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Simple Experimental Test For the Inertial Field of a Rotating Real Mechanical Object

Introduction: For the last five years, this investigator and others[1] have studied the mechanical properties of rotating objects for the purpose of application of certain heretofore undiscovered properties of rotation to new forms of propulsion machinery and machines with an antigravitational effect. The course of this investigator has not been to try to perfect new propulsion machinery, per se, but however to thoroughly investigate the phenomena of rotation.

The result of a great deal of experimentation (see appendix I), has resulted in a picture which relates the performance of certain non-conventional machinery: Dean, Laithwaite, Wolfe, DePalma, to a variable inertia property which can be engendered through motion of a rotating object.

In terms of the acceptance of a new body of information relating to the properties of rotating objects and variable inertia, a simple experiment has to be devised which clearly demonstrates the new phenomena. In the performance of experiments with large rotating flywheels, there are great experimental difficulties which result from experimenting on the large rotating flywheels themselves. Through a series of corroborating experiments it has been established the anisotropic inertial properties of a rotating object are conferred on the space around the object. That is to say the space around a rotating object will have conferred upon it an inertial anisotropy. Let us ascribe this to the setting up of an od (odd) field through rotation of a real physical object. The purpose of the experiment to be described is the determination of one of the properties of an od field. The anisotropic inertia property.

The Experiment: A good way to detect a field whose effect is a spatial inertial anisotropy is to use a time measurement based on an inertial property of space and compare it to a remote reference. With reference to figure (1) we have a situation where the timekeeping rate of an Accutron tuning fork regulated wristwatch is compared to that of an ordinary electric clock with a synchronous sweep second hand.

The Accutron timepiece is specified to be accurate to one minute a month. Examination of the relative time drift of the Accutron - electric clock combination shows a cumulative drift of .25 second Accutron ahead for 4 hours of steady state operation. This is within the specification of the watch.

With the flywheel spinning at 7600 r.p.m. and run steadily for 1000 seconds (17 minutes), the Accutron loses .9 second relative to the electric clock.

Much experimentation has shown that the effect is greatest with the position of the tuning fork as shown. Magnetic effects from leakage fields from the gyro drive motors are almost entirely absent, any remaining leakage is removed by co-netic magnetic shielding. The Accutron is also in a "non-magnetic" envelope.

