UNIVERSITY OF NORTH DAKOTA SCHOOL OF LAW
Torts I
Fall 2008

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FINAL EXAMINATION

Limited open-book. Four hours.

Write your exam number here: _____

All exam materials (including this booklet and your response) must be turned in at the end of the period. You will not receive credit unless you return this booklet with your exam number written above. Do not turn the page until instructed to begin.

Notes and Instructions

1. Assume that today's date is December 4, 2008.
2. You may write anywhere on the examination materials — e.g., for use as scratch paper. Only answers and material recorded in the proper places, however, will be graded.
3. Your goal is to show your mastery of the material presented in the course and your skills in analyzing legal problems. It is upon these bases that you will be graded.
4. During the exam: You may not consult with anyone – necessary communications with the proctors being the exception. You may not view, attempt to view, or use information obtained from viewing materials other than your own.
5. After the exam: You may discuss the exam with anyone, except that you may not communicate regarding the exam with any enrolled member of the class who has not yet taken the exam.
6. Unless expressly stated otherwise, assume that the facts recited herein occur within one or more hypothetical states within the United States. Base your exam answer on the general state of the common law and typical statutory law in the United States, including all rules, procedures, and cases as presented in class, as well as, where appropriate, the theory and history discussed in class. It is appropriate, if you wish, to note differences between minority and majority approaches in your answer, as well as statutory or other differences among jurisdictions.
7. Note all issues you see. More difficult issues will require more analysis. Spend your time accordingly.
8. Organization counts.
9. Read all exam question subparts before answering any of them — that way you can be sure to put all of your material in the right place.
10. Feel free to use abbreviations, but only if the meaning is entirely clear.
11. **Bluebooks:** Make sure your handwriting is legible. I cannot grade what I cannot read. Skip lines and write on only on one side of the page. Please use a separate bluebook for each subpart.
12. **Computers:** Please clearly label each subpart of your answer.
13. This exam is "limited open book." The only materials to which you may refer during the exam, other than this exam booklet, scratch paper provided as part of the exam administration, and any special references specifically authorized by the Dean of Students office, are: (a) the authorized copy of the Torts Wypadki, which will be distributed to you in the exam session, and (b) a "reference sheet," consisting of a single 8.5-inch-by-11-inch sheet of paper, upon which anything may be written and/or printed, including on both sides, front and back. You may not consult or access any other piece of paper, including, but not limited to, a copy of the Torts Wypadki that you have printed out yourself. No materials may be shared during the exam.
14. Do not write your name on any part of the exam response or identify yourself in any way, other than to use your examination I.D. number appropriately. Self-identification on the exam will, at a minimum, result in a lower grade, and may result in disciplinary action.
15. Good luck!

"The *Sirius* Incident"

Congratulations. You've just received top-secret security clearance.

For the past four months, as a new attorney at the headquarters of NASA, the National Aeronautics and Space Administration, in Washington, D.C., most of your work has involved tourist injuries. One would-be plaintiff sought millions of dollars in compensation for slipping and falling on some ice cream spilled in a NASA gift shop. When you were able to show that the ice cream in question was actually solid freeze-dried chips of "astronaut ice cream," the plaintiff voluntarily dismissed the claim the next day.

Other than that, the job has been pretty boring. Maybe now that you have your security clearance, things will get more interesting. You look up. The NASA general counsel, Gwendolyn Galstrom, has just walked through your door.

"Are you familiar with 42 U.S.C. § 2601?" she asks.

"I've read it," you answer. "It's a provision passed by Congress in 1963 in anticipation of space colonization. It provides for a system of tort law for people living and working outside the Earth's atmosphere as part of any U.S.-backed mission. There was a question about which state's law would apply away from Earth, so 42 U.S.C. § 2601 answers that question by providing that in the event that any astronauts or space colonists are injured by one another, or are injured by NASA or anyone else, the applicable tort law is the 'general law and principles of tort liability existing among the jurisdictions of the United States.' I guess in 1963 they thought we would actually have colonists on the Moon by now." You laugh. "It's pretty funny that Congress actually worried about things like that."

Galstrom frowns. She throws a file on your desk. Red-and-yellow-striped tape lines the edges of the folder.

