INTERNATIONAL COURT OF JUSTICE

SPECIAL AGREEMENT

BETWEEN

REPUBLIC OF PROTEUS
(APPLICANT)

AND

GRAND DUCHY OF DESPINA
(RESPONDENT)

JOINTLY NOTIFIED TO THE COURT ON 1 DECEMBER 2045

COUR INTERNATIONALE DE JUSTICE

COMPROMIS

ENTRE

RÉPUBLIQUE DU PROTEUS
(DEMANDEUR)

ET

GRAND-DUCHÉ DE DESPINA
(DÉFENDEUR)

NOTIFIÉ CONJOINTEMENT À LA COUR LE 1 DÉCEMBRE 2045

Case concerning Asteroid Mining Activities and Orbital Mineral Processing Facilities

Proteus v. Despina

STATEMENT OF AGREED FACTS

Background

1. The Republic of Proteus and the Grand Duchy of Despina are the two largest economies in the world, along with the world's fifth and seventh largest populations, respectively. They have a long history of bilateral cooperation and international engagement, both being founding members of the United Nations and permanent members of its Security Council, as well as members of the World Bank, the International Monetary Fund, and the World Trade Organisation.

2. Since the turn of the century, the world has turned increasingly to hybrid motor vehicles, which possess both an internal combustion engine and electric motors, to alleviate global dependence on oil. By 2035, over 70% of motor vehicles in the world were hybrid vehicles. Some of the larger industrial motor vehicles also deploy hydrogen fuel cells to provide electric power.

3. The prevalence of hybrid vehicles has placed significant pressure on the world's supply of rare earth metals, such as neodymium ($_{60}$Nd), terbium ($_{65}$Tb), and dysprosium ($_{66}$Dy), used to make powerful magnets in the electric motors, and lanthanum ($_{57}$La), used to make batteries in hybrid vehicles. Similar pressure are imposed on the supply of platinum group metals, such as platinum ($_{78}$Pt), palladium ($_{46}$Pd), osmium ($_{76}$Os), and iridium ($_{77}$Ir), which are used in catalytic converters and advanced fuel cells. Although the technology exists for hybrid vehicles to be built without such rare earth metals, protection of patents and proprietary trade secrets have prevented the widespread adoption of such technology, particularly in developing countries.

4. The worsening scarcity of natural resources, particularly in fossil fuels, platinum group metals, rare earth metals, and uranium has strained relations between Proteus and Despina as they become increasingly competitive in the market for such resources.

5. Both Proteus and Despina have no fossil fuel reserves or uranium deposits of note. To date, no viable deposits of rare earth metals and platinum group metals have been found in either State.

The MFA-AEC joint venture and takeover

6. Aerospace Equipment Corporation (***AEC***) is a private company registered in Proteus and all of its founding shareholders were wealthy private investors in Proteus. AEC was established in 2017 for the purpose of designing spacecraft and space installations for use in outer space and on the Moon.

7. In March 2028, after years of design and prototype testing, AEC developed and built the *LunarProspector*, the world's first robotic spacecraft designed for mineralogical exploration on the Moon. This was soon followed by the *LunarMiner*, a large-scale robotic mining vehicle for the Moon that may be remotely controlled from the Earth, Earth orbit, lunar orbit, or the Moon. The

operational design of the *LunarMiner* involved the transporting of extracted ores by large lunar vehicles to a mineral processing facility on the lunar surface. Since then, no less than 20 spacefaring countries and/or their businesses have engaged in commercial lunar mining, both for use on the Moon, in Earth orbit, and on Earth.

8. On 4 December 2031, AEC was listed on the Proteus Securities Exchange (***PSX***).

9. Metals from Asteroids, Inc. (***MFA***) is a company registered in Despina. MFA's largest shareholder (35%) is the Economic Development Fund of Despina, a sovereign wealth fund established by the Government of Despina in 2003 from the privatisation of its utilities and its airline. The remaining shareholders are various government pension funds (27%) and the National Aerospace Authority of Despina (the ***NAA***) (38%). The stated object of MFA is to engage in future asteroid mining operations for Despina.

10. On 14 October 2033, AEC announced to the PSX that it had entered into a lucrative joint venture with MFA to customise the *LunarProspector* and the *LunarMiner* for asteroid mining operations.

11. By October 2038, the *AstroProspector* and the *AstroMiner*, as developed jointly by AEC and MFA, were ready for deployment on asteroids. Complementing these developments, the NAA designed, built, and tested the *Ceres* series of launch vehicles for the purpose of launching the *AstroProspector* and *AstroMiner* to the Asteroid Belt. Unlike the *LunarMiner*, the *AstroMiner* is designed to break off smaller yet substantial pieces of the asteroid, around 20 metres in diameter, which are then ferried to Earth orbit for processing at a purpose-built mineral processing facility named *AstroCrusher*, where the ores are processed and refined.

12. The *AstroCrusher* was to be attached to Despina's main orbital space station, the *Palomar*. The *Palomar* was built in modules by the NAA, launched into Earth orbit, and assembled from 2028 to 2035. Similarly, the *AstroCrusher* was constructed with modules built by MFA, each launched by the NAA from Despina using the *Ceres VI* launch vehicle, and assembled in orbit by the crew of the *Palomar*, who were all nationals of Despina employed by the NAA.

