## Jefferson Lab Alignment Group Data Transmittal

| TO: Pierre Bertin | DATE: Sep 142004 |  |
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## DETAILS:

Below are the direction cosines of three proton array detectors and their projections onto the central $Z$ axis of the DVCS. A negative $Z$ is upstream. Values are in millimeters and decimal degrees. Note that the $Z$ axis of the DVCS, defined by the side plane of the $5^{\text {th }}$ column, $5^{\text {th }}$ row crystal, is 15.07 mm to the beam left of the detector assembly.

## Description

Detector $1 \quad \mathbf{I}=0.40716$

$$
\mathbf{J}=-0.67250
$$

$$
K=-0.61803
$$

Detector 2

$$
\begin{aligned}
& \mathbf{I}=0.23694 \\
& \mathbf{J}=-0.74972 \\
& \mathbf{K}=-0.61789
\end{aligned}
$$

Detector $3 \quad \mathbf{I}=0.06042$

$$
\mathrm{J}=-0.78474
$$

$$
\mathrm{K}=-0.61688
$$

Upstream Flange $\quad X=-15.90$

$$
\mathbf{Y}=-1.39
$$

