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INTERNAL FIELD PROBING OF TRANSLATING FRCs

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B_θ are typically $.16 B_w$ (B_z measured B_θ , if it were part of an elongated or percent change in B , where the average $1/2 \times 2 = 1/2 (B_{\theta rms}/B_w)^2$.

Simulations of B_θ generation have MHD code.⁴ The simulations used approximately matched to the source for μs , in which the FRC has translated guide field region on the left. The field values of both signs. However, of the FRC and weakest near the field found to be $\sim 10\%$ of the poloidal flux which the toroidal flux is typically demonstrate that the Hall term in toroidal field generation⁵ in the region gradients during FRC acceleration, the subsequent toroidal field evolution

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References

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5. D. W. Hawett, Nuclear Fusion 24,

		T ₀
		Plasma
		Triple-Axis Probe
		Source Trans.
		(t=10 μ s) (t=30 μ s)
B_0 (kG)	5.5	
n (10^{13} cm ⁻³)	1.1	
T (eV)	630	
Φ_1 (kG cm ²)	175	
r_s (cm)	10	
r_s (cm)	10	

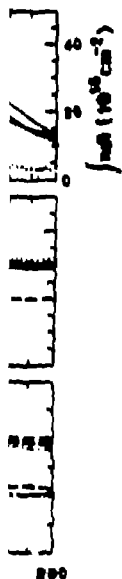
Moreover, the toroidal flux is in contrast to experimental results in poloidal flux. These simulations equations can indeed account for an asymmetric field and density. 2-D MHD modeling does not predict

energy.

1. 26, 1299 (1983).
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<u>Radial Array Studies</u>	
Source ($t=10 \mu s$)	Translation ($t=30 \mu s$)
5.3	3.5
1.3	0.6
490	400
230	345
11	13



and
 different
 , $r = 4.0$
 (dash),
 solid),
 as in b).

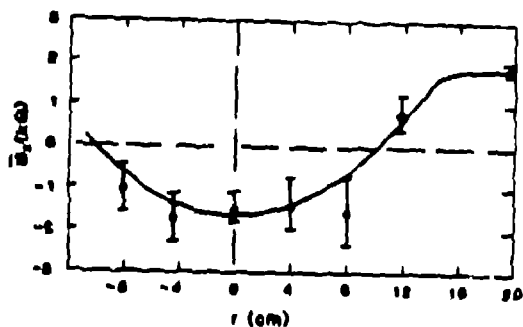


Fig. 2. Average B_z vs r for
 triple-axis data.
 Error bars are rms deviations
 Solid curve is theoretical
 profile.

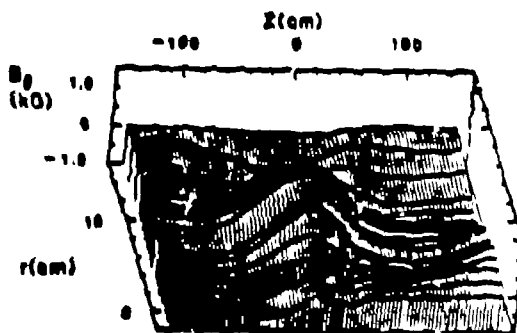


Fig. 3b. Radial array data:
 B_0 vs r, z .