

List of Film Loops (8 mm)

Film Associates; Space Science Series:

- 1) 443001 Solar Prominances
- 2) 443008 Solar Flares

Spring Green Multimedia:

- 1) PAF 1202 Skylab: Conservation of Astronaut Angular Momentum
- 2) PAF 1203 Skylab: Darts and Paper Airplanes
- 3) PAF 1206 Skylab: Lifting in Orbit

Educational Services, Inc. (Equivalent to a set of Ealing films):

- 1) 50098 Reflections of Straight Waves/Barrier
- 2) 50099 Reflection of Circular Waves
- 3) 50100 Reflection of waves from concave barriers
- 4) 50101 Refraction of Waves in a Ripple Tank
- 5) 50102 Barrier Penetration by Waves I
- 6) 50103 Bragg Reflection of Waves
- 7) 50104 Doppler Effect in a Ripple Tank
- 8) 50105 Formation of Shockwaves
- 9) 50106 Superposition of Pulses in a Ripple Tank
- 10) 50107 Interference of Waves in a Ripple Tank
- 11) 50108 Effects of Phase Differences in a Ripple Tank
- 12) 50109 RT-I4 Single Slit Diffraction of Waves in a Ripple Tank
- 13) 50110 Multiple Diffraction
- 14) 50111 Diffraction and Scattering of Waves around an Obstacle in a Ripple Tank

Ealing:

- 1) 80-200 Radioactive Decay (Franklin Miller, Ohio State U.)
- 2) 80-201 Scintillation Spectrometry (Franklin Miller, Ohio State U.)
- 3) 80-202 Absorption Spectra (Franklin Miller, Ohio State U.)
- 4) 80-203 Ferromagnetic Domain Wall Motion (Franklin Miller, Ohio State U.)
- 5) 80-204 Paramagnetism of Liquid Oxygen (Franklin Miller, Ohio State U.)
- 6) 80-205 Critical Temperature (Franklin Miller, Ohio State U.)
- 7) 80-206 Diffraction – Single Slit (Franklin Miller, Ohio State U.)
- 8) 80-207 Diffraction – Double Slit (Franklin Miller, Ohio State U.)
- 9) 80-208 Resolving Power (Franklin Miller, Ohio State U.)
- 10) 80 209 Michelson Interferometer (Franklin Miller, Ohio State U.)

