Key Background Points for Nomination of Dr. Lawson Brigham of the University of Alaska Fairbanks as President-Elect of Sigma Xi:

A. Leadership & Management Expertise ~

- International and U.S. leader in Arctic policy formulation and research; broad international experience in Arctic & Antarctic affairs and polar climate change issues; active member of the polar research community.
- Distinguished Professor of Geography & Arctic Policy, University of Alaska Fairbanks (2009-2016).
- Educator & Faculty Member at 3 Schools: U.S. Coast Guard Academy, Naval Postgraduate School, and University of Alaska Fairbanks
- Chief Strategic Planner for the Commandant of the U.S. Coast Guard (1990-1993).....leader of strategic thinking/planning staff for the Coast Guard's senior leadership & the entire organization.
- Director of the Coast Guard's Work-Life Study (1989-92) (major human resources effort involving more than 80,000 active duty, reserves, civilian & auxiliary personnel; focused on human services delivery & organizational cultural change).
- Coast Guard Officer assigned to the Navy staff of the Chief of Naval Operations in the Pentagon (coordinated linkages between the Coast Guard & Navy flag officer/leadership) (1985-86).
- Deputy Director & Alaska Office Director of the U.S. Arctic Research Commission (Presidential Commission) (2001-2008).
- Commissioner, Alaska Arctic Policy Commission (2013-2015) (Appointed by the Alaska State Legislature).
- Chair of the Arctic Council's Arctic Marine Shipping Assessment (2005-2009) [Multi-million dollar, 200-person international research team].
- Vice Chair, Arctic Council Working Group on Protection of the Arctic Marine Environment (2004-2009).
- Successful command leadership & management of four U.S. Coast Guard cutters including: a patrol cutter, Great Lakes icebreaker, major offshore law enforcement cutter, & the polar icebreaker *Polar Sea* on Arctic & Antarctic expeditions/global operations (scientific expedition to the North Pole and across the Arctic Ocean; scientific expeditions in the Ross Sea and across the Southern Ocean).

B. Relevant Experiences~

- Member of the U.S. Delegations to the International Maritime Organization (London) and to the Arctic Council.
- Member, U.S. Federal NOAA Hydrographic Services Review Panel (Appointed by the NOAA Administrator) (2011-Present)
- U.S. Congressional Testimony: Senate Committee on Foreign Relations; Senate Committee on Appropriations (Subcommittee on Homeland Security).

- Major International and U.S. Speaking Engagements: Universities of Cambridge, Moscow State, Helsinki, Tokyo, Sydney, Ottawa, London/UCL, Tasmania, Singapore, Oslo, Tromso, Stockholm, and more; also in the U.S. ~ Universities of Georgia, Washington, Stevens Institute of Technology, Kansas, MIT, Princeton, Michigan State, Dartmouth, Delaware, UCLA, and more.
- Major speaker at 3 Russian Geographical Society International Conferences on *The Arctic: Territory of Dialogue* (Moscow, 2010; Arkhangelsk, 2011; Salekhard, 2013); senior political leaders of the Russian Federation present; one of two U.S. speakers in 2011 & 2013.
- Counsilor/Board Member, American Geographical Society; current Vice President of the American Polar Society.
- Member, World Economic Forum Global Agenda Council on the Arctic (2013-Present).
- Fellow, U.S. Coast Guard Academy Center for Arctic Study & Policy (2014-Present).
- Research Member, Stanford University/Hoover Institution Arctic Security Initiative (2012-Present).

C. Significant Honors ~

- Awarded a Polar Medal & Honorary Membership in the American Polar Society (2015).
- Named 2010 Distinguished Alumnus of the U.S. Coast Guard Academy.
- Elected 2013 Member of the Norwegian Scientific Academy for Polar Research.
- Elected Member of Sigma Xi (2004) & the Council on Foreign Relations (2013).
- Elected 1995 Fellow of the Arctic Institute of North America.
- Elected 1993 Fellow of the Royal Geographical Society (London).
- Marine Policy Research Fellowship, Woods Hole Oceanographic Institution (1989-1990).
- Distinguished Graduate of the U.S. Naval War College, Newport, RI (1982).
- Signee, American Geographical Society's *Flier's and Explorers Globe* for Commanding the icebreaker *Polar Sea* in 1994 as the first ship in history to reach the ends of the global ocean in the Ross Sea, Antarctica in February 1994 and the North Pole in August 1994 (University of Delaware Ceremony 12 February 2008); one of 60 signees since 1934.

Dr. Lawson W. Brigham Center for Arctic Policy Studies University of Alaska Fairbanks Captain, U.S. Coast Guard (Retired) 25 May 2016