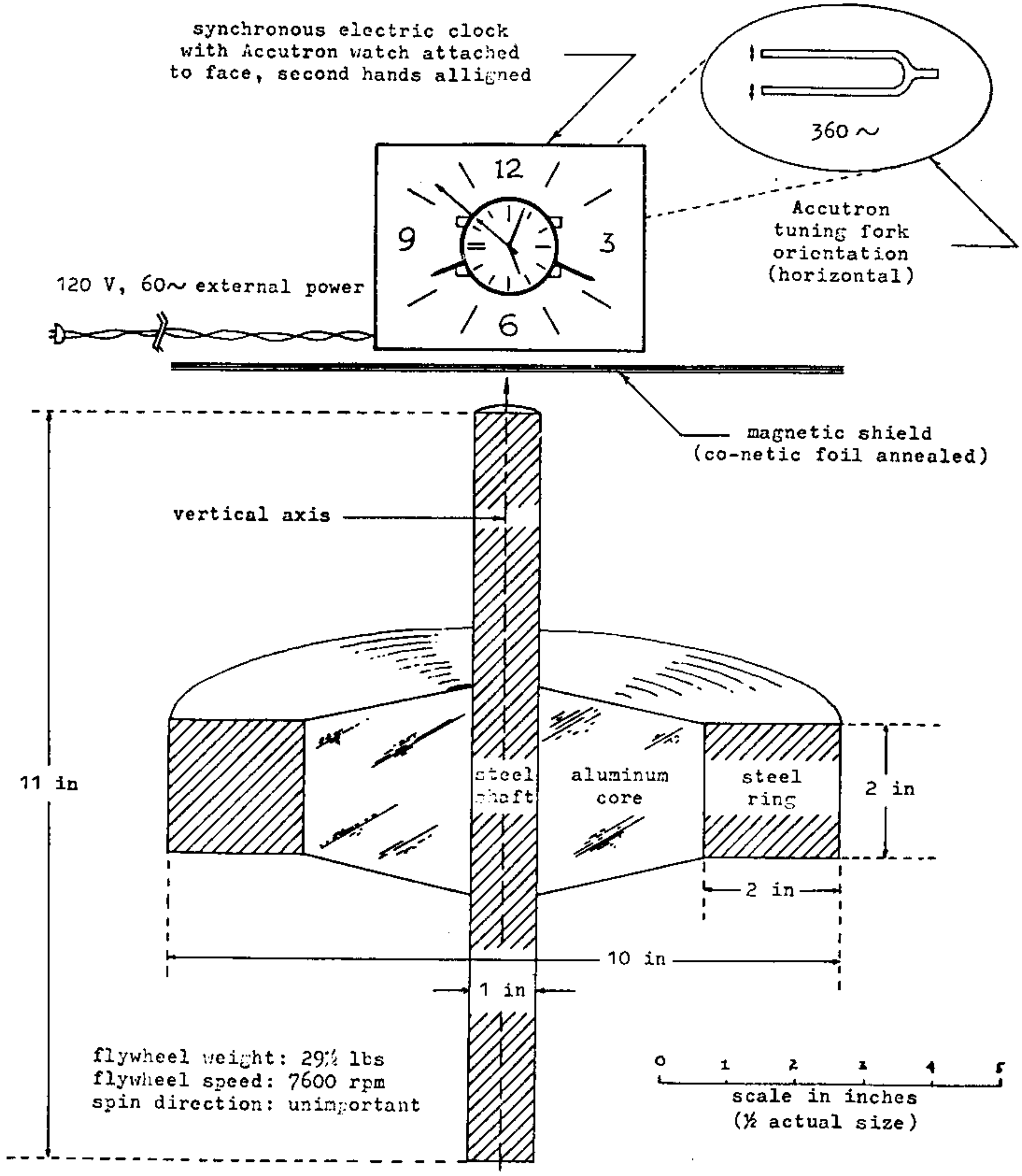
The purpose of the experiment is a simple demonstration of one of the effects of the od field of a rotating object. The demonstration may easily be repeated using any one of a variety of rotating objects, motor flywheels, old gyrocompases etc. The rotating mass of the flywheels used in these experiments is 29½ pounds. The rotational speed of 7600 r.p.m. is easily accessable. The effect is roughly proportional to the radius and mass of the rotating object and to the square of the rotational speed.

Finer measurements can be made using an external electrically powered tuning fork oscillator and an electronic frequency counter. In this case the inertial anisotropy of the od field of a rotating object can be much more quickly and precisely measured. Field strength lines can be plotted along contours of constant frequency shift for the two orientation conditions of fork vibration direction parallel to, and perperdicular to, the axis of rotation of the test object.

<u>Conclusions and Observations</u>: The proper conclusions and evaluations of the above experiment will affect present conceptions of Cosmology. Before this can happen, simple tests must be performed to show the existance of a new phenomena. It is hoped the apparatus for the performance of these tests is widely enough available to lead to quick verification.

1) Eric Laithwaite, John S. Wolfe, Edward Delvers, Bruce E. DePalma.

Appendix: Axial moment of inertia measurements of constrained gyroscopes, pendulum experiments demonstrating anisotropic inertia of a rotating body.