"This is code-word-classified top secret," she says. "The code-word is PENUMBRA. Other than me, you are the only person in the building authorized to see this. I need you to read the report about events that transpired a few weeks ago, and give me a memo analyzing the liability of the parties."

Gulp. As Galstrom strides out of your office, you open up the folder. Hmmm, you think to yourself as you see what's inside. Things definitely just got more interesting.

Artist's rendering of the NASA Headquarters building in Washington, D.C.

TOP SECRET – PENUMBRA
EYES ONLY

Report on the *Sirius* Incident of November 2008

BACKGROUND

The Extremely Advanced Projects Office ("EAPO," rhymes with "depot") operates as a secret department within the NASA hierarchy to carry out classified missions that are funded through black-budget line-item appropriations. EAPO has operated the top-secret Antares Lunar Base program since 2006 and has operated the top-secret XV-43 rocket program since 2005.

The Antares Lunar Base consists of an interconnected set of habitable modules inside the Daedalus Crater on the surface of the far side of the Moon.

Because of the effects of tidal locking, the far side of the Moon always faces away from Earth, and is thus not visible from the Earth's surface. The reader should be aware that while the far side of the Moon is popularly believed to be the "dark side," the far side of the Moon actually receives approximately equal amounts of sunlight as the near side of the Moon. During a new-moon lunar phase, when the Moon appears dark from Earth, the far side of the Moon is fully illuminated by the sun. On November 17, 2008, the date of the *Sirius* incident, the Moon was in a waning gibbous phase, and the Antares base was in twilight.

The Antares lunar houses approximately 2,000 civilian employees of NASA, comprising astronauts, scientists, lab personnel, engineers, and various support staff, including medical personnel. Through EAPO, NASA owns the entire base and manages all aspects of its operation. Because of its location on the Moon's far side, the Antares base is not visible to Earth-based telescopes.

The XV-43 is a model of single-stage Earth-to-Moon spacecraft operated and maintained by EAPO. XV-43 vehicles, working from NASA's top-secret Hawkins Dry Lake Flight Operations Facility in central Nevizona, shuttle personnel from the Earth to the Antares base on the Moon and back again. The XV-43 also transports crew and equipment from the Antares base

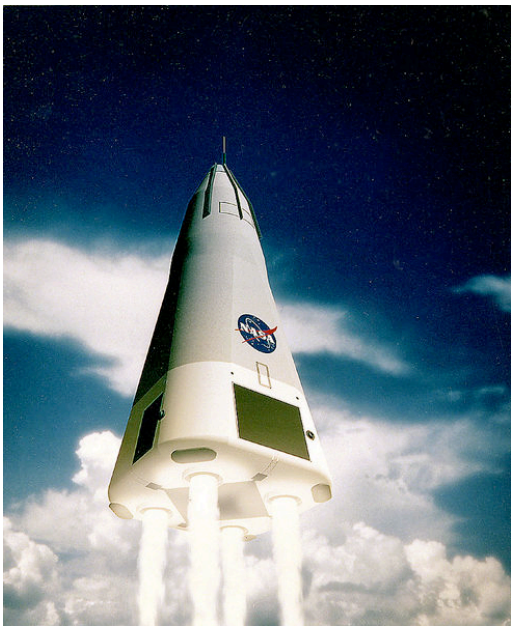

FIG. 1 (left): Rendering of the XV-43 vehicle.
FIG. 2 (right): Photograph of Daedalus Crater.

to different locations on the Moon's surface.

Guidelines designed to ensure the continuing secrecy of the Antares base program prohibit the use of radio communications under any circumstances, except over very short ranges, such as between moonwalking astronauts no more than a few meters apart.

FINDINGS

Except where noted, the following facts are based on de-briefing interviews conducted with the persons concerned. Witness accounts did not vary significantly from one another.

On November 17, 2008, astronauts Ashton Aldrich and Bonnie Beltier served as first and second in command, respectively, aboard the XV-43 vehicle christened *Sirius*, hull number XLI-50. *Sirius* and crew left Antares to retrieve ore mined at a remote unmanned outpost. Also on board was Dr. Don Dayton, one of three flight surgeons stationed at Antares. Dayton, a specialist in aerospace medicine, went along on the journey merely to observe, hoping to learn more about base operations so that he would have a better foundation of knowledge for treating injuries suffered by base personnel.

En route, Beltier spotted in her peripheral vision what appeared to be a distress rescue flare in the distance off the starboard side of the craft. Aldrich and Beltier consulted, and decided to investigate. Being out of laser-optical communications range and operating under radio-silence rules, Aldrich and Beltier did not report their change of flight plan to the base.

As they approached the site within the Mare Ingenii lowlands where they believed the flare to be fired from, Aldrich decided not to switch on the *Sirius*'s landing lights. Aldrich determined that landing lights were not necessary because he was familiar with this area of the lunar surface and knew it to comprise level terrain generally free of large boulders or other obstructions. Moreover, Aldrich considered that using landing lights could have a serious downside. Specifically, Aldrich was afraid the distress flare could have been sent up by an alien, i.e., an intelligent non-human extraterrestrial creature. Before making the landing approach, Aldrich discussed his concern about aliens with Beltier, who readily agreed that caution was advisable. Dayton, who was not on the flight deck, was not a party to these conversations.

A few words should be said about the mental states of Aldrich and Beltier.

It is now clear that Aldrich exhibited a pathological fear of aliens. Of course, NASA does not permit persons with such abnormal phobias to serve on space missions or to serve in any capacity of responsibility. Had NASA known about Aldrich's phobia of aliens, Aldrich would have been denied entry to the astronaut corps, and, if already in the astronaut corps, would have been declared unfit for flight and taken off the active-duty roster. Indeed, 14 C.F.R. 1276.018 prohibits NASA from approving for astronaut duty those individuals with irrational beliefs relating to outer space, including, specifically, "a belief in UFOs, hostile alien forces, or alien encounters." There were signs that Aldrich had such irrational fears. In the course of his background investigation, investigators found that Aldrich had, during college, written several letters to various government officials warning them that Earth was under immediate threat of an alien invasion. However, when interviewed for the astronaut corps, Aldrich said that he sent the letters as a joke, and that he currently regretted his actions. Relying on these statements, NASA gave him an all-clear psychological evaluation. Had Aldrich told the truth, he never would have been approved for flight.

Beltier had no underlying phobias or abnormal psychological conditions. However, it has been determined that at the time of the *Sirius* incident, Beltier was suffering from paranoid delusions as a result of the ingestion of lysidamide. It is not known how Beltier obtained or ingested lysidamide. Lysidamide is a rare psychotherapeutic drug, chemically similar to LSD. It is not available without a prescription, and there is no known black market for the drug. All personnel and their belongings are thoroughly searched at the Hawkins Dry Lake Space Flight Facility before launch, and the only source

of lysidamide at the Antares base is the medical-clinic pharmacy. It is possible that Beltier received lysidamide as the result of an erroneously filled prescription for erythromycin, an antibiotic. But this theory cannot be proven. Beltier took the last pill on November 17, 2008 and threw the bottle away that morning. Moreover, the base pharmacy has no records that shed light on the matter.

Upon final landing approach in the very low lighting conditions at Mare Ingenii, the *Sirius* struck a large boulder, jolting the vehicle. Aldrich maneuvered away from the obstruction and set the *Sirius* down nearby. It was later determined that in striking the boulder, the *Sirius* suffered severe damage to the heat shield. While this damage does not affect the vehicle's lunar-surface operability, it does prevent the *Sirius* from making the return trip to Earth, pending repairs. Because the vehicle must be repaired on the Moon's surface, costs are estimated to run in the tens of millions of dollars.

Without switching on any lights, Aldrich and Beltier donned spacesuits and ventured out on to the lunar surface. Concerned as they both were about aliens, each was armed with a Kimball-Radfan 86 high-velocity flare gun, a model intended for use in launching a distress signal. In the dim lunar twilight, Beltier thought she saw a creature with two tentacles moving near an outcropping of rock. Beltier alerted Aldrich to the apparition, and both astronauts simultaneously fired their flare guns at it. In the light produced by the signal flares, Aldrich and Beltier saw that the tentacled shape was actually a pressurized lunar-terrain rover-bus with robotic manipulator arms. Striking a window, the flares caused fissures in the glass, allowing the pressurized air inside to leak out. Realizing their error, Aldrich and Beltier ran to the rover-bus to determine if lives were endangered.

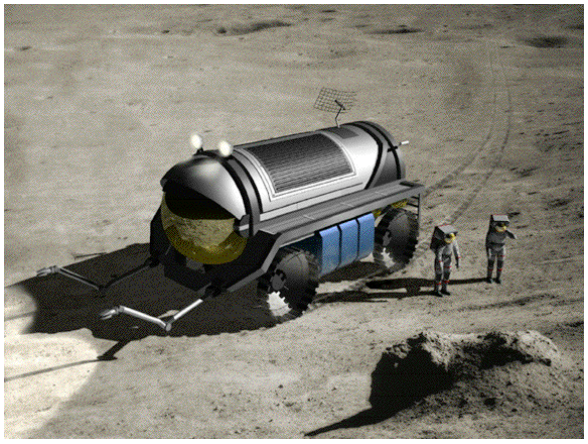

FIG. 3: Rendering of a pressurized rover-bus vehicle of the type operated by Cooper Carlston on November 17, 2008.

Inside the rover-bus was Cooper Carlston, the stranded astronaut who had sent up the signal flare. The three astronauts consulted. Checking gauges, Carlston determined that only a few minutes remained before he would be deprived of breathable air. Later investigation confirmed that the Carlston's assessment was indeed correct. Analysis showed that the impact from either one of the distress flares would have been enough, by itself, to cause window fissures sufficient to cause a pressurization loss necessitating an evacuation within a few minutes.

Without time for additional assistance to arrive, an immediate rescue plan was needed. The rover-bus was, as is customary, not equipped with pressurized spacesuits for walking on the airless lunar surface. Nor was an additional spacesuit available on the *Sirius*, as XV-43 vehicles are regularly equipped with only two spacesuits, which Aldrich and Beltier were then wearing. Without a pressurized spacesuit for Carlston to wear, Beltier determined the only chance Carlston had for survival was for Aldrich and Beltier to carry him, through the vacuum of space, back to the *Sirius* – as rapidly as possible

Contrary to popular myth, it is possible, as 1960s animal experiments confirmed, to survive brief exposures to a vacuum. Aware of this, Beltier carefully planned for Carlston's transit to be quick. To avoid rapid decompression, Beltier had Carlston open a valve to evacuate the remaining air from the rover-bus in a controlled fashion. Carlston then opened the hatch and stepped out. The last sensation Carlston recalled before passing out was the saliva bubbling off his tongue.

Aldrich found himself terrified by the appearance of Carlston, who immediately

began frothing at the mouth, bleeding from the eyes, and swelling up like a balloon. Aldrich quickly panicked and took off by himself at a dead run in the direction of the *Sirius*. Deprived of help, Beltier hoisted Carlston on her back and bounded across the lunar surface to get Carlston into the airlock. Once she reached the *Sirius*, Beltier promptly secured the hatch and recompressed the chamber.

In all, Carlston was exposed to the vacuum of space for at least one, but not more than two minutes. Nonetheless, his injuries were considerable. Carlston's skin was bloated to twice its normal volume, and his lungs were filled with blood and detached alveolar tissue. Dr. Dayton was ready at the airlock, and he began rescue efforts immediately.

Carlston gained consciousness momentarily, at which point he looked up at Dayton and said, "I can't stand the pain, doc. Just let me go. Even if you save me, I'll never be the same."

"Nonsense, son," Dayton said. "You're going to be fine."

Despite his reassurances, however, Dayton in fact believed that Carlston, if he survived a long and painful recovery, would suffer lifelong debilitating illness as a result of his exposure.

"You'll be back to 100 percent by tomorrow," Dayton said.

"Okay doc, I trust you," Carlston responded. He then slipped into unconsciousness.

Working from the medical kit, Dayton intubated Carlston, started a respiratory ventilator, and hooked up a heart monitor. As soon as Dayton turned on the heart monitor, he saw that it showed a flatline – indicating a condition known as asystole, a total standstill of the heart. Moving quickly, Dayton charged the external paddles and administered a shock to Carlston. When the heart monitor barely registered the shock, Dayton realized that he had the gain (sensitivity level) turned down on the monitor.

After turning it up to the proper level, Dayton realized his mistake. Carlston had, in fact, had a normal sinus rhythm at the time the heart monitor was connected. But now, having received the unnecessary electrical shock, Carlston's weakened, oxygen-deprived heart underwent a profound parasympathetic discharge, resulting in true asystole. Taking a moment to think about what he was doing, Dayton realized the appropriate course of treatment for asystole, unlike ventricular fibrillation, was not electric shock, but rather an injection of vasopressin and the administration of chest compressions. Dayton did this, and he continued chest compressions until, just before arrival back at Antares base, Carlston's heart resumed beating on its own.

After being stabilized at the base medical clinic, Carlston was transported back to Earth and brought by specially chartered military airlift from Hawkins Dry Lake to Barnes Air Force Base in San Frangeles. From there, he was taken by military ambulance, operated by the U.S. Navy, to the San Frangeles Naval Medical Center.

En route to SFNMC, the ambulance carrying Carlston was involved in a vehicular collision. The impact did not further injure Carlston, but the incident may require sensitive handling, as the driver of the other vehicle, Eleanor Elmengin, has threatened to sue the government for vague whiplash-related neck injuries she claims to have suffered.

At SFNMC, Carlston is now in stable condition. Unfortunately, physicians have determined that Carlston suffered permanent brain damage resulting from prolonged oxygen deprivation. Physicians do not, however, attribute Carlston's permanent impairment to the mistakes Dayton made in the course of emergency treatment. Physicians say that because of the trauma suffered from exposure to the vacuum, Carlston would have only had a 40-percent chance of regaining full brain function even if he had received proper treatment. Thus, the outcome would likely have been the same.

Immediately after the incident, the base commander revoked Ashton Aldrich's flight status and reassigned him. Following a clean bill of health by the chief medical officer on Antares, Bonnie Beltier was returned to flight status on December 2, 2008. On December 3, 2008, Beltier was awarded the NASA Exceptional Bravery Medal along with a classified commendation letter.

Having finished reading the report, you sit back in your chair. Just then, the phone rings. It's Galstrom.

"I just wanted to make sure you understand what I am expecting out of your memo," she says. "Even though NASA would generally never sue one of its own employees for negligence, don't make that assumption in your analysis. Analyze all liability. NASA might use the liabilities of crew members to NASA as a means of offsetting damages or for any number of other reasons."

"Got it. Thanks," you say.

Opening a secured document in which to write your memo, you set to work.

QUESTION

Provide the memo Ms. Galstrom has requested.

Please organize your memo as follows, clearly labeling the subparts in your response:

Subpart A: Discuss Ashton Aldrich's liability in tort, if any, and include within this subpart mention of NASA's liability, if any, based on Aldrich's actions.

Subpart B: Discuss Bonnie Beltier's liability in tort, if any, and include within this subpart mention of NASA's liability, if any, based on Beltier's actions.

Subpart C: Discuss Cooper Carlston's liability in tort, if any, and include within this subpart mention of NASA's liability, if any, based on Carlston's actions.

Subpart D: Discuss Dr. Don Dayton's liability in tort, if any, and include within this subpart mention of NASA's liability, if any, based on Dayton's actions.

Subpart E: Discuss Eleanor Elmengin's prospects, if any, for recovery in tort against NASA.

Subpart F: Discuss NASA's liability, if any, but do not repeat analysis you have already provided under subparts A through E.

If you wish to discuss anything else, please label it under a heading of *Subpart G.*

Do not needlessly repeat the exact same analysis with substituted parties. If, for example, NASA is liable for an employee's actions, and you have already discussed the liability for that employee for those actions, simply mentioning NASA's liability on that basis is sufficient without further explication.

The subparts will not all be given equal weight. The subpart structure is provided for organizational purposes only. Thus, it may be entirely appropriate for one subpart to be answered with extreme brevity, while another subpart might require very detailed analysis. You should divide your time proportionately among the subparts according to which ones require the most discussion and analysis. Read them all right now, and plan ahead to put information where it belongs.