## RICH Task List- Updated 5/27/2016

#	Category	ltem	Responsible Group	Status	Comments
1	Flectronics	FPGA programming	Fast Electronics	On Hold	On hold until Q1 2017 calendar year; FPGA boards are produced already, at Jlab, and tested (see Ben's emails 5/23 & 5/26/2016)
2		Electronics delivery	INFN	Expected June 2016	Information in installation document emailed by Marco Mirazita on 3/10/2016.
3		Test electronics boards	DSG/INFN	Not started	Ideally start in August, see Marco Contalbrigo's email on 5/25/2016
4	<del>1</del> 5	Test mirrors	INFN	Not started	Mirrors will be tested on arrival.
5		Rack for mirror testing	DSG/INFN	Waiting for more info	Mirrors shipped in cardboard box, will need to discuss storage options.
6		Spherical mirror shipments	INFN	First shipment received	First 4 spherical mirror segments received on 5/23/2016, stored in EEL 121b
7	Mirrors	CMM for Mirror charactarization	DSG	Contacted Survey group	Survey Group can assist, arranging measurements for 6/14-6/17, roughness measurement of samples will be taken (Chris Gould's email 5/26/2016)
8		Planar mirror shipments	INFN	Not started	Delivered to JLAB after summer, see Marco Contalbrigo's email on 5/25/2016
9		Install Debian OS onto PCs	DSG	Waiting for info from INFN	Computer Center's (CC) protocol that nonsupported OS goes on guest network; Is guest network okay? Is network access needed for tests?
10		Validate mirrors shipped	INFN/DSG	Not started	Occur week of 6/13/2016, validation includes visual inspection, point-like source spot imaging
11		Scale for aerogel measurements	DSG	PR submitted	PR submitted on 5/25/2016 (PR # 363877P), estimated delivery date on or before 6/15/2016
12	2	Gloves and masks for aerogel testing	DSG	Completed	Gloves and masks in brown cabinet in EEL 121b gowning room
13		Aerogel shipments	INFN	Started October 2015	Aerogel stored in dryboxes in cleanrooms, received shipment of 10 tiles on 5/19/2016
14	P P	Aerogel weighing	INFN	Not started	Weighing to determine moisture absorbed and density; Would DSG help be needed in process?
15	Aerogel H	Visually inspect aerogel on delivery	DSG	On-going	Shipment from 5/19/2016 inspected
16	ľ	Measure aerogel transmission	INFN	Not started	Measure in Washington, <b>DSG assistance requested</b>
17		Study optical effects of aerogel	INFN	Planning phase	Not definite task, INFN checking JLAB laser safety protocol
18			INFN		Not definite task, shape of mold to be determined
18		Check dimensions of aerogel with mold	IINFIN	Planning phase	
19		Cooling system hardware list	DSG	List compiled, rack layout created	Updated for higher capacity flow, rack layout for valves created (See George's email from 5/24/2016 and 5/26/2016, respectively)
20	Cooling	Approve location for cooling system compressors	Hall B Engineering	Completed	Top level of forward carriage reserved, See Bob's email on 5/24/2016, DSG will visit and relay pictures to INFN
21		Cooling system hardware procurement	DSG/INFN	Not started	Will start when system is approved.
22		ASME valve approval	Hall B Engineering	Info received, approval in process	See Saptarshi's email from 5/24/2016
23		Cooling system hardware installation in hall	DSG/Hall B Engineering	Not started	Will start as detector is assembled
24		N2 purge system hardware list	DSG	List compiled	Updated for higher capacity flow, See George's email from 5/24/2016
25		N2 purge system hardware procurement	DSG/INFN	Not started	Will start when hardware is approved
26		N2 purge system hardware installation in hall	DSG/Hall B Engineering	Not started	Will start as detector is assembled
27		Interlock system hardware list	DSG	Preliminary list compiled	In DSG weekly meeing talk from 5/18/2016.
28	3	Interlock system design	DSG	Started	cRIO-based system, DSG researching cRIO modules needed for interlocks.
29	Interlocks	Interlock system hardware procurement	DSG/INFN	Not started	Will start when system is finalized.
30		Develop interlock system LabVIEW code	DSG	Not started	Will start when hardware is bought.
31		Interlock hardware installation in hall	DSG/Hall B Engineering		Will start as detector is assembled and after development
32		Minimize leaks in detector body	INFN	Not Started	Will occur during and after detector assembly.
33		Arrange EEL 124 for assembly	DSG	Not started	Will start when DCs move to hall.
34	5 Assembly 6	Move components from storage to assembly area	Hall B Engineering	Not started	Will start when assembly is to begin.
35		External frame and support structure delivery	INFN	Expected May 2016	Information in installation document emailed by Marco Mirazita on 3/10/2016.
36		Assembly structure anchoring approval	Hall B Engineering/INFN	Started	Sandro will evaluate bolt size and lifting points, not critical task for review, see Sandro's email on 5/23/2016
37		Detector assembly	DSG/INFN	Not started	Assemble in EEL 124 when DCs move to Hall.
38	Testing	Internal Pulse Generator	DSG/INFN	Not started	Will be developed after electronics production; mentioned during INFN-DSG phone meeting on 5/23/2016; who would develop this?
39	Safety	THA for cooling and N2 purge systems	DSG	In process	Valery requested help with THA for cooling and N2 purge system on 5/26/2016, see Tyler's email on 5/26/2016
40		PCs for mirror testing	DSG	Completed	Will use RHEL PCs SVTSystem2 and PCAMPERO, both meet requested specs.
41		LV supply (5 V, minimum 2 A, two channels)	DSG	Completed	Required LV supply available for use.
42		Oscilloscope	DSG	Completed	Required oscilloscope available for use.
43		Mulitmeter	DSG	Completed	Required multimeter available for use, in EEL 121b cleanroom.
44		N2 purge system design	DSG	Completed	George updated diagram for higher capacity flow, see George's email from 5/24/2016
45		Cooling system design	DSG	Completed	Updated for higher capacity flow, See George's email from 5/24/2016
45		CAEN HV interlocks	DSG		Confirmed CAEN HV supply has internal interlocks.
40	7	Darken EEL 121b cleanroom		Completed	
47			DSG	Completed	Tyler's email on 3/8/2016
48	ľ	Remove excess equipment from EEL 121b cleanroom	DSG	Completed	Completed week of 5/10/2016.
50		PMT shipments	INFN Hall D. Engineering	Completed	half of total PMTs in cabinet in TED, remaining in Valery's and Andrey's offices.
50		Move optical tables to EEL 121b cleanroom	Hall B Engineering	Completed	Tyler's email on 4/15/2016