Inertial Field Experiment

Figure 1

dwg: ECB
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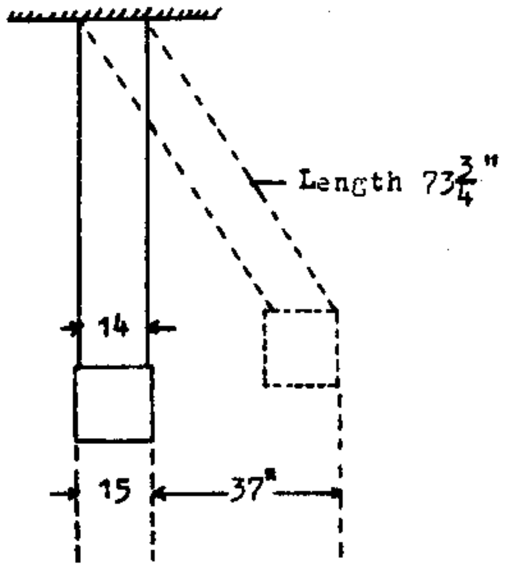
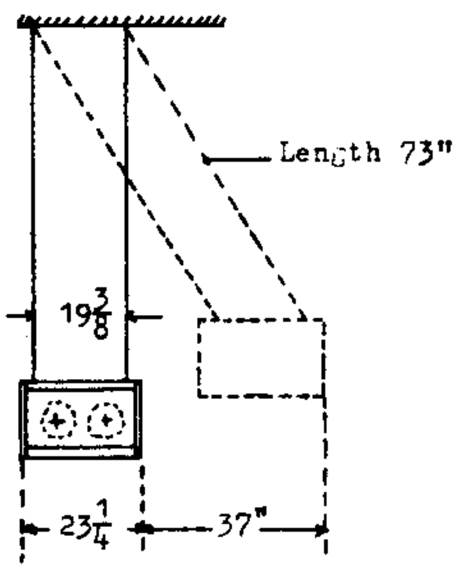
Pendulum Experiment Data March 17, 1975



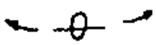
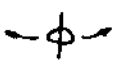
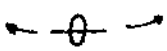
Flywheel orientation	Period for ten swings (seconds): measurement*		Period for ten swings (seconds): average
unenergized	28.010	28.0075	28.0050
	28.005		
	28.005	28.0025	
	28.000		
energized	28.005		28.0012
	28.000		
	28.005		
	27.995		
energized	28.005		28.0087
	28.010		
	28.015		
	28.005		



Flywheel orientation	Measurement*	Average
unenergized	27.730	27.7325
	27.740	
	27.740	
	27.720	
energized	27.720	27.7312
	27.745	
	27.740	
	27.720	

*note: each measurement represents the average of ten measurements taken to determine the time duration of ten swings of the pendulum

Pendulum Experiment Data   March 17, 1975

flywheel orientation	number of measurements	average period (seconds)	standard deviation
unenergized 	20	2.80075 ± .00014 sec.	.00286
unenergized 	20	2.80025 ± .00010 sec.	.00192
energized* 	40	2.80012 ± .00006 sec.	.00237
energized* 	40	2.80087 ± .00006 sec.	.00249
unenergized 	40	2.77325 ± .00011 sec.	.00426
energized* 	40	2.77312 ± .00010 sec.	.00398

*note: two 30-lb flywheels rotating in opposite directions at 7600 rpm

Elastic Collision Experiment Data

Feb. 10, 1975

Machine (A) weighs 234 lbs and can be energized (two 30-lb flywheels rotate in opposite directions at 7600 rpm).
Machine (B) weighs 234 lbs and is not energized during any of these experiments.

I) Collision of (A) into (B); (A) released from D=20.0 cm.

	40 volts to (A) motors, 7600 rpm			0 volts to (A) motors, 0 rpm		
	motion of (B)	residual motion of (A)	total motion	motion of (B)	residual motion of (A)	total motion
	18.1 cm	2.2 cm	20.3 cm	17.65 cm	2.3 cm	19.95cm
	18.2 cm	2.0 cm	20.2 cm	17.75 cm	2.25cm	20.0 cm
	18.25cm	2.05cm	20.3 cm	18.0 cm	2.4 cm	20.4 cm
	17.8 cm	2.2 cm	20.0 cm	17.7 cm	2.4 cm	20.1 cm
	17.8 cm	2.4 cm	20.2 cm	17.65 cm	2.3 cm	19.95cm
	17.8 cm	2.2 cm	20.0 cm	17.65 cm	2.3 cm	19.95cm
	17.9 cm	2.3 cm	20.2 cm	17.9 cm	2.1 cm	20.0 cm
	18.0 cm	2.1 cm	20.1 cm	17.6 cm	2.4 cm	20.0 cm
	17.8 cm	2.3 cm	20.1 cm	17.85 cm	2.25cm	20.1 cm
	17.9 cm	2.3 cm	20.2 cm	17.75 cm	2.25cm	20.0 cm
Average	17.96 cm	2.20 cm	20.16 cm	17.75 cm	2.30 cm	20.04 cm

When (A) is energized (B) goes 1% further than when (A) is quiescent
When (A) is energized it rebounds 5% less than when (A) is quiescent

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II) Collision of (B) into (A); (B) released from D=20.0 cm

