



Minutes of Meeting

Date: 29/11/02

Herschel

Doc.-No.: HP-2-ASED-MN-0235

Meeting place:	Video Con: ASED, FN & RAL, Abingdon	Chairman:	Horst Faas
Date/Time:	29/11/02 / 13h00	Secretary	Horst Faas
Agenda dated:	See attached	Close of Meeting:	Close of Meeting

Subject: SPIRE ECR#039 Clarification Meeting

Participants:	RAL/MSSL: J. Delderfield, D. Griffin ASED: H. Faas, J.Lang, G. Peters, W. Hund	Additional Distribution:	W. Rühle, R. Hohn, E. Hölzle, J. Kroeker, A. Hauser, C. Kalde
---------------	---	--------------------------	---

Page: 1 of 4 Page(s) plus Annex 1, 2 and 3

Brief-Minutes (except following sheets)

Summary of Results of Sheets 2 till

Reference	Results	Remarks
	<p>The scope of the Video Con was the clarification of the change request related to the new Spire Grounding and Screening Philosophy.</p> <p>The following information was available:</p> <ul style="list-style-type: none"> - HP-2-ASPI-CR-0265, 18/11/02 - Spire ECR#039, Version 1, dated 28/10/02 - Spire Grounding and Screening Philosophy, Spire Requirements Document, SPIRE-RAL-PRJ-00624, 1/10/02 - Spire Harness Definition Doc., SPIRE-RAL-PRJ-000608, Issue 1.0 Amended, Page 50 and Page 121 (Update of sample pages demonstrating implementation proposal) - SPIRE Harness overview diagram (prepared by ASED) <p>Harness Manufacturing Aspects:</p> <p>The harness overview diagram was used to identify the harness bundling and branching from the cold instrument side to the CVV wall.</p> <p>The implication of the branching on the overshield was discussed and it was agreed that a simple overlap of the shield would be sufficient.</p> <p>It was confirmed that the JFET Cryoharness will use backshells. The FPU cryoharness will also use backshells. It was recommended by SPIRE that the FPU backshell angle shall be 90 degrees of the FPU to support thermal de-coupling.</p> <p>Several options for the internal CVV overshield concerning the use of material (SST, manganin, isotan, constantan), the possible type of the overshield (e.g. braid, foil, etc.) and the corresponding coverage were discussed.</p> <p>It was agreed that ASED should follow up the following options for an overall shielding inside the CVV:</p> <ul style="list-style-type: none"> • Braid • Foil • Surfed wire shields <p>The three possible options will be evaluated in terms of availability and manufacturing aspects.</p> <p>It was confirmed by SPIRE that all impedance values in the SPIRE harness lines apply to the nominal</p>	

Reference	Results	Remarks
	<p>operating temperatures in the CVV which is about 10 degree Kelvin [tbc]. Line resistance calculation for requirement verifications have to be done for this temperature, not for ambient.</p> <p>Lifetime calculations: It was agreed that as a worst case assumption the metal cross-section of the current single braided manganin CVV external harness overshield (strand size AWG4401, coverage approx. 90%) shall be duplicated for external cryoharness and, in addition, shall be used for the calculation in the internal CVV cryoharness. The aim is to report initial results at the next Quarterly Progress Mtg. at ASP in the Week of 9 Dec.</p>	

Meeting: HP-2-ASED-MN-0235

Title: SPIRE ECR#039 Clarification Video Con

Date: 29/11/02

Action Item List

Herschel

No.:	Description:	Due Date	Originator Comp./Pers.	Actionee Comp./Pers.	Source	Completion
#1	Provide relevant CASA information about cryoharness to SPIRE (Transfer via the ASED FTP server)	9/12/02	J. Delderfield	J. Lang		

	Name	Dep./Comp.		Name	Dep./Comp.
	Alberti von Mathias Dr.	SM 34	X	Rühe Wolfgang	ED 6
	Alo Hakan	OTN/IP 35		Runge Axel	OTN/EN 64
	Barlage Bernhard	ED 11		Sachsse Bernt	ED 21
	Bayer Thomas	ED 541		Schäffler Johannes	OTN/EN 64
X	Faas Horst	EA 65		Schink Dietmar	ED 422
	Fehringer Alexander	SM 33	X	Schlosser Christian	OTN/EN 64
	Frey Albrecht	ED 422		Schwabbauer Paul Dr.	OTN/ED 421
	Grasl Andreas	OTN/EN 64		Schweickert Gunn	SM 34
	Grasshoff Brigitte	ED 521		Stauss Oliver	SM 33
	Hartmann Hans Dr.	ED 422		Steininger Eric	ED 422
X	Hauser Armin	SM 31	X	Stritter Rene	ED 11
	Hinger Jürgen	SM 31		Suttner Klaus	SM 32
X	Hohn Rüdiger	ED 541		Tenhaeff Dieter	SM 34
X	Höizle Edgar	ED 421		Thörmer Klaus-Horst Dr.	OTN/ED 65
	Huber Johann	ED 543		Wagner Adalbert	OTN/IP 35
X	Hund Walter	SE 76		Wagner Klaus	SM 31
	Idler Siegmund	ED 432	X	Wietbrock, Walter	ED 521
	Ivány von András	ACE 32		Wöhler Hans	SM 34
	Jahn Gerd Dr.	SM 31		Zipf Ludwig	ACE 32
X	Kalde Clemens	ED 532			
	Kameter Rudolf	OTN/EN 64			
	Kersting Stefan	OTN/EN 63	X	Alcatel	ASPI
	Kettner Bernhard	SM 34	X	ESA/ESTEC	ESA
	Knoblauch August	ED 531			
	Koelle Markus	ED 533		Instruments:	
X	Kroeker Jürgen	ED 542		MPE (PACS)	MPE
	Kunz Oliver	SM 31	X	RAL (SPIRE)	RAL
	Lamprecht Ernst	OTN/SM 222		SRON (HIFI)	SRON
X	Lang Jürgen	SE 76			
	Langfermann Michael	ED 541		Subcontractors:	
	Mack Paul	OTN/EN 64		Air Liquide	AIR
	Maier Hans-Ulrich	ED 11		Astrium Sub-Subsyst. & Equipment	ASSE
	Mauch Alfred	SM 34		Austrian Aerospace	AAE
	Moritz Konrad Dr.	ED 65		APCO Technologies S. A.	APCO
	Müller Lutz	OTN/EN 64		Astrium GmbH Space Infrastr.	ASIP
	Muhl Eckhard	OTN/EN 64		BOC Edwards	BOCE
X	Pastorino Michel	ASPI Resid.		EADS CASA ESPACIO	CASA
	Peitzker Helmut	ED 65		Eurocopter	ECDE
	Peltz Heinz-Willi	SM 33		HTS AG Zürich	HTSZ
X	Peters, Gerhard	ED 531		Linde	LIND
	Pietroboni Karin	ED 65		Patria New Technologies Oy	PANT
	Puttlitz Joachim	OTN/EN 64		Phoenix, Volkmarsen	PHOE
	Raupp Helmut	SM 33		Rembe, Brilon	REMB
	Rebholz Reinhold	ED 541		SENER Ingenieria SA	SEN
	Reuß Friedhelm	ED 62			