencies among 20 subcommittees made up of community volunteers.

Anyone interested could join a subcommittee, Cowdery said. Chair positions were handed out upon request, he said, adding, "generally, the first person who wanted to be chair was chair. No one was denied participation."

But an assortment of people who held those posts said in recent interviews that they were called or received a notice in the mail asking if they would join, then were assigned or voted in as chairs.

"The assignment of subcommittee chairs was mysterious, confusing," said Steve Rosing, who sat on the Community & Economic Development panel. Rosing manages the Made In Alaska program, which contracts with the Department of Commerce.

Several people involved said the panels were stacked with hand-picked members and leadership positions predetermined. Mike Abbott, who oversaw the process for the governor's office,

"Partisan politics appeared to have played a major role in the selection of subcommittee members," said Don Valesio, a commission member and a representative of a state worker union.

One woman who tried to participate said she was told she couldn't vote and was ultimately left off the panel roster.

Kelly Brown of Fairbanks, a business agent with the Alaska State Employees Association, volunteered and added a panel look at Health, Business and Social Services.

During meetings of some of the panels, she said she was told she couldn't vote because she worked for an employer. She also was surprised to learn her name wasn't included in the final list of subcommittee members, even though she attended meetings.

The commission's final report boasted that the panels "included at least one member of the state employee unions."

That sort of conflict between some group leaders and volunteers "ruined off a lot of people," she said. "They were drowned out by people who wanted to push their own agenda."

Marco Pignatelli, Cowdery's legislative aide and executive director of the commission, said Brown's allegations were not true. "We never kept anybody from voting," he said. "It was the most all-inclusive process we could possibly have made it."

The absence of Brown's name from the final list "was probably an oversight," said Rynnieva Moss, a legislative aide for Rep. John Coghill who worked on the subcommittee and remembers that Brown participated and offered recommendations.

CRITICISM STARTS EARLY

Complaints that many subcommittee members had conflicts of interest began early and never went away.

"The way the commission was established and run," Brice said, "was if you're in business and want to get a government contract, come participate."

Some business people initially were reluctant to participate in the process out of fear that they might be barred in the future from bidding on state contracts.

To reassure them, Pignatelli asked the Legislature's legal service for an opinion on their concerns. A legislative counsel later told the volunteers that contractors serving on the panels would not be restricted from state contracts.

Cowdery and Pignatelli said the personal agenda accusations were unfounded.

"There's no conflict of interest in a volunteer group," Pignatelli said. "Conflict of interest occurs when you have decision-making authority and you use that power for your own benefit."

All recommendations from these subcommittees must be run through the Legislature and by the governor, he said. "There's checks and balances."

But critics of the subcommittees' makeup argued self-serving interests kept the panels from looking objectively at privatizing state work.

The panels also didn't do much of the work the bill required. No cost-benefit reviews were done, no studies on competitive bidding, no surveys of what other states have tried and failed at.

state budget was too difficult to understand and most programs are not broken down by costs for specific services.

The panel unanimously complained that they didn't have enough time for a complete job.

Cowdery and Pignalberi tried to quell some early conflict of interest criticism after the Department of Corrections panel came under fire for having as a chairman the head of a private corrections company.

Bruce Morrison, former head of Corrections, a private company that now owns Allvest Inc., was replaced as chairman early on in the process. His company operates a number of private corrections facilities in Alaska and is slated to build a new prison in Delta Junction. Thanks to aggressive lobbying from Ward.

Bruce Morrison's substitute also has been heavily involved with the private prison industry in Alaska.

The replacement, Sharon Anderson, is a former chief operations officer of Allvest who worked for Cornell from August 1998 until June 1999. Cowdery, Pignalberi and Anderson said they couldn't remember who asked her to serve as chair, but believed the invitation came from Ward's office.

Pignalberi also said it wasn't a problem because the subcommittees started after June. "There was no reason not to use her," he said. "She has expertise in the area. The fact that she worked for the company in the past didn't disqualify her."

In the end, the Corrections panel recommended that the state shift much of its corrections work to private companies, including its entire sex offender treatment program. It also suggested moving nonviolent prisoners to private intermediate facilities. Cornell provides such services.

Questions also were raised about other chair assignments and panel recommendations.

Virgil Norton of Nikiski was put in charge of the panel reviewing the Department of Environmental Conservation. Norton works for a man in Kenai who is suing the DEC over a multiyear, \$1-million-plus cleanup of dry cleaning fluid spilled on his land and seeping along the Kenai River.