	40 volts to (A) motors, 7600 rpm			0 volts to (A) motors, 0 rpm		
	motion of (A)	residual motion of (B)	total motion	motion of (A)	residual motion of (B)	total motion
	17.9 cm	1.9 cm	19.8 cm	18.1 cm	1.6 cm	19.7 cm
	18.4 cm	1.6 cm	20.0 cm	18.3 cm	1.5 cm	19.8 cm
	18.5 cm	1.5 cm	20.0 cm	18,45 cm	1.4 cm	19.95 cm
	18.4 cm	1.5 cm	19.9 cm	18.35 cm	1.6 cm	19.95 cm
	18.4 cm	1.6 cm	20.0 cm	18.4 cm	1.45cm	19.85 cm
	18.1 cm	1.9 cm	20.0 cm	18.35 cm	1.7 cm	20.05 cm
	18.3 cm	1.8 cm	20.1 cm	18.3 cm	1.7 cm	20.0 cm
	18.3 cm	1.85cm	20.15cm	18.35 cm	1.4 cm	19.75 cm
	18.3 cm	1.6 cm	19.9 cm	18.45 cm	1.6 cm	20.05 cm
	18.1 cm	1.9 cm	20.0 cm	18.55 cm	1.35cm	19.9 cm
Average	18.27 cm	1.72 cm	19.98 cm	18.36 cm	1.53 cm	19.90 cm

When (A) is energized and collided upon it moves .5% less than when quiescent
When (A) is energized (B) rebounds 1.2% more than when (A) is quiescent

