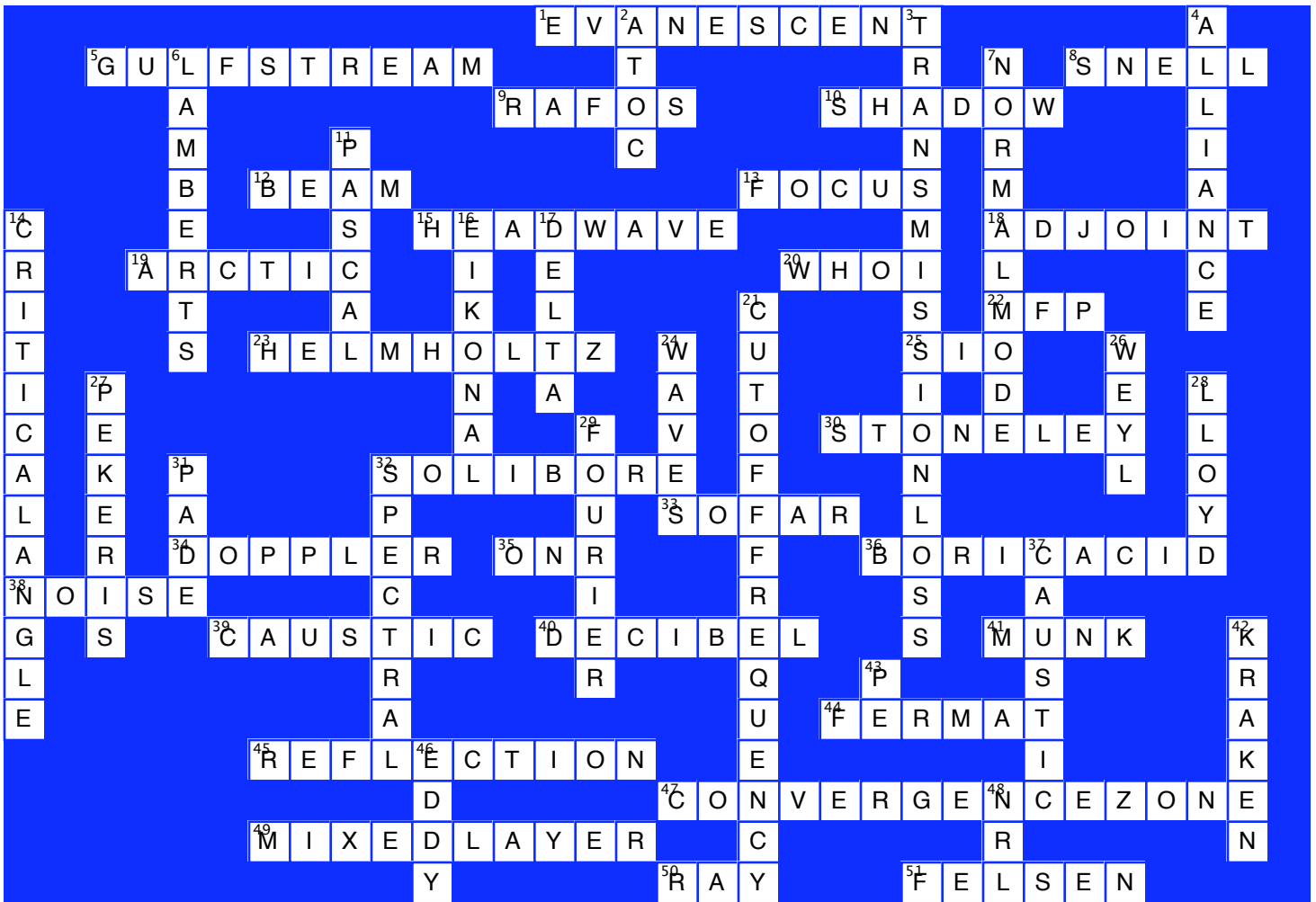


Ocean Acoustics



Across

1. Disappearing [EVANESCENT]
5. One of many rivers in the ocean with interesting effects. [GULFSTREAM]
8. Opposite of fast in Munich [SNELL]
9. Type of float; Time reversal of 17 across [RAFOS]
10. Where no ray goes [SHADOW]
12. Collimated sound [BEAM]
13. Name of the ranch where the sons raise meat [FOCUS]
15. Odd little first arrival. [HEADWAVE]
18. Sneezy bar; way to associate errors and actions [ADJOINT]
19. Sound always comes back to the top in these waters. [ARCTIC]
20. Distinguished institution; Expression of joy or enthusiasm [WHOI]
22. Toothpaste additive; electronic glasses for acoustic arrays [MFP]
23. Seven sciences claimed claimed him for their own [HELMHOLTZ]
25. Oldest oceanographic institute in the U.S. [SIO]
30. Name associated with an interface wave for an elastic layer over an elastic halfspace [STONELEY]
32. Acoustician at a party [SOLIBORE]
33. Very long distance [SOFAR]
34. Heard in siren sound [DOPPLER]

Down

2. Follows a tic [ATOC]
3. Effect of shifting into reverse on freeway [TRANSMISSIONLOSS]
4. Michelin-rated RV [ALLIANCE]
6. Widely used scattering law of questionable merit [LAMBERTS]
7. Par for the course [NORMALMODE]
11. Pressure unit [PASCAL]
14. One very important angle [CRITICALANGLE]
16. From Greek, an image [EIKONAL]
17. Impulsive function [DELTA]
21. High on L.A. freeways [CUTOFFFREQUENCY]
24. Says hello [WAVES]
26. Name associated with an expansion of a point source into planewaves. [WEYL]
27. Name associated with a fluid layer over a fluid halfspace [PEKERIS]
28. Name associated with dipole pattern due to a source reflected in the ocean surface [LLOYD]
29. Scientific advisor to Napoleon's army [FOURIER]
31. When the check comes [PADE]
32. Ghostly [SPECTRAL]
37. Burning [CAUSTIC]
42. Biker bar in San Diego; mode code [KRACKEN]
43. One-way wave equation [PE]
46. Spinning blob of water [EDDY]
48. Edison invention [NRL]

Across

35. First federal agency to sponsor scientific research in the U.S. [ONR]
36. Eyewash chemical that absorbs sound [BORICACID]
38. Opposite of signal? [NOISE]
39. From Greek, to burn [CAUSTIC]
40. Part of a Bel [DECIBEL]
41. Famous oceanographer whose name is associated with an internal wave spectrum, a deep water sound speed profile, and spice, amongst many other things. [MUNK]
44. Needed a bigger margin [FERMAT]
45. Serious thought [REFLECTION]
47. ASA Meeting [CONVERGENCEZONE]
49. Seldom lives up to its name [MIXEDLAYER]
50. Normal to a wavefront [RAY]
51. Famous poet and wave theorist [FELSEN]