- 11) 80-210 Coupled Oscillators – Equal Masses (Franklin Miller, Ohio State U.)
- 12) 80-211 Coupled Oscillators – Unequal Masses (Franklin Miller, Ohio State U.)
- 13) 80-212 Measurement of “G” – The Cavendish Experiment (Franklin Miller, Ohio State U.)
- 14) 80-213 Inertial Forces – Translational Acceleration (Franklin Miller, Ohio State U.)
- 15) 80-214 Inertial Forces – Centripetal Acceleration (Franklin Miller, Ohio State U.)
- 16) 80-215 Wilberforce Pendulum (Franklin Miller, Ohio State U.)
- 17) 80-216 Temperature Waves (Franklin Miller, Ohio State U.)
- 18) 80-217 Non-recurrent Wavefronts (Franklin Miller, Ohio State U.)
- 19) 80-218 Tacoma Narrows Bridge Collapse (Franklin Miller, Ohio State U.)
- 20) 80-231 Straight Wave Reflection from Straight Barriers (Educational Services, Inc.)
- 21) 80-232 Circular Wave Reflection from Various Barriers (Educational Services, Inc.)
- 22) 80-233 Reflection of Waves from Concave Barriers (Educational Services, Inc.)
- 23) 80-234 Refraction of Waves (Educational Services, Inc.)
- 24) 80-235 Barrier Penetration by Waves (Educational Services, Inc.)
- 25) 80-236 Bragg Reflection of Waves (Educational Services, Inc.)
- 26) 80-237 Doppler Effect (Educational Services, Inc.)
- 27) 80-238 Formation of Shock Waves (Educational Services, Inc.)
- 28) 80-239 Superposition of Pulses (Educational Services, Inc.)
- 29) 80-240 Interference of Waves (Educational Services, Inc.)
- 30) 80-241 Effect of Phase Differences between Sources (Educational Services, Inc.)
- 31) 80-242 Single Slit Diffraction (Educational Services, Inc.)
- 32) 80-243 Multiple Slit Diffraction (Educational Services, Inc.)
- 33) 80-244 Diffraction and Scattering around Obstacles (Educational Services, Inc.)
- 34) 80-251 The Velocity Vector (Educational Services, Inc.)
- 35) 80-252 Velocity in Circular & Simple Harmonic Motion (Educational Services, Inc.)
- 36) 80-253 The Acceleration Vector (Educational Services, Inc.)
- 37) 80-254 Velocity & Acceleration in Circular Acceleration (Educational Services, Inc.)
- 38) 80-255 Velocity & Acceleration in Simple Harmonic Motion (Educational Services, Inc.)
- 39) 80-256 Velocity & Acceleration in Free Fall (Educational Services, Inc.)
- 40) 80-266 Soap Film Oscillations (Educational Services, Inc.)
- 41) 80-267 Coupled Oscillators, Energy Transfer (Educational Services, Inc.)
- 42) 80-268 Coupled Oscillators, Other Oscillators (Educational Services, Inc.)
- 43) 80-269 Coupled Oscillators, Normal Modes (Educational Services, Inc.)
- 44) 80-288 The Photoelectric Effect (A.E. Walters, Rutgers U.)
- 45) 80-289 Capacitors and Dielectrics (A.E. Walters, Rutgers U.)
- 46) 80-291 Maxwellian Speed Distribution (Harold A. Daw, New Mexico State U.)
- 47) 80-293 Equipartition of Energy (Harold A. Daw, New Mexico State U.)
- 48) 80-301 Rotating Reference Frames (H.F. Meiners)
- 49) 80-2728 Constant Velocity and Uniform Acceleration (J.L. Stull, Alfred U.)
- 50) 80-2736 Newton’s First and Second Laws (J.L. Stull, Alfred U.)

- 51) 80-2744 Newton's Third Law (J.L. Stull, Alfred U.)
- 52) 80-2751 Conservation of Momentum – Inelastic Collisions (J.L. Stull, Alfred U.)
- 53) 80-2769 Conservation of Energy (J.L. Stull, Alfred U.)
- 54) 80-2777 Conservation of Momentum – Elastic Collisions (J.L. Stull, Alfred U.)
- 55) 80-2785 Simple Harmonic Motion – The Stringless Pendulum (J.L. Stull, Alfred U.)
- 56) 80-2793 Center-of-Mass Pendulum (J.L. Stull, Alfred U.)
- 57) 80-2801 How an Air Track Works (J.L. Stull, Alfred U.)
- 58) 80-3031 Distance, Time, and Speed (David Kutliroff, New Brunswick High School)
- 59) 80-3049 One Dimensional Acceleration (David Kutliroff, New Brunswick High School)
- 60) 80-3064 Trajectories (David Kutliroff, New Brunswick High School)
- 61) 80-3030 Circular Motion (David Kutliroff, New Brunswick High School)
- 62) 80-3098 Simple Harmonic Motion (David Kutliroff, New Brunswick High School)
- 63) 80-3114 Dynamics of Circular Motion (David Kutliroff, New Brunswick High School)
- 64) 80-3130 Dynamics of Pendulums (David Kutliroff, New Brunswick High School)
- 65) 80-3148 The Center of Mass (David Kutliroff, New Brunswick High School)
- 66) 80-3155 Collisions in Two Dimensions (David Kutliroff, New Brunswick High School)
- 67) 80-3387 Boyle's Law (Don Herbert, Prism Productions, Morris Shamos, N.Y.U.)
- 68) 80-3395 Finding Absolute Zero (Don Herbert, Prism Productions, Morris Shamos, N.Y.U.)
- 69) 80-3437 Energy Conversion (Don Herbert, Prism Productions, Morris Shamos, N.Y.U.)
- 70) 80-3460 Acceleration Due to Gravity II (The National Film Board of Canada)
- 71) 80-3486 A Matter of Relative Motion (The National Film Board of Canada)
- 72) 80-3528 Galilean Relativity III, Projectile Fired Vertically (The National Film Board of Canada)
- 73) 80-3775 Colliding Freight Cars (The National Film Board of Canada)
- 74) 80-3825 Kinetic Energy (The National Film Board of Canada)
- 75) 80-3866 Standing Waves on a String (The National Film Board of Canada)
- 76) 80-3874 Standing Waves in a Gas (The National Film Board of Canada)
- 77) 80 3890 Vibrations of a Rubber Hose (The National Film Board of Canada)
- 78) 80-3916 Vibrations of a Wire (The National Film Board of Canada)
- 79) 80-3924 Vibrations of a Drum (The National Film Board of Canada)
- 80) 80-3932 Vibrations of a Metal Plate (The National Film Board of Canada)
- 81) 80-3940 Production of Sodium by Electrolysis (The National Film Board of Canada)
- 82) 80-3957 Thomson Model of the Atom (The National Film Board of Canada)
- 83) 80-3955 Rutherford Scattering (The National Film Board of Canada)
- 84) 80-3999 Reversibility of Time (The National Film Board of Canada)
- 85) 80-4005 Scattering in One Dimension, Part One: Barriers (Education Development Center)
- 86) 80-4013 Scattering in One Dimension, Part Two: Square Wells (Education Development Center)
- 87) 80-4021 Scattering in One Dimension, Part Three: Edge Effects (Education Development Center)

- 88) 80-4054 Particle in a Box (Education Development Center)
- 89) 80-4161 The Concept of Changing Flux (R.B. Adler, M.I.T.)
- 90) 80-4179 Faraday's Law of Induction (R.B. Adler, M.I.T.)
- 91) 80-4203 Moving System of Orbiting Bodies (Education Development Center)
- 92) 80-4211 Orbiting Bodies in Various Force Fields, Part I: Positive Power Laws (Education Development Center)
- 93) 80-4229 Orbiting Bodies in Various Force Fields, Part II: Negative Power Laws (Education Development Center)
- 94) 82-0001 Liquid Forces (Gene Gray, Newton Public Schools)
- 95) 82-0019 The Buoyant Force (Gene Gray, Newton Public Schools)
- 96) 82-0027 Archimedes' Principle (Gene Gray, Newton Public Schools)
- 97) 82-0035 Floating and Sinking (Gene Gray, Newton Public Schools)
- 98) 82-0043 Density of Liquids (Gene Gray, Newton Public Schools)
- 99) 82-0050 Convection in Liquids (Gene Gray, Newton Public Schools)
- 100) 82-0068 The Surface of Water (Gene Gray, Newton Public Schools)
- 101) 82-0076 Drops and Splashes (Gene Gray, Newton Public Schools; H. Edgerton, M.I.T.; T.Uyemura, U. Tokyo)

Kalmia, Co.:

- 1) 1080 Maxwell-Boltzmann Distribution (J.T. Fitch, M.I.T.)
- 2) 1090 Brownian Motion (J.T. Fitch, M.I.T.)
- 3) 6521 The Speed of Projectiles, Sound and Light (Robert Ehrlich, S.U.N.Y. at New Paltz)
- 4) 6522 Simultaneity is Relative (Robert Ehrlich, S.U.N.Y. at New Paltz)
- 5) 6523 The Michelson-Morley Experiment (Robert Ehrlich, S.U.N.Y. at New Paltz)
- 6) 6524 Length Contraction (Robert Ehrlich, S.U.N.Y. at New Paltz)
- 7) 6525 Time Dilation (Robert Ehrlich, S.U.N.Y. at New Paltz)
- 8) 6526 The Doppler Effect and the Twin Paradox (Robert Ehrlich, S.U.N.Y. at New Paltz)
- 9) 6527 World Lines (Robert Ehrlich, S.U.N.Y. at New Paltz)
- 10) 6528 Coordinate Transformation (Robert Ehrlich, S.U.N.Y. at New Paltz)

Odd film loops:

- 1) Damped Oscillations (Demonstrations in Physics Loop 4, Holt, Rinehart, Winston)
- 2) Lenz's Law
- 3) Group Velocity
- 4) Fourier Series