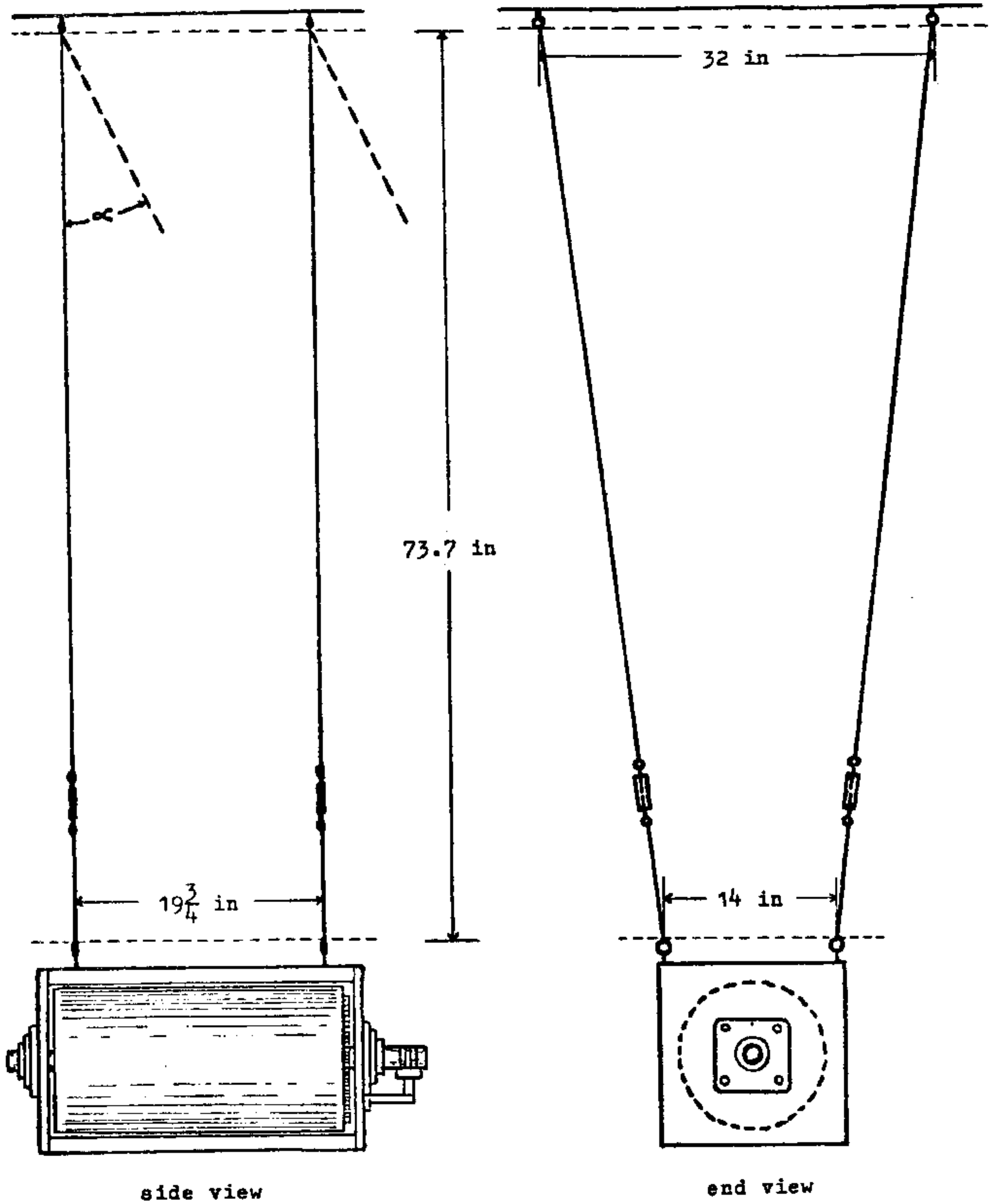


Figure 2. Pendulum Experiment Geometry

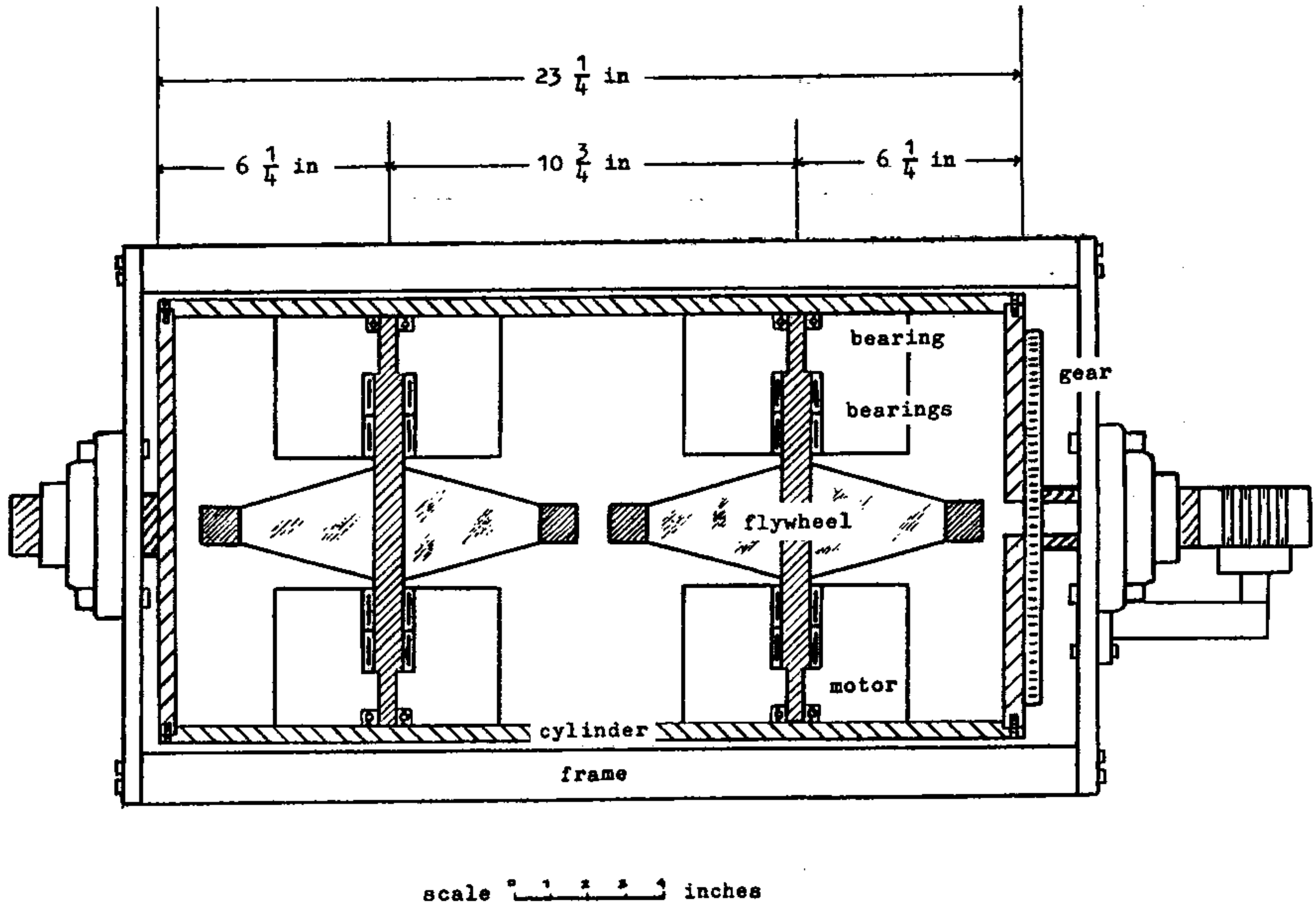
