



15th August 2001

To: Berend

From: John Delderfield

cc: Eric, Bruce, Doug

SPIRE-RAL-COM-000813

## **SPIRE FPU Interface Drawing**

Thank you for taking time out from the pressing job of structural analysis to distribute single sheet files. My idea of .dxf turned out to be more complicated than the .cgm ones I found you had sent, in that more drawing artefacts translated across. So sorry I wasted your time asking for .dxf.

I've put the 6 sheets into a drawing package, removed the black back-grounds, and made the items black not yellow since this makes for easier printing to paper and is OK on screen. I will get Judy to place the resulting single sheet .pdfs with this note on Livelink.

This issue 11 is much cleaner than the previous 9 (what happened to 10?), and I share your hope that 12 can be a stable baseline.

There are still a few drawing type points.

- Sheets have views without labels; I suggest if there's not a specific title needed for a view one calls it something like "Viewing towards -Z".
- Need to add thread tolerances, flatnesses, tightening torques, locking statements, etc., to all mechanical I/Fs.
- Unit C of G indication
- Title...not Spire, just the HSFPU.
- Sheet 1 says see sheet 6 for HSFPU filter I/F details, but they are not there. Need apertures as in my recent note through plate and in filter faceplate so MDMs mate properly.
- Is top of shutter envelope dimensioned?
- Sheet 4, fixing details, incomplete. Blades also have 4 off of parts shown. Will washers fit without hitting radius on inner PCD on cone foot. Fits/tolerances...or dowels?
- Please draw in curved Herschel telescope focal plane on at least one sheet as already sent to you in IID-B issue 2/3(jd).
- If normals to blade mounts nominally pass through cone centre, it would not be a bad idea to show these construction lines on sht 4.
- My baseline would be to show detector wiring FPU-shell interface plates as a single item each side with connectors all arranged parallel similar to the facing JFET rack ones...as mentioned in my recent note. How is spectrometer 2K box design going? I'll endeavour to get a JFET rack layout idea to you by end of next week...JPL clarifications permitting.
- add cooling pipe locations as per information coming from Astrium/Alcatel and harness routings

Anyone else receiving this as a circulation, feel encouraged to comment but please mail to at least [spireprj@rl.ac.uk](mailto:spireprj@rl.ac.uk) so all the above system people automatically access it.

Cheers

*John*