

# BTA Stripping Foil History

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Table 1: BTA Foils mounted on 5 November 2003

Holder	Foil Material	$\Delta t$	$\Delta x$
1	Empty	Inches	mg/cm <sup>2</sup>
2	Carbon	.003	13.9
3	Beryllium	.005	23.5
4	Carbon	.005	23.1
5	Carbon	.005	23.1
6	Beryllium	.006	28.2
7	Silica	.005	28.0
8	Silica	.005	28.0

Table 2: BTA Foils mounted on 14 August 2006

Holder	Foil Material	$\Delta t$	$\Delta x$	Status
1	Empty	Inches	mg/cm <sup>2</sup>	Unchanged
2	Carbon	.003	13.9	Unchanged
3	Aluminum	$A + A$	12.7	New
4	Carbon	.005	23.1	Unchanged
5	Carbon	.005	23.1	Unchanged
6	Aluminum	$A + a$	10.65	New
7	Al and C	$A + c$	6.35 + 8.48	New
8	Carbon	$C + c$	24.7	New

Here  $A$  is the thickness of “Heavy Duty” Renolds Wrap;  $a$  is the thickness of “regular” Renolds Wrap.  $C = 100 \mu\text{m}$  and  $c = 60 \mu\text{m}$  are the thicknesses of the Glassy Carbon foils. In holder number 7, the Aluminum

foil is mounted upstream of the Glassy Carbon foil. Peter Thieberger mounted the foils on holders 3, 6, 7, and 8. Before mounting them he measured their dimensions and weighed them to obtain the surface densities given in the Table.

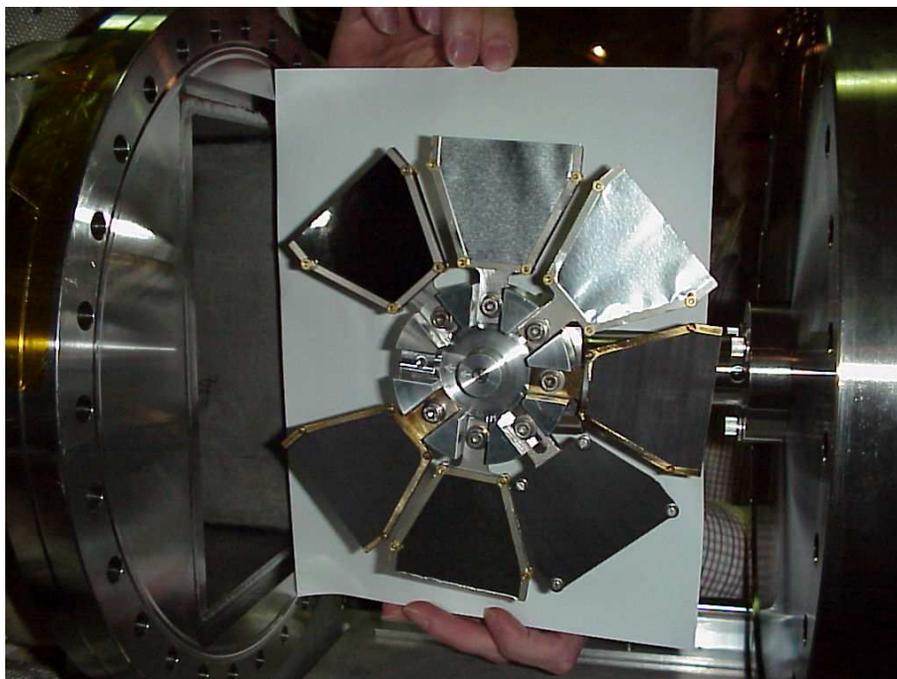


Figure 1: BTA Foils mounted on 14 August 2006. The beam direction here is into the picture. Holder 2 is just below the empty slot. Holders 3 through 8 follow consecutively going counter-clockwise from Holder 2.

Table 3: BTA Foils mounted on 17 August 2007

Holder	Foil Material	$\Delta t$	$\Delta x$	Status
1	Empty	Inches	$\text{mg}/\text{cm}^2$	Unchanged
2	Carbon	.003	13.9	Unchanged
3	Al and C	$A + c$	$6.42 + 8.68$	New
4	Carbon	.005	23.1	Unchanged
5	Carbon	.005	23.1	Unchanged
6	Al and C	$A + c$	$6.45 + 8.39$	New
7	Al and C	$A + c$	$6.35 + 8.48$	Unchanged
8	Carbon	$C + c$	24.7	Unchanged

Here again  $A$  is the thickness of “Heavy Duty” Renolds Wrap;  $a$  is the thickness of “regular” Renolds Wrap.  $C = 100 \mu\text{m}$  and  $c = 60 \mu\text{m}$  are the thicknesses of the Glassy Carbon foils. In holders 3, 6, and 7, the Aluminum foil is mounted upstream of the Glassy Carbon foil. Peter Thieberger mounted the foils on holders 3, 6, 7, and 8. Before mounting them he measured their dimensions and weighed them to obtain the surface densities given in the Table.

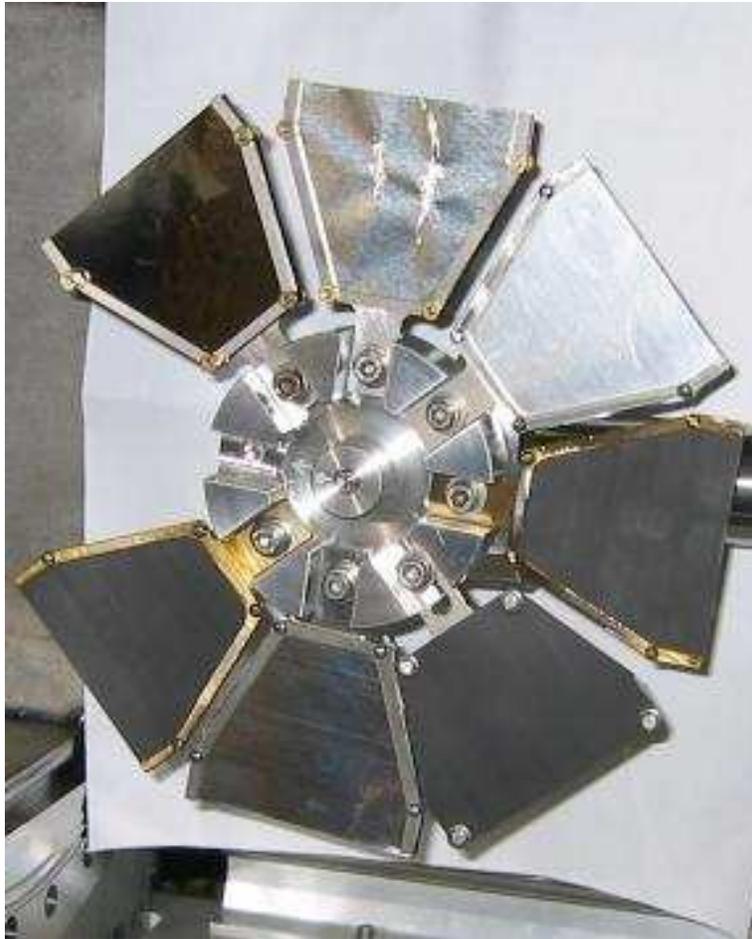


Figure 2: BTA Foils mounted on 17 August 2007. The beam direction here is into the picture. Holder 2 is just below the empty slot. Holders 3 through 8 follow consecutively going counter-clockwise from Holder 2.



Figure 3: BTA Foils mounted on 17 August 2007. The beam direction here is coming out of the picture. Holder 2 is just below the empty slot. Holders 3 through 8 follow consecutively going clockwise from Holder 2.