



LASER INTERFEROMETER GRAVITATIONAL WAVE OBSERVATORY

RECORD OF DECISION/AGREEMENT (RODA)

Document	LIGO-M 080374-00 -Y
Date:	29 Oct 2008
Title:	RODA: HAM Triple Suspensions to have provision for mounting damping struts to the tops of their structures
To the Attention of:	aligo_sus, aligo_sys
cc:	
From/signatories:	Name/Title: Janeen Romie (SUS/US Leader) Signature: _____ Name/Title: Dennis Coyne (SYS Leader) Signature: _____ Name/Title: _____ Signature: _____
System(s) affected:	<input type="checkbox"/> Initial LIGO <input checked="" type="checkbox"/> Advanced LIGO <input type="checkbox"/> Other: _____
Nature/Scope:	<input checked="" type="checkbox"/> Design Decision <input type="checkbox"/> Requirements Decision <input type="checkbox"/> Work Scope Decision <input type="checkbox"/> Working Agreement between Groups <input type="checkbox"/> Other _____
Subsystem(s) affected	<input checked="" type="checkbox"/> Relevant Subsystem(s)/Component(s): HAM Large Triple Suspension (HLTS) HAM Small Triple Suspension (HSTS)
Primary Contacts	Group or Affiliation and Contact _____
Reference Documents:	B. Abbott, et. al., "Responses to AdL HAM ISI Review Committee", L080115-00; item 15, pg. 6

DECISION/AGREEMENT STATEMENT:

Low frequency and/or lightly damped modes for payloads on the HAM-ISI optics table complicate the ISI control and may compromise its performance. As a risk reduction measure, the SUS group will add provision for attachment of conceptual stiffening/damping struts to the tops of the HLTS and HSTS structures. Each structure should have ~3 attachment holes at the top corner of each face (24 holes total). The holes should be 1/4-20 UNC oversize threaded if tube thickness allows for over 4 thread engagement, and 1/4 " clearance if not. They should have a separation of ~2 to ~3 in, as indicated in the conceptual sketch below, for additional holes in the HLTS structure.

