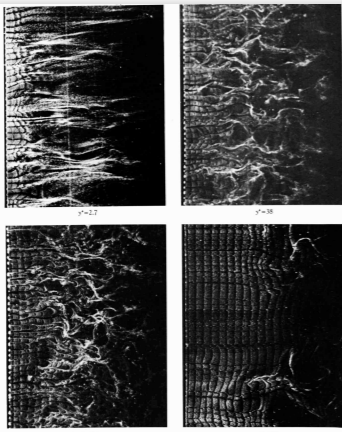
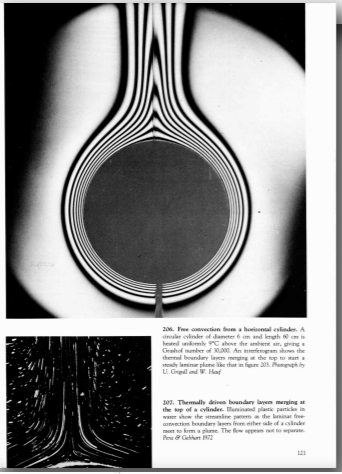


An Album of Fluid Motion

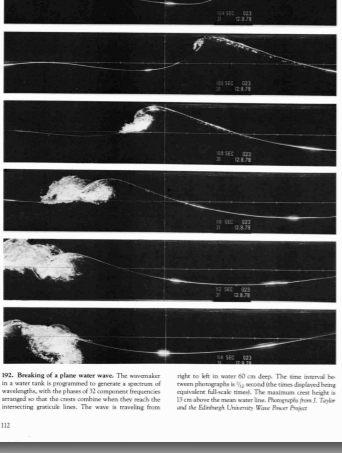
Assembled by Miles Van Dike
Department of Mechanical Engineering
Stanford University, Stanford, California



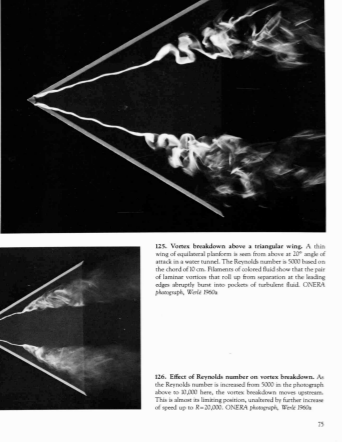
181. Structure of a turbulent boundary layer. Successive layers of the flow over a flat plate in a water channel are shown. The first turbulent boundary layer is shown on the right in this photograph. Subsequent layers are shown on the left. The height of the turbulent boundary layer increases as the distance from the leading edge of the plate increases. Photograph by J. H. Keulegan, JPL.



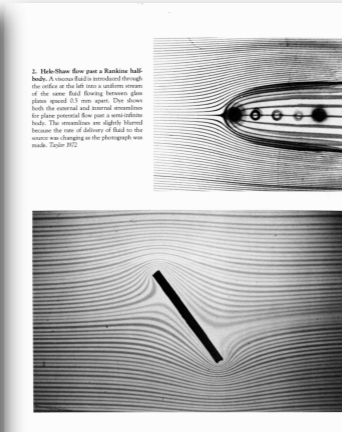
221. Vortex tubes behind a cylinder. Multiple vortex tubes are shown in this photograph. The tubes are arranged in a regular pattern and are spaced at regular intervals. Photograph by J. H. Keulegan, JPL.



183. Cellular patterns in a rotating cylindrical container. The patterns are arranged in a regular grid and are spaced at regular intervals. Photograph by J. H. Keulegan, JPL.



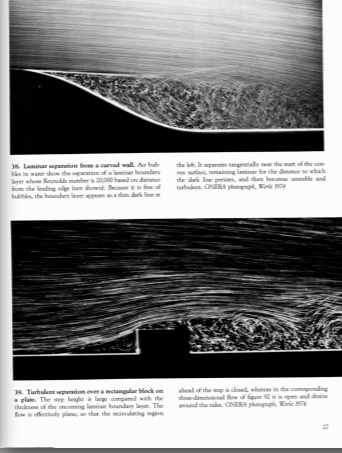
123. Vortex breakdown above a triangular wing. The flow is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



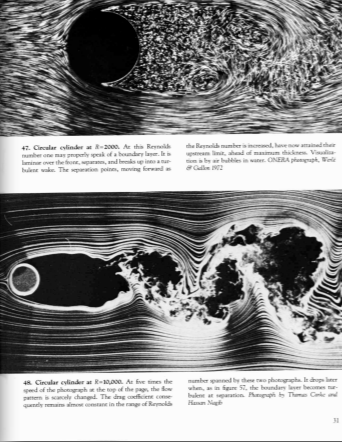
182. Flow past a circular cylinder. The flow is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



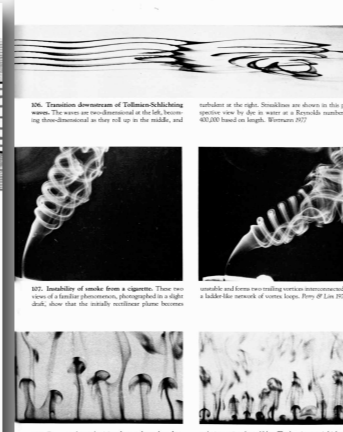
31. Secondary vortices induced by an oscillating cylinder. The vortices are arranged in a regular pattern and are spaced at regular intervals. Photograph by J. H. Keulegan, JPL.



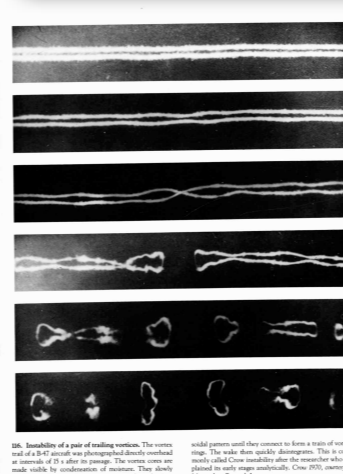
26. Laminar separation flow over a curved wall. The flow is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



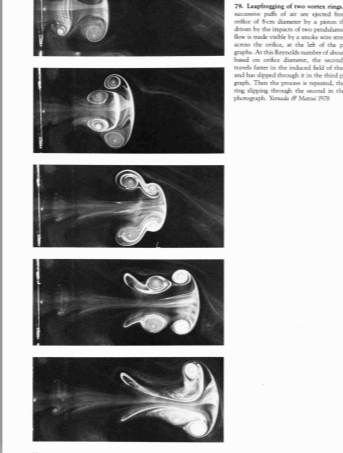
42. Circular cylinder at $Re = 2000$. The flow is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



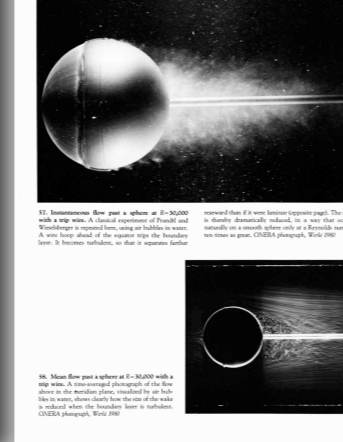
106. Transition downstream of Tollmien-Schlichting waves. The waves are shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



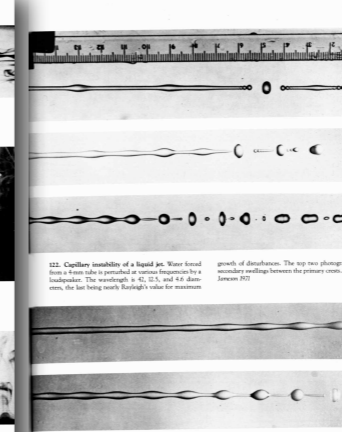
107. Instability of smoke from a cigarette. The smoke is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



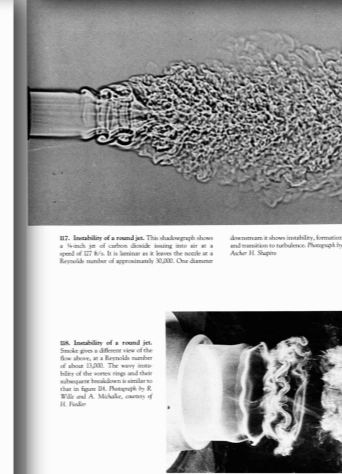
108. Shear layer vortex being shed from a heated surface. The vortex is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



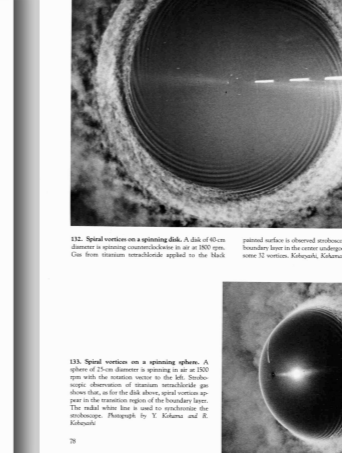
97. Flow past a sphere at $Re = 300000$. The flow is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



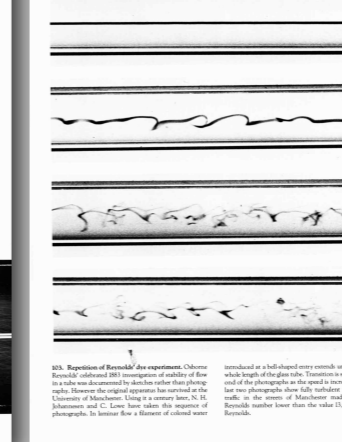
122. Capillary instability of a liquid jet. The jet is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



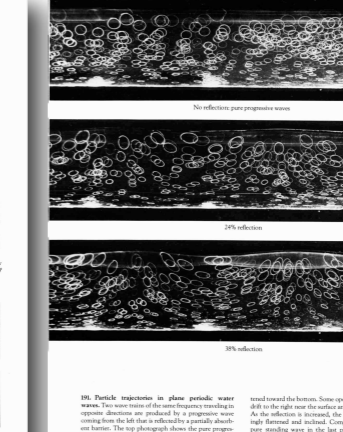
128. Instability of a rod jet. The jet is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



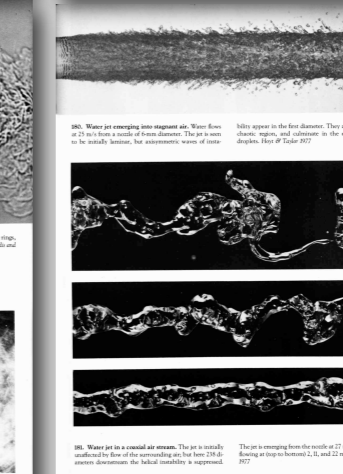
132. Spiral vortices on a spinning disk. The vortices are arranged in a regular pattern and are spaced at regular intervals. Photograph by J. H. Keulegan, JPL.



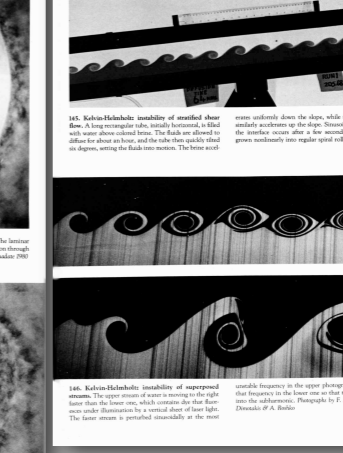
133. Spiral vortices on a spinning sphere. The vortices are arranged in a regular pattern and are spaced at regular intervals. Photograph by J. H. Keulegan, JPL.



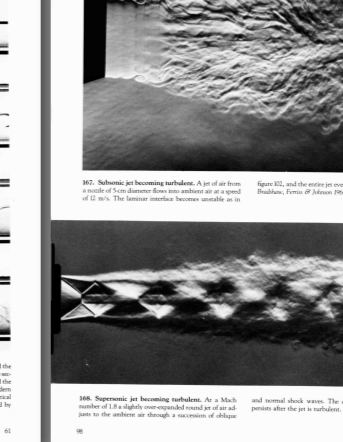
191. Particle trajectories in a plane periodic wave. The trajectories are shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



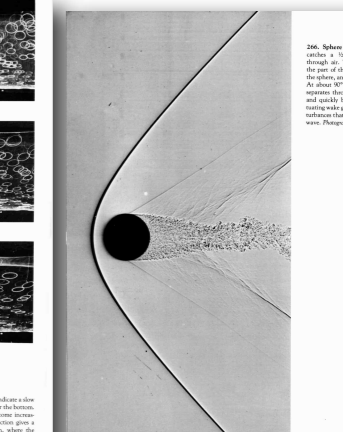
180. Wave jet emerging in a stagnation air flow. The jet is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



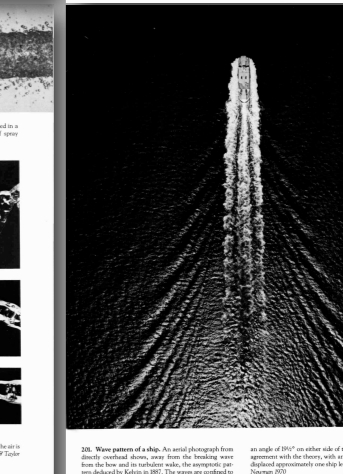
144. Kelvin-Helmholtz instability of stratified shear flow. The flow is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



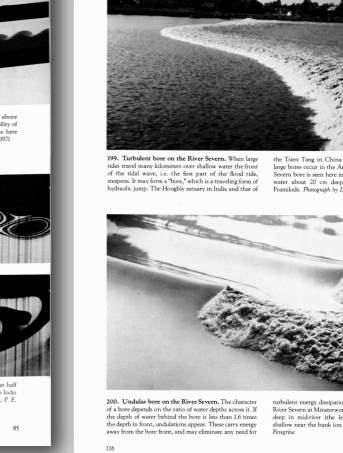
162. Jet becoming turbulent at $M = 1.8$. The jet is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



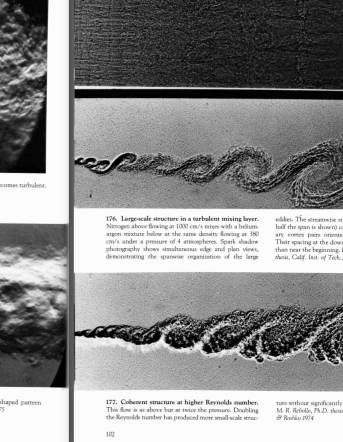
126. Turbulent mixing layer. The flow is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



201. Wake pattern of a ship. The wake is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



189. Turbulent flow over a curved wall. The flow is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.



126. Turbulent flow over a curved wall. The flow is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.

206. Shear at $M = 1.52$. A photograph showing a shear layer in a flow field. The flow is shown in a series of cross-sections, illustrating the development of the vortex and its subsequent breakdown. Photograph by J. H. Keulegan, JPL.