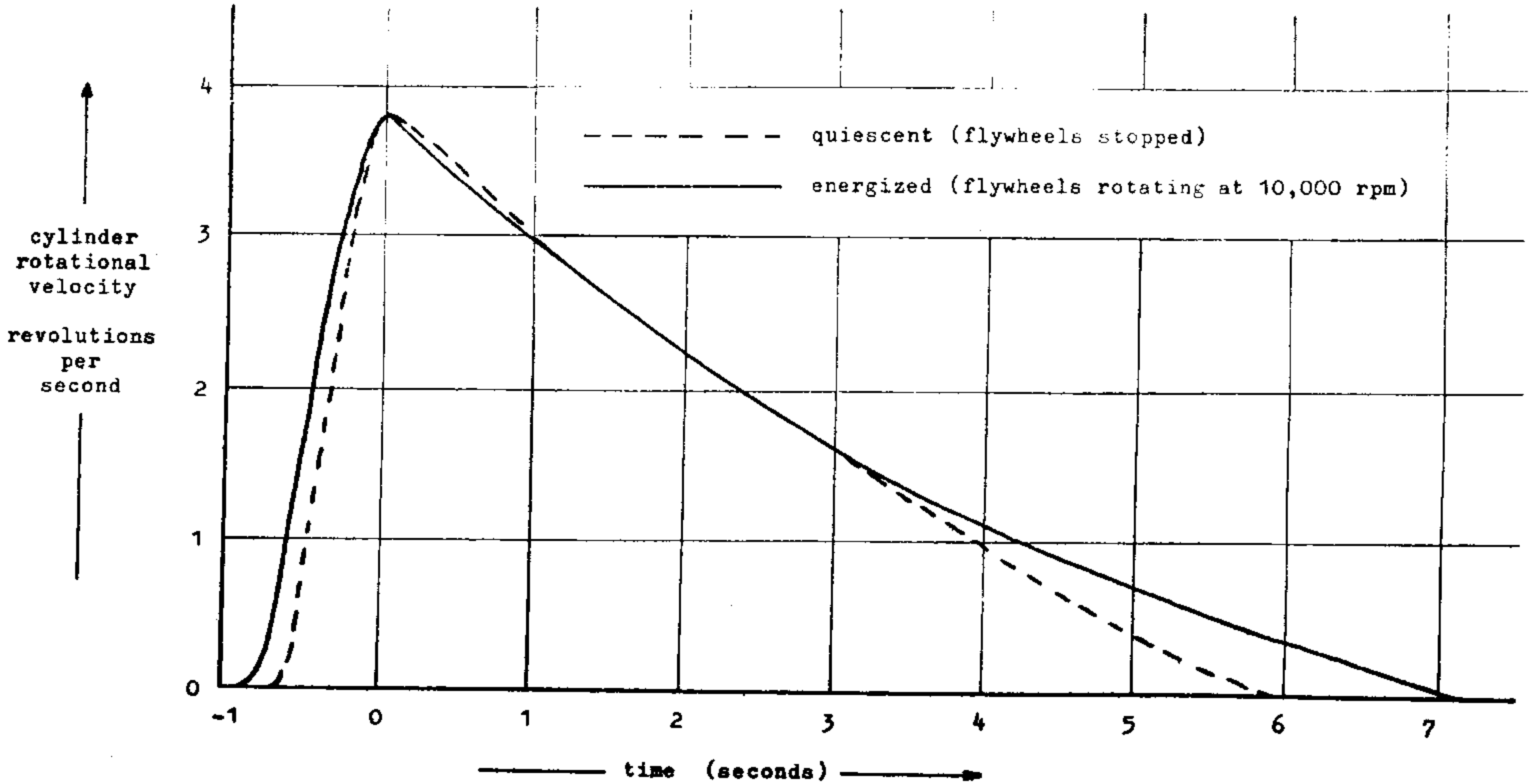
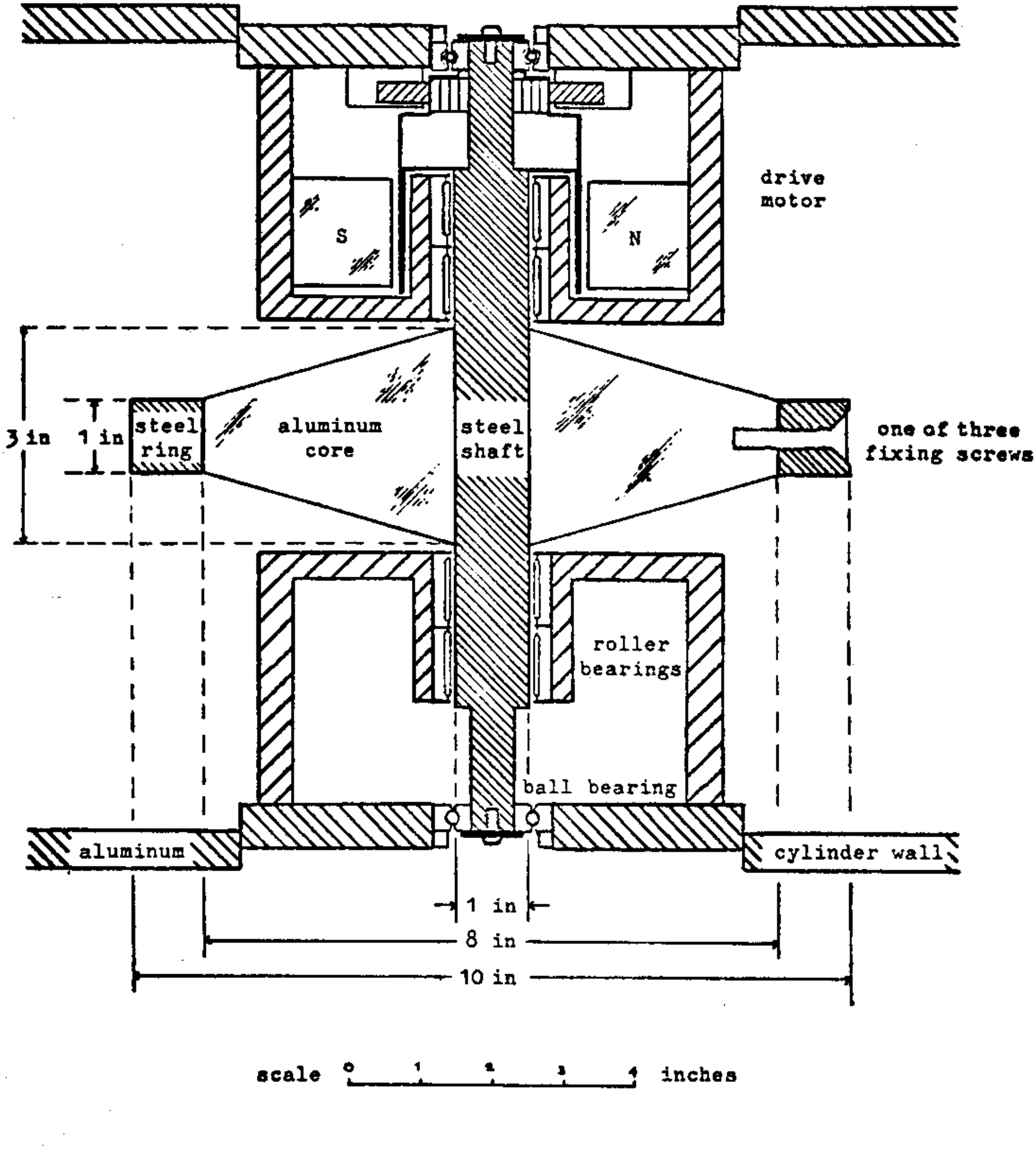


