XRA 909　第一級海上無線通信士
YRA 909　第二級海上無線通信士　「英語」試験問題
ZRA 909　第三級海上無線通信士

5問　1時間30分

1. 次の英文を読み、それに続く設問**A-1**から**A-5**までに答えなさい。解答は、それぞれの設問に続く選択肢1.から3.までの中から答えとして最も適切なものを一つずつ選び、その番号のマーク欄を黒く塗りつぶしなさい。

The turquoise waters became darker and darker, and shapeless, glow-in-the-dark creatures began to glide past like ghosts. The three-man submarine went down, down, down into the abyss and drew within sight of something no human had ever laid eyes on before: Cook Seamount, a 13,000-foot (4,000-meter) extinct volcano at the bottom of the sea off Hawaii.

Scientists from the University of Hawaii and the nonprofit group Conservation International aboard the vessel Pisces V visited the volcano this month to examine its geological features and its rich variety of marine life. Conservation International hopes to study 50 seamounts — undersea volcanoes — over the next five years. "We don't know anything about the ocean floor," said Peter Seligmann, co-founder of Conservation International. "What we know is that each one of those seamounts is a refuge for new species, but we don't know what they are. We don't know how they've evolved. We don't know what lessons they have for us."

Seamounts are active or dormant volcanoes that rise dramatically from the bottom of the ocean and never reach the surface. They are hot spots for marine life because they carry nutrient-rich water upward from the sea floor. Seamounts are believed to cover about 18 million sq. miles (47 million sq. km) — three times bigger than Russia.

Cook, situated over 100 miles (160 km) southwest of Hawaii's Big Island, is part of a group of undersea volcanoes known as the Geologist Seamounts that are about 80 million years old and could hold many new animal species — as well as elements such as nickel and cobalt that mining companies could extract. "My goal today is to find out what's living on them, find out how they support ocean life, what their effect is from ocean currents — and essentially what drives the ocean, what makes the ocean what it is," Greg Stone, a marine biologist from Conservation International, said. "Seamounts are a key part of that, and something which humanity knows very little about."

Two other seamounts were studied over the three days of expeditions: McCall, home to a large number of small deep-sea sharks, and Lo'ihi, an active volcano that is likely to someday become the newest Hawaiian island.

＜注＞ turquoise　青緑色の　　glow-in-the-dark　暗闇の中で光を放つ　　dormant　(活動)休止(状態)の
nutrient-rich　滋養に富む

(設問)

A-1　Why had nobody seen Cook Seamount until the Pisces V expedition?
1. It had been destroyed by a powerful volcanic eruption.
2. The seamount is in a deep part of the ocean where humans have not been before.
3. There were too many dangerous creatures for people to explore it safely.

A-2　Why did the researchers on the vessel Pisces V wish to explore Cook Seamount?
1. Their aim was to examine the geology and biological diversity.
2. They wanted to save endangered marine wildlife on the ocean floor.
3. They were looking for valuable undersea resources that could be mined, such as nickel or cobalt.

A-3　What do the people from Conservation International say about seamounts?
1. They believe that it is unlikely the expeditions will find any new species in the seamounts.
2. In their opinion, there is little left for scientists to discover on the ocean floor.
3. According to them, very little is yet known about seamounts but there is potential for very important discoveries.

A-4　According to the article, which of the following statements about seamounts is true?
1. The total area covered by seamounts is about one third of the size of Russia.
2. There is very little marine life around seamounts due to the heat caused by volcanoes.
3. They are large volcanoes, either active or inactive, that remain under the surface of the ocean.

A-5　What does the article say about the seamount, Lo'ihi?
1. Lo'ihi is a dormant volcano about 100 miles southwest of Hawaii's Big Island.
2. There are a lot of small, deep-sea sharks living around Lo'ihi.
3. Although Lo'ihi is now an underwater volcano, it is likely to rise to the surface of the ocean someday.

2. 次の英文**A−6**から**A−9**までは、海上移動業務に関する国際文書の規定文の趣旨に沿って述べたものである。この英文を読み、それに続く設問に答えなさい。解答は、それぞれの設問に続く選択肢1.から3.までの中から、答えとして最も適切なものを一つずつ選び、その番号のマーク欄を黒く塗りつぶしなさい。

A−6 In communications between coast stations and ship stations, the ship station shall comply with the instructions given by the coast station in all questions relating to the order and time of transmission, to the choice of frequency, and to the duration and suspension of work.

（設問） How are matters such as the order and time of transmission, or the choice of frequency, to be decided in communications between coast stations and ship stations?

1. It is the responsibility of the ship station to make all such decisions.
2. The ship station is required to follow the instructions given by the coast station.
3. The coast station must comply with the instructions contained in the transmissions of the ship station.

A−7 Every radio installation shall be so located that no harmful interference of mechanical, electrical or other origin affects its proper use, and so as to ensure electromagnetic compatibility and avoidance of harmful interaction with other equipment and systems.

