

IAA Study Group Status Report

Responsible Commission: 6

Study Number and Title: S 6.14 Active SETI: Scientific, Technical, Societal, and Legal Dimensions

Short Description of Scope of Study (repeat from Study Group Proposal)

Overall Goal:

(Expected scientific or practical benefit of the study group's efforts)

1) Assess the feasibility and desirability of complementing the traditional Passive Search for Extraterrestrial Intelligence (Passive SETI) with Active SETI, in which intentional signals are transmitted from Earth to possible extraterrestrial intelligence.

a. Identify and evaluate scientific rationale for Active SETI.

b. Identify and evaluate transmission technologies available now and in near future for Active SETI.

c. Identify and evaluate societal dimensions of Active SETI, e.g., representing humankind in transmissions from Earth.

d. Identify and evaluate legal dimensions of Active SETI.

Intermediate Goals:

1) Facilitate discussions as part of or in parallel with relevant conferences and workshops.

2) Produce recommendations for the Academy for future studies and activities to support the development of Active SETI.

Progress in past six months:

As proposed in the initial study group proposal, the study group has coordinated a session on Active SETI to be held immediately following the Royal Society of London's meeting "Towards a Scientific and Societal Agenda on Extra-terrestrial Life." This study group session, titled "Communication with Extraterrestrial Intelligence" and identified as an IAA study group project, took place on October 6, 2010 at the Second IAA Symposium on "Searching for Life Signatures" and consisted of the following presentations with international representation aimed at identifying priorities for the study group's strategic planning process:

Session 4: "Communication with Extraterrestrial Intelligence"

IAA Study Group 15:00-18:30

Chair: Douglas Vakoch (SETI Institute, USA)

The Influence of the Works Produced by the Various IAA Study Groups on Space Policy Makers

Claudio Maccone (IAA, Italy)

Sending Messages: A Comparison between the Early Proposals (XIXth Century) and the Realized Projects (XXth-XXIth Centuries)

Florence Raulin Cerceau (Centre Alexandre Koyré, France)

How Can the Active SETI Debate Be Constructive?

Kathryn Denning (York University, Canada)

If Active SETI Succeeds: Constructively Anticipating Outcomes

Stephen Baxter (UK)

Metalaw and Active SETI

Adam Korbitz (USA)

Long-Term Strategic Planning for Active SETI

Mark Lupisella (NASA Goddard Space Flight Center, USA)

Interstellar Communication Objectives and Limitations: A Roadmap to Signal and Receiver Design

Ian Morison (University of New South Wales, Australia), David Messerschmitt (University of California, Berkeley, USA)

How to Read a Letter from ET

Stephane Dumas (SETI League, Canada)

Transmitting May Be Good for Us

Alan Penny (University of St Andrews, UK)

Website Study Information up to date? (Study Group Membership, Study Plan and Schedule): yes

Issues requiring resolution? (recommend approach): Based on feedback received during the Commission 6 meeting at the 2010 IAC, the name of the Study Group has been changed to “Active SETI: Scientific, Technical, Societal, and Legal Dimensions.”

Product Deliveries on Schedule? (If modified explain rationale): yes

Study Team Member Changes? (List any Study Team Members that you wish to discontinue, and provide names plus contact coordinates of any Members you wish to add on the second page of this Study Update form.) Note: Complete contact information including email, tel. and fax must be provided for all additions. Only Members with complete contact information will be listed and receive formal appointment letters from the IAA Secretariat.): none

Name of person providing Study Group Status (Study Group Chair or Co-Chair):

Douglas A. Vakoch

Status Report Date: 15 March 2011