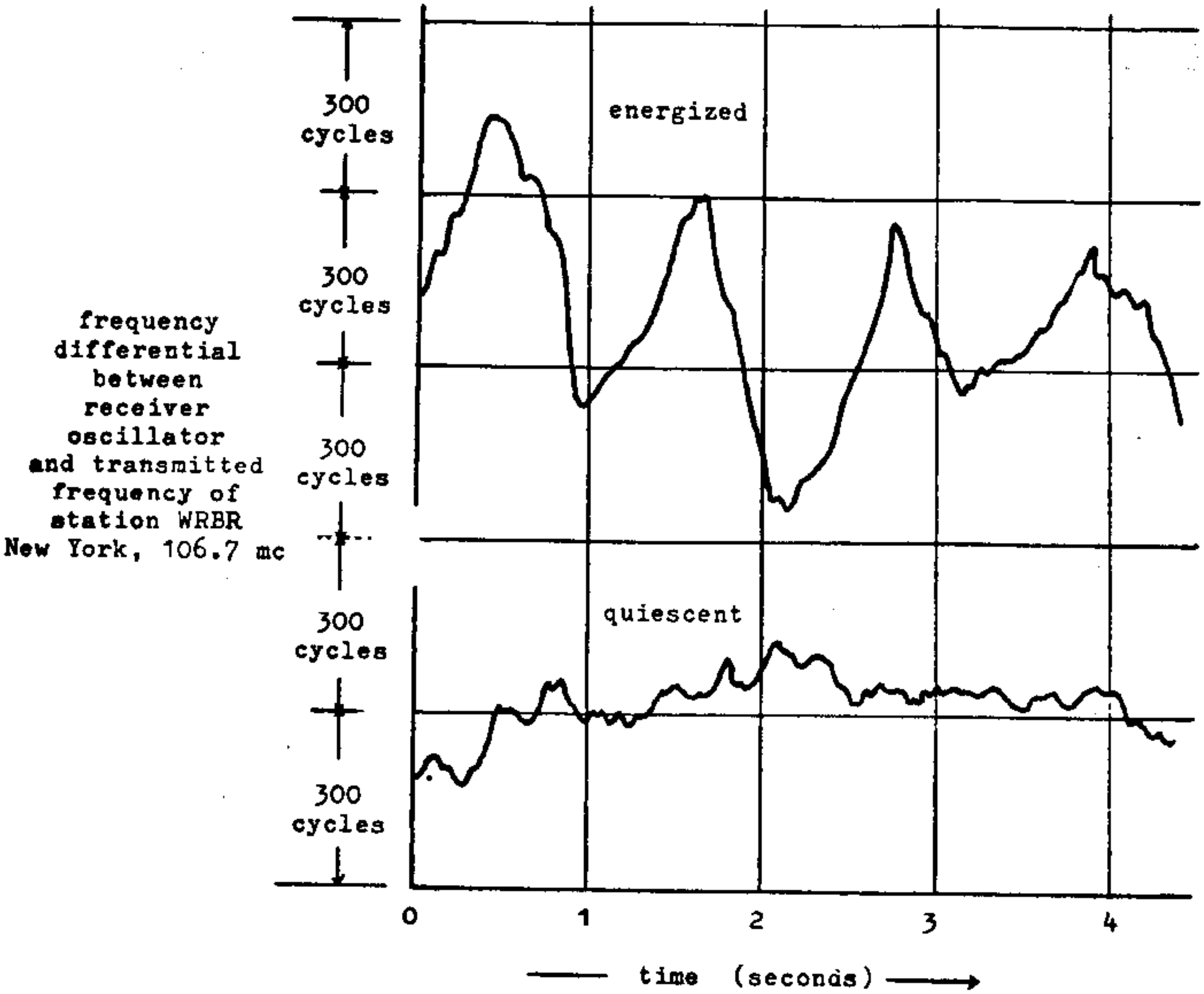
Figure 1. The Force Machine



Transient Behavior of the Force Machine



Details of the Force Machine Flywheel



Graph 2. Radio Frequency Shift Experiment