DIVER: YOU MUST DOWNLOAD & TAKE THESE FORMS TO THE EXAM!

APPENDIX 3
University of Hawaii Diving Safety Program
DIVING MEDICAL EXAM
INSTRUCTIONS FOR THE EXAMINING PHYSICIAN
******PLEASE READ CAREFULLY******

TO THE EXAMINING PHYSICIAN: This person, _____, requires a medical examination to assess his/her fitness for certification as a Scientific Diver for the University of Hawai'i. His /her answers on the attached Diving Medical History Forms may indicate potential health or safety risks as noted. Your evaluation is requested on the attached Scuba Diving Fitness Medical Evaluation Report. If you do not have expertise in diving and hyperbaric diving medicine and if any response or test result is outside normal limits, before making your determination you should consult with authorities possessing such expertise. Please contact the undersigned Diving Safety Officer if you have any questions or concerns about this examination or the University of Hawai'i standards. Thank you for your assistance.

Jason C. Jones, Diving Safety Officer
University of Hawaii -EHSO
2040 East-West Rd., Honolulu, HI 96822
phone: (808) 956-6420 fax: 956-6952 email: uhdso@hawaii.edu
http://www.hawaii.edu/ehso/diving-safety

THIS EXAMINATION IS TO VERIFY THE FITNESS OF THE EXAMINEE TO ENGAGE IN OCCUPATIONAL DIVING. SCUBA AND OTHER MODES OF COMPRESSED-GAS DIVING CAN BE STRENUOUS AND HAZARDOUS. A special risk is present if the middle ear, sinuses or lung segments do not readily equalize air pressure changes. The most common cause of distress is Eustachian insufficiency. Most fatalities involve deficiencies in prudence, judgment, emotional stability or physical fitness. Please consult the following list of conditions, which usually restrict candidates from diving. (Adapted from Bove, 1998: 61 -63, bracketed numbers are pages in Bove)

CONDITIONS WHICH MAY DISQUALIFY CANDIDATES FROM DIVING

1. Abnormalities of the tympanic membrane, such as perforation, presence of a monomeric membrane, or inability to autoinflate the middle ears. [5,7,8,9]
2. Vertigo including Meniere's Disease. [13]
3. Stapedectomy or middle ear reconstructive surgery. [11]
4. Recent ocular surgery. [15,18,19]
5. Psychiatric disorders including claustrophobia, suicidal ideation, psychosis, anxiety states, untreated depression. [20 -23]
6. Substance abuse, including alcohol. [24-25]
7. Episodic loss of consciousness. [1, 26,27]
8. History of seizure. [27, 28]
9. History of stroke or a fixed neurological deficit. [29,30]
10. Recurring neurologic disorders, including transient ischemic attacks. [29,30]
11. History of intracranial aneurysm, other vascular malformation or intracranial hemorrhage. [31]
12. History of neurological decompression illness with residual deficit. [29,30]
13. Head injury with sequelae. [26, 27]
14. Hematologic disorders including coagulopathies. [41, 42]
15. Evidence of coronary artery disease or high risk for coronary artery disease[1]. [33 -35]
16. Atrial septal defects. [39]
17. Significant valvular heart disease -isolated mitral valve prolapse is not disqualifying. [38]
18. Significant cardiac rhythm or conduction abnormalities. [36 -37]
19. Implanted cardiac pacemakers and cardiac defibrillators (ICD). [39, 40]
20. Inadequate exercise tolerance. [34]
21. Severe hypertension. [35]
22. History of spontaneous or traumatic pneumothorax. [45]
23. Asthma[2]. [42 -44]
24. Chronic pulmonary disease, including radiographic evidence of pulmonary blebs, bullae or cysts. [45,46]
25. Diabetes mellitus. [46 -47]
26. Pregnancy. [56]

SELECTED REFERENCES IN DIVING MEDICINE

Most of these are available from Best Publishing Company, P.O. Box 30100, Flagstaff, AZ 86003-0100, the Divers Alert Network (DAN) or the Undersea and Hyperbaric Medical Association (UHMS), Bethesda, MD.

Sadler, C., M. Alvarez Villela, K. Van Hoesen, I. Grover, M. Lang, T. Neuman, and P. Lindholm. Diving after SARS-CoV-2 (COVID-19) infection: Fitness to dive assessment and medical guidance. Diving and Hyperbaric Medicine. 2020 30 September;50(3). doi: 10.28920/dhm50.3

[1]"Assessment of Cardiovascular Risk by Use of Multiple-Risk-Factor Assessment Equations." Grundy, et. al. 1999. AHA/ACC Scientific Statement.
http://www.circ.ahajournals.org/cgi/content/full/100/13/1481

ACC/AHA Guidelines for Exercise Testing. A report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee on Exercise Testing). Gibbons RJ, et al. 1997. Journal of the American College of Cardiology. 30:260-311.
http://www.circ.ahajournals.org/cgi/content/full/96/1/345

[2]"Are Asthmatics Fit to Dive? " Elliott DH, ed. 1996 Undersea and Hyperbaric Medical Society, Kensington, MD.

DIVERS ALERT NETWORK MEDICAL ADVISORY SERVICES
(919) 684-2948, Option 4
https://dan.org/health-medicine/medical services

DIVING MEDICINE, Third Edition, 1997. A. Bove and J. Davis. W.B. Saunders Company, Philadelphia

DIVING AND SUBAQUATIC MEDICINE, Third Edition, 1994. C. Edmonds, C. Lowery and J. Pennefather. Butterworth-Heinemann Ltd. Oxford

MEDICAL EXAMINATION OF SPORT SCUBA DIVERS, 1998. Alfred Bove, M.D.,Ph.D. (ed.). Medical Seminars, Inc. San Antonio, TX

NOAA DIVING MANUAL, NOAA. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.

U.S. NAVY DIVING MANUAL. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.

UNIVERSITY OF HAWAI'I DIVING SAFETY PROGRAM
APPENDIX 2
MEDICAL EVALUATION OF FITNESS FOR SCUBA DIVING REPORT

_____ _____
Name of Applicant (Print or Type) Date (Mo/Day/Year)

TO THE PHYSICIAN: This person is an applying, or is presently certified, to engage in diving with self-contained underwater breathing apparatus (SCUBA) in the workplace. This activity puts unusual stress on the individual in several ways. Your opinion on the applicant's medical fitness is requested. Scuba diving requires heavy exertion and prudent safety decision making on the part of the diver. The diver must be free of cardiovascular and respiratory disease. An absolute requirement is the ability of the lungs, middle ear and sinuses to equalize pressure. Any condition or medication that risks the loss of consciousness should disqualify the applicant.

THE FOLLOWING ARE MINUMUM REQUIRED TESTS:

[ ] INITIAL EXAMINATION AND WHEN DEEMED NECESSARY BY PHYSICIAN

- Chest X-Ray

[ ] INITIAL and PERIODIC RE-EXAM (Every 5 yr. < Age 40; Every 3 yr. Age 40 – 60; Every 2yr. Age > 60)

- Medical History
- Complete Physical Exam, with emphasis on neurological and otological components
- Spirometry
- Hematocrit or Hemoglobin
- Urinalysis
- Any further tests deemed necessary by the physician

[ ] PATIENT OVER AGE 40, AND WHEN DEEMED NECESSARY BY PHYSICIAN

- Resting EKG
- Assessment of coronary artery disease using Multiple-Risk-Factor Assessment[1] (age, lipid profile, blood pressure, diabetic screening, smoker)

  Note: Exercise stress testing may be indicated based on risk factor assessment[2]

PHYSICIAN'S STATEMENT: I have evaluated the above individual according to the University of Hawai'i medical standards for scientific diving as described in Appendix 1, and find no conditions that may be disqualifying. I have discussed with the patient any medical condition(s) that would not disqualify him/her from diving but which may seriously compromise subsequent health. The patient understands the nature of the hazards and the risks involved in diving with these conditions.

RECOMMENDATION (check one):

[ ] APPROVAL. **As the basis for this recommendation, I have conducted and considered the results of all tests as specified above** and find no medical condition(s) that I consider incompatible with diving.
[ ] RESTRICTED ACTIVITY APPROVAL. The applicant may dive in certain circumstances as described in REMARKS.
[ ] FURTHER TESTING REQUIRED. I have encountered a potential contraindication to diving. Additional medical tests must be performed before a final assessment can be made. See REMARKS.
[ ] NOT APPROVED. This applicant has medical condition(s), which, in my opinion, clearly would constitute unacceptable hazards to health and safety in diving.

REMARKS:_____

_____, M.D. or D.O. _____
Signature Date
Name (Print or Type): _____
Address: _____
City, State, Zip: _____ Telephone: _____
My familiarity with applicant is: ____With this exam only ____Regular Physician for ____ years
_____ Other (describe) _____
My expertise in diving medicine is: _____

NOTE: SIGNATOR MUST BE AN M.D. or D.O.

UNIVERSITY OF HAWAI'I DIVING SAFETY PROGRAM
MEDICAL EVALUATION OF FITNESS FOR SCUBA DIVING REPORT
APPLICANT'S RELEASE OF MEDICAL INFORMATION

I authorize the release of all medical tests and information associated with this examination, and all medical information subsequently acquired in association with my diving under the auspices of the University of Hawaii to the UH Diving Safety Officer, Diving Control Board and/or their designee(s) at:

UH Diving Safety Program
Environmental Health and Safety Office
University of Hawaii at Manoa
2040 East-West Rd.
Honolulu, HI 96822

Signature of Applicant _____ Date:_____

Applicant Printed Name _____

APPENDIX 3
UNIVERSITY OF HAWAI'I DIVING MEDICAL HISTORY AND EXAMINATION FORM

Section 1A. Diving Medical History Form (To Be Completed By Applicant-Diver)

Name _____ Sex _____ DOB: _____ Wt._____ Ht. _____

Sponsor _____ Date _____/_____/_____
(Dept./Project/Program/School, etc.) (Mo/Day/Yr)

Mailing Address: _____

Phone: (_____) _____ email: _____

TO THE APPLICANT:

Scuba diving makes considerable demands on you, both physically and mentally. Diving with certain medical conditions may be asking for trouble not only for yourself, but also for your buddy, other dive team members, or anyone coming to your aid if you get into difficulty in the water. Therefore, it is prudent to meet certain medical and physical requirements before beginning a diving or training program.

Your answers to the questions below are as important in determining your fitness as your physical examination. Obviously, you should give accurate information or the medical screening procedure becomes useless.

This form shall be kept confidential. If you believe any question amounts to invasion of your privacy, you may elect to omit an answer, provided that you must subsequently discuss that matter with your own physician and he/she must then indicate, in writing, that you have done so and that no health hazard exists. Should your answers indicate a condition, which might make diving hazardous, you will be asked to review the matter with your physician. In such instances, his/her written authorization will be required in order for further consideration to be given to your application. If your physician concludes that diving would involve undue risk for you, remember that he/she is concerned only with your well-being and safety.

Please respect the advice and the intent of this medical history form.

Have you ever had or do you presently have any of the following? Please answer Yes or No. Explain affirmative responses under "Comments".

Yes / No / NA A. Has your medical history changed since your last diving medical examination?

Yes / No 1. Trouble with your ears, including ruptured eardrum, difficulty clearing your ears, or surgery.
Yes / No 2. Trouble with dizziness.
Yes / No 3. Eye surgery.
Yes / No 4. Depression, anxiety, claustrophobia, etc.
Yes / No 5. Substance abuse, including alcohol.
Yes / No 6. Loss of consciousness.
Yes / No 7. Epilepsy or other seizures, convulsions or fits.
Yes / No 8. Stroke or a fixed neurological deficit.
Yes / No 9. Recurring neurologic disorders, including transient ischemic attacks.
Yes / No 10. Aneurysms or bleeding in the brain.
Yes / No 11. Decompression sickness or embolism.
Yes / No 12. Head injury
Yes / No 13. Disorders of the blood, or easy bleeding.
Yes / No 14. Heart disease, diabetes, high cholesterol
Yes / No 15. Anatomical heart abnormalities including patent foramen ovale, valve problems, etc.
Yes / No 16. Heart rhythm problems.
Yes / No 17. Need for a pacemaker
Yes / No 18. Difficulty with exercise.
Yes / No 19. High blood pressure
Yes / No 20. Collapsed lung
Yes / No 21. Asthma.
Yes / No 22. Other lung disease.
Yes / No 23. Diabetes mellitus.

Yes / No 24. Pregnancy
Yes / No 25. Surgery If yes explain below
Yes / No 26. Hospitalizations. If yes explain below
Yes / No 27. Do you take any medications? If yes list below
Yes / No 28. Do you have any allergies to medications, foods, or environmentals? If yes explain below.
Yes / No 29. Do you smoke?
Yes / No 30. Do you drink alcoholic beverages?
Yes / No 31. Is there a family history of high cholesterol?
Yes / No 32. Is there a family history of heart disease or stroke?
Yes / No 33. Is there a family history of diabetes?
Yes / No 34. Is there a family history of asthma?

Please explain any "yes" answers to the above questions:

_____

_____

_____

_____

_____

_____

_____

_____

DIVER'S CERTIFICATION: I certify that the above answers and information represent an accurate and complete description of my medical history.

Signature: _____ Date: _____

Section 3. MEDICAL EXAMINATION. To be completed by the Doctor.

Last Name:_____ First Name:_____ M.I.: _____

Date of Birth: _____ Sex: _____ Height: _____ Weight: _____

MEDICAL HISTORY REVIEW: Is there any significant past history, or current condition or medication, which might disqualify the applicant for diving? Yes / No

Remarks:_____

_____

_____

General Appearance: _____

Blood Pressure: _____ Pulse: _____

Vision: Uncorrected: R/_____ L/_____ Corrected: R/_____ L/_____

Color Test: _____Normal _____Deficient.

EXAMINATION: Please check all items and, if abnormal, give details.

	Normal	Abnormal	Comments
1. Head and neck	_____	_____	_____
2. Nose, Sinuses	_____	_____	_____
3. Ear Canals	_____	_____	_____
4. Ear Drums	_____	_____	_____
5. Ear clearing	_____	_____	_____
6. Webber, Rinne	_____	_____	_____
7. Fundi, Disks	_____	_____	_____
8. Pupils, ECM	_____	_____	_____
9. Peripheral visions	_____	_____	_____
10. Mouth and Throat	_____	_____	_____
11. Neck, Nodes/mass	_____	_____	_____
12. Axillary Nodes	_____	_____	_____
13. Back and Chest	_____	_____	_____
14. Lungs	_____	_____	_____
15. Heart Sounds	_____	_____	_____
16. Heart rhythm, size	_____	_____	_____
17. Abdomen LS & K	_____	_____	_____
18. Genitalia, nodes	_____	_____	_____
19. Cremasteric	_____	_____	_____
20. DTR's Tricep	_____	_____	_____
21. DTR's Bicep	_____	_____	_____
22. DTR's Knee	_____	_____	_____
23. DTR's Ankle	_____	_____	_____
24. Plantar Reflex	_____	_____	_____
25. Sensory, noxious	_____	_____	_____
26. Sensory, fine	_____	_____	_____
27. Sensory, vib	_____	_____	_____
28. Heel/Toe Walk	_____	_____	_____
29. Romberg	_____	_____	_____
30. Fast Pointing	_____	_____	_____
31. Finger - Nose	_____	_____	_____
32. Rapid Movement	_____	_____	_____
33. Squat	_____	_____	_____

Emotional Stability: _____

Apparent Diving Aptitude: _____

Breath hold Duration: _____

Signature: _____, Examiner Date: _____ Print or Type Name: _____

Address: _____

_____

Phone: (_____) _____