Norton's boss, Gary Hinkle, has battled the DEC for nearly three years over the cost of the cleanup and the way it has been handled. Norton's panel ultimately recommended a laundrylist of changes to the way the DEC operates, including how it issues permits and conducts investigations.

The group also recommended that the Legislature "prohibit unnecessary and redundant rule-making by the department" and "fund a thorough audit" of the DEC.

Jim Hickle, executive director of Holy Rosary Academy, a private school in Anchorage, chaired the Education & Early Development panel. The group's recommendations included creating a voucher system — in which the government pays for schooling by giving families redeemable certificates. The families use those vouchers to pay for the school of their choice, including private religious schools.

ADDED OPTIONS

REPORT FROM REPORTERS

One recommendation from the Community

said, "there should be an Alaska Film Commission." In the commission's final report, the recommendation states "there should be an Alaska Film Office."

Until last year, the state film program was run by Mary Pignalberi, wife of commission executive director Marco Pignalberi. She and four others were laid off when the Legislature cut the division's budget last year.

Steve Levi, an Anchorage-based writer who served on the economic development panel, said Mary Pignalberi is a friend who also used to direct film work his way when television or movie producers called her office for help on a project.

He lobbied his group to add the film office to the list, he said, because "Alaska is the only state that doesn't have a film commission" and he and other writers heed an agency to steer work their way.

Marco Pignalberi said the recommendation came from others, not him.

"At no time did I ever try to get that position to get my wife's job back," he said. "I did not instigate anything to do with the Alaska Film Office."

Pignalberi did not object to adding the film office to the recommendation list, however, even though it means more government, not privatization. He said the film commission's work was valuable to the state. He also said part of the panel's job was to offer suggestions on making the delivery of government services more efficient.

The fully staffed film office did that, he said.

One subgroup recommendation was rewritten and its chairman booked after it submitted a report at odds with Cowdery's views.

Pat Davidge, who led the Community and Economic Development sub-subcommittee for 2½ months, said in the first meeting Cowdery offered a report he had done during the last legislative session on Alaska's international trade programs. Cowdery's study was highly critical of the way they were run and concluded that the services would be better provided by the World Trade Center of Alaska, a private group that competes with the state's Division of Trade and Development.

Davidge said his group read Cowdery's study, and the subsequent reports critical of the paper, and chose to take a different track. Their final report explained their reasons and offered recommendations significantly different from Cowdery's.

When the panel turned in the report, Pignalberi condemned it as "off the mark" in an e-mail to Davidge and said it was a political attempt to further Commerce Commissioner Deborah Sedwick's disapproval of Cowdery's report.

Davidge, who had worked in the Reagan and Hickle administrations, said that was absurd. "Rather than look at the substance of the report, they attacked the individual," he said.

Davidge was ousted as chairman. Pignalberi assigned a new international panel and told the group to write a new report. The new chairman, Lee Wareham, a retired vice president at Alascom and board member of the World Trade Center.

© Reporter Martin Salas can be reached at msalas@alaska.com.

MEMORANDUM
Department of Natural Resources

State of Alaska
Office of the Commissioner

TO: Commission on Privatization

DATE: December 1, 1999

FILE NO:

TELEPHONE NO: 269-8431


FROM: Marty Rutherford
Deputy Commissioner

SUBJECT: Report of Subcommittee on
Privatization of DNR

Attached is the Department of Natural Resources (DNR) response to the Privatization Report on DNR. The format of this document is similar to that provided to the full Commission on Privatization from the DNR Subcommittee, in that it is divided into division/section responses to the division/section reports.

The attachments speak to the details of the comments and recommendations. However, there is one item I would like to note in this cover memo. Throughout the DNR Subcommittee Report are various budget detail. Some of that detail is an accurate reflection of what is in the FY2000 budget, which runs from July 1, 1999 through June 30, 2000, and some of it is not. Recognizing that the budget documents are difficult to use I strongly recommended to the DNR Subcommittee that they work closely with DNR's division managers to understand the documents they were being asked to analyze by their subcommittee chair. When that close coordination did not occur, the Subcommittee Report occasionally reflects detail which is inaccurate and misleading. For that reason I would like to work closely with your staff as you develop your final Commission Report so that I might identify and clarify budget confusions.

Finally, I would like to apologize that I was not available at your initial meeting on November 18th to review the DNR Subcommittee Report. Because our subcommittee chair was out of the country I was unaware that the full Commission was reviewing the DNR Report until the evening of November 17th and at that time I was traveling to Fairbanks and Juneau.

I look forward to working with you and your staff as you prepare your final recommendations.

Attachments

RESPONSE TO PRIVATIZATION REPORT ON RECORDER'S OFFICE

Sadly, the privatization report pertaining to the Recorder's Office is fraught with inaccuracies, incomplete information and adverse personal opinions by the disgruntled former contractor who prepared and presented the report. It is important to state that the preparer of the privatization report did not contact any Recorder's Office manager or other DNR official to confirm statements in the report nor to discuss the proposed recommendations. DNR is hopeful that the legislature and the public will be able to see through the biased nature of this report and recognize the true value of the services provided by the Recorder's Office/UCC component.

The Recorder's Office component is fully funded by program receipts and routinely generates more than \$1 million in excess of its requisite operating funding annually. In FY99 this excess approached \$2.5 million. It is hard to understand why the state would even consider privatizing a money-making program such as this when the state is in such dire need of revenues.

Implementation of the internal indexing system has been beneficial for both the Recorder's Office staff and for the public. The new system offers many new tools and efficiencies that were not available on the prior system operated by a private contractor. Further, the component has the ability to seek continual improvements in the system as needed and can get timely responses to such requests, something that it was unable to achieve while the system was operated by a private contractor under a no cost agreement.

The "History" section of the report seems irrelevant to the issue of privatization. What it does convey is the immense conflict of interest represented by a private vendor who wants to recover the operation of a system for his own purposes. The sole source agreement with Motznik Computer Services expired in June 1996, when the contractor failed to meet the conditions previously agreed to for extension of the agreement. In April 1997, the contractor stated that the processing would not be provided beyond July 1, 1997, unless the state began paying for the service and substantially changed its data entry procedures. Soon thereafter, the House Labor and Commerce Committee instructed the department to resume negotiations with that vendor, and a one-year extension was reached. At about the same time, the Legislature appropriated \$50.0 for the in-house Recorder's Office indexing system in SLA97, CH100, Sec. 82, P54, line 22. When the agreement with MCS again expired in 1998, DNR was ready to transition to the new system that the legislature had authorized the previous year.

The transition to the new system occurred in January 1999. For the first time in a very long time, our employees felt they were in control of their daily work. They do not have to worry about losing a lengthy document that took many hours to input (a frequent occurrence under the old system), as the new system enables them to save their work in progress. The many operational and data entry efficiencies offered by the new system have enabled staff to keep pace with the daily work and to minimize the incessant backlogs incurred under the prior system. Further, the new system enables the public to

get the information much sooner than before, and corrections to data show up immediately (rather than up to six months later as under the prior system).

One of our frequent customers had this to say about the new system: "The state's new system is superior to Motznik's slow and expensive system (\$1.25 per minute) because data can now be searched by recording district, document type and date. These features alone save me about 95% of the time I would normally spend searching the Motznik system."

RESPONSE TO RECOMMENDATION 1

The FY00 CIP request for Y2K funding was submitted in good faith on the best available information at the time. DOA expressed Y2K issues for the SNA network and told agencies they needed to migrate to the Wide Area Network (WAN). Increased costs would occur for agencies that chose not to migrate. Later, however, DOA clarified that there was no Y2K issue driving the SNA to WAN conversion. DNR withdrew its request as soon as it received the updated information.

The Recorder's Office received Revised Program funding for two front-line staff at the height of the refinance activity in FY94. When the high volumes tapered off in the years following FY94, they remained well above volumes in the early 1990's when staffing levels were higher. There was no excess staffing, but rather a continued need to address the incoming workload under an indexing system that was cumbersome and difficult to use.

Recording offices process and film much documentation that is never reported in the page count statistics for recorded documents (i.e. plat attachments, UCC attachments, etc.) The fact is that the component filmed and processed more than 560,000 pages in FY99. Less than 380,000 pages were filmed in FY94.

RESPONSE TO RECOMMENDATION 2

The informational letters distributed by the State Recorder were designed to inform the user groups about potential adverse impacts of budget reductions. Our managers believe they have an obligation to keep the public informed of possible impacts. There would be overwhelming negative response from the public if offices were closed or otherwise impacted and the public was not informed.

RESPONSE TO RECOMMENDATION 3

The report states that the processing was provided for 12 years "at no cost to the state". Because the contractor was not compensated by the state, the system was not maintained with current technology and did not meet the needs of the public. You get what you pay for! The state did seek other vendors who would be interested in providing the system at no cost. Responses indicated this would only be possible if the state would provide them with an exclusive license to market the data or meet other unreasonable requirements.