13. On 11 December 2038, MFA launched a takeover of AEC on the PSX. Despite successfully acquiring over 80% of the listed shares of AEC, the Foreign Acquisitions Panel of Proteus decided that the takeover was contrary to the national interest of Proteus and caused the Supreme Court of Proteus to order the compulsory sale of the AEC shares bought by MFA. However, the decisions of the Foreign Acquisitions Panel and the Supreme Court of Proteus was held by the International Banking & Finance Tribunal of the World Trade Organisation to be contrary to the 2031 Stockholm Convention for the Regulatory Oversight of International Banking and Finance.

14. On 3 October 2039, MFA completed the acquisition of AEC and delisted it from the PSX. On that day, AEC announced that it would continue to supply the *LunarProspector* and *LunarMiner* spacecraft to the public, but the *AstroProspector* and *AstroMiner* spacecraft would be available exclusively to MFA. Concerns that such a decision has the potential to give Despina a quasi-monopoly on future commodity suppliers were expressed at the time by Proteus and other countries in the United Nations and through diplomatic channels.

Activities on 16 Psyche and 216 Kleopatra

15. On 24 March 2041, MFA launched the *AstroMiner I* to the asteroid 16 Psyche, which spectral studies and the earlier *AstroProspector VI* mission has identified significant deposits of rare earth metals and platinum group metals (as is the case for most M-type asteroids). Extraction activities began in August 2043 and ended in March 2049 when the radioisotopic fuel cells and rocket fuel on board the *AstroMiner I* became exhausted.

16. The ores extracted were all ferried to the *AstroCrusher* facility and the refined minerals were then used exclusively by Despina for orbital and lunar activities and domestic consumption on Earth. The economic advantage enjoyed by Despina was considerable, given the stratospheric prices in global commodity markets of rare earth metals and platinum group metals by that time.

17. With cooperation between MFA and the NAA:

    (i) all of the *AstroProspector* spacecraft were built by AEC in Proteus and launched by the NAA from Despina using the *Ceres III* launch vehicle;

    (ii) all of the ferry spacecraft were built by AEC in Proteus and launched by the NAA from Despina using the *Ceres I* launch vehicle; and

    (iii) all of the *AstroMiner* spacecraft were built by AEC in Proteus and launched by the NAA from Despina using the *Ceres V* launch vehicle.

18. On 17 November 2041, MFA launched *AstroMiner II* to the asteroid 216 Kleopatra. Extraction activities on 216 Kleopatra began in January 2044.

19. On 6 May 2043, MFA launched the *AstroMiner III* mission to 21 Lutetia, which is expected to begin mining operations in February 2046.

20. On 3 April 2044, when communications between the Earth and the *AstroMiner II* on 216 Kleopatra were interrupted by an occultation by Mars, one of the ferry spacecraft, pre-programmed to operate autonomously, had mistakenly latched onto the smaller of the asteroid's two natural moons, Cleoselene. By the time the mistake was discovered by Earth-based staff of MFA, Cleoselene was no longer within the gravitation field of 216 Kleopatra and there was not enough fuel in the ferry spacecraft to turn around. Consequently, Cleoselene was brought to Earth orbit and processed by the *AstroCrusher*. The loss and destruction of Cleoselene was made public by Despina on 2 May 2044 by a note delivered to the United Nations to the U.N. Secretary-General, who then disseminated it among all U.N. Member States.

21. On 4 June 2044, MFA announced that it would implement design changes to the *AstroMiner IV* and launch it towards 77 Frigga in September 2045.

The *Vesta* and its interception

22. There were increasing concerns in the international community about the economic and market effects of continued asteroid mining operations by Despina, especially as the refined metals extracted from the asteroids have been used domestically by Despina and not supplied to the

international commodity markets. There was also international condemnation over the loss and destruction of Cleoselene.

23. In the United Nations, various initiatives were proposed by other Member States to amend the 1967 Outer Space Treaty or to renegotiate a new treaty in place of the 1979 Moon Agreement but, although there was some debate in the Legal Sub-Committee of the U.N. Committee on the Peaceful Uses of Outer Space, no proposal was adopted. Further, some Member States have suggested that trade sanctions ought to be imposed on Despina to redress the economic benefits it enjoyed in its monopoly over mineral resources from asteroids were also proposed by other Member States, but no resolution or decision were proposed by any Member State in the United Nations or the World Trade Organisation.

24. During 2044, engineers at the Proteus Space Science Research Organisation (the ***PSSRO***) secretly developed and built a spacecraft named *Vesta*, designed to travel to an asteroid and separate into a dozen smaller orbiters on arrival, with each orbiter then orbiting around the asteroid at high speed. These orbiters, coupled with the irregular rotation of most asteroids, would effectively prevent any landing by an *AstroMiner* spacecraft on that asteroid. On 12 February 2045, the Chancellor of Proteus announced at the United Nations that:

