



LASER INTERFEROMETER GRAVITATIONAL WAVE OBSERVATORY
RECORD OF DECISION/AGREEMENT (RODA)

Document	LIGO-M040020-00-Y	
Date:	27 Jan 2004	
Title:	RODA: Sapphire/fused silica downselect date	
To the Attention of:	COC: GariLynn Billingsley, Bill Kells, Helena Armandula, Gregg Harry SUS: Ken Strain, Norna Robertson, Janeen Romie, Mark Barton, Justin Greenhalgh, Caroline Cantley, Calum Torrie, Jim Hough TNI: Eric Black, Ken Libbrecht AOS: Phil Willems, Dave Ottaway, Mike Smith Systems: Peter Fritschel, Dennis Coyne, David Shoemaker	
cc:	aligo_systems, aligo_sus	
From/signatories:	Name/Title: Carol Wilkinson	Signature: _____
	Name/Title: _____	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 type="checkbox"/> Design Decision <input type="checkbox"/> Requirements Decision <input type="checkbox"/> Work Scope Decision <input type="checkbox"/> Working Agreement between Groups <input checked="" type="checkbox"/> Other Management schedule/risk decision	
Subsystem(s) affected	<input checked="" type="checkbox"/> Relevant Subsystem(s)/Component(s): COC, SUS, AOS/ATC, systems	
Primary Contacts	Group or Affiliation and Contact	David Shoemaker
Reference Documents:	_____	

DECISION/AGREEMENT STATEMENT:

The downselect between sapphire and fused silica for the test masses of AdL had been set for April 2004. There is continuing work on exploring both substrates, as well as continued work on coatings. A delay in the downselect will give additional information to the decision through probable additional results from the TNI, coating research, annealing of fused silica, and characterization of sapphire.

The Suspension (SUS) group is about to commit significant labor resources to the design of the input and end test mass quadruple suspensions. Controls prototype design will begin to go into fabrication in ~June, 2004 and final design tasks will start (concurrently with the controls prototype development) in ~Aug, 2004. A decision on the substrate material for the Test Masses must be made by June 30, 2004 in order to keep to the Advanced LIGO development schedule.