## **Flight Mill Parts**

ltem	ltem #	Vender	Web site	Unit	# used *	Cost/ Unit	Cost \$US	Notes/Instructions
ferrite ring magnets	63B06929118	Magnet Shop	http://www.magnetshop.com/	pack 100	1	12.00	12.00	1 glued to the dowel, and 1 to the 1" teflon/mini-CD combo, opposing - to generate the "float."
hypodermic tubing	HTX-20R-12-10	Small Parts, Inc.	http://www.smallparts.com/	pack 100	3	8.31	24.93	Used for the arms.
hypodermic tubing	HTX-20R-48	Small Parts, Inc.	http://www.smallparts.com/	each	1	7.76	7.76	Cut into 1 1/2" lengths for the axes; use a metal file to round ends; should fit tightly into the teflon sunk into dowel, loosely into the rotating teflon bit.
nickel ring magnets	R1001	Super Magnet Man	http://www.supermagnetman.net/	each	60	0.30	18.00	Used to log rotations on the hall effect sensors, 2 per mini-CD – attracting.
3/8" teflon rod	47503	United States Plastic Corporation	http://www.usplastic.com/	foot	5	1.92	9.60	Cut into 30 x 1" lengths, 30 x 3/4" lengths. drill the 3/4" pieces w/ a size 62 bit 1/2" deep (parallel - for axis), sink into hole in dowel. drill 1' pieces w/ a size 60 bit 3/4" deep (parallel - for axis) and also a perpendicular hole w/ a size 62 bit to accept the rotating arm, placed 1/8" off of the un-drilled end
1" diameter Delrin rod, 3.75" long		Professional Plastic	http://www.professionalplastics.com/ DELRINSHEET-ROD	foot	10	20.00	200.00	Many suppliers: just use cheapest on the internet.

<sup>\*</sup> Number used to fabricate 30 mills.