（設問） What do the regulations say about the radio installations?

1. Radio installations shall be located properly to interact with other equipment and systems so as to ensure effective use of electromagnetic energy.
2. Radio equipment shall be so electromagnetically compatible that there is no need to consider the avoidance of mechanical or physical interactions with other equipment or systems when selecting its location.
3. Radio installations shall be so situated as to ensure its proper operation in all aspects and not to cause any harmful interference or interactions with other equipment or systems.

A−8 The maintenance of radio records, in compliance with the requirements of the Radio Regulations and the SOLAS Convention, is the responsibility of the radio operator designated as having primary responsibility for radiocommunications during distress incidents.

（設問） Which person is responsible for keeping radio records?

1. The radio operator who is principally responsible for the handling of radiocommunications during distress incidents is also responsible for keeping radio records.
2. All persons operating radiocommunications equipment during distress incidents share responsibility for keeping radio records.
3. In compliance with the appropriate regulations and conventions, the maintenance of radio records is the responsibility of the operator who uses the radiocommunications equipment first.

A−9 The radio records shall be kept at the distress communications operating position, and shall be made available both for inspection by the master and for inspection by any authorized official of the Administration and by any duly authorized officer exercising control under the relevant article of the STCW Convention.

（設問） Which of the following conforms to the requirements described above?

1. The radio records shall be maintained by any officer concerned with the control of rescue operations in cases of distress incidents.
2. The master or any appropriately authorized person shall be able to inspect the radio records kept at the specified position whenever he or she so needs.
3. The master shall always be a duly authorized inspector under the relevant article of the Convention.

3. 次の設問**B-1**の日本文に対応する英訳文の空欄（ア）から（オ）までに入る最も適切な語句を、その設問に続く選択肢1.から10.までの中からそれぞれ一つずつ選びなさい。解答は、選んだ選択肢の番号のマーク欄を黒く塗りつぶしなさい。

（設問）

B-1 クラゲは、海水を冷却に使用している石炭火力発電所にとってひとつの脅威である。イスラエルの研究者たちは大群のクラゲによる冷却システムの被害と、水温及び月との相関を取ってみた。彼らは、海水が温かく、満月になる前の数日及び満月の時に、クラゲの大群がやってくることを発見した。

Jellyfish are a (ア) to coal-fired power stations where seawater is used for cooling. Israeli researchers have (イ) cooling system damage caused by swarms of jellyfish (ウ) water (エ) and the moon. They found jellyfish swarms arrived when the seas were warmer and in the days before and during the (オ) moon.

1. by	2. calculated	3. correlated	4. full
5. heat	6. new	7. temperatures	8. threat
9. with	10. wonder		

4. 次の設問**B-2**の日本文に対応する英訳文の空欄（ア）から（オ）までに入る最も適切な語句を、その設問に続く選択肢1.から10.までの中からそれぞれ一つずつ選びなさい。解答は、選んだ選択肢の番号のマーク欄を黒く塗りつぶしなさい。

（設問）

B-2 気象庁は突然発生する局地的な豪雨や竜巻を予測するため、フェイズドアレイレーダーシステムの試験を開始している。同システムは10秒から30秒で半径60キロメートル以内、高度14キロメートルまでの各部分を観測できる。これまでの気象レーダーでは、本目的の使用には不十分なのである。

The Japan Meteorological Agency has started testing a phased array radar system for (ア) sudden localized torrential rains or (イ). The system is capable of monitoring (ウ) part of an area within a (エ) of 60 kilometers up to an altitude of 14 kilometers in 10 to 30 seconds. Conventional weather radar is (オ) for this purpose.

1. a	2. deciding	3. diameter	4. every
5. inexpensive	6. insufficient	7. predicting	8. radius
9. strong winds	10. tornadoes		

5. 次の設問**B-3**の日本文に対応する英訳文の空欄（ア）から（オ）までに入る最も適切な語句を、その設問に続く選択肢1.から10.までの中からそれぞれ一つずつ選びなさい。解答は、選んだ選択肢の番号のマーク欄を黒く塗りつぶしなさい。

（設問）

B-3 レーダーSARTのような捜索救助用位置指示装置は、生存艇又は遭難船舶の位置を特定するために使用される。位置指示装置は、船舶に通常搭載される装置と互換性を持つべきものとされており、そこには特別な捜索救助船舶等が利用できない場合、いかなる船舶でも捜索救難活動を行えるようにすることが意図されている。

Search and rescue locating devices such as radar SART are (ア) to locate a survival craft or a distressed vessel. The (イ) is that the locating device should be compatible (ウ) the equipment normally carried on a ship (エ) any ship can (オ) a rescue operation if special search and rescue vehicles are not available.

1. against	2. chance	3. conduct	4. finding
5. intent	6. make	7. so that	8. used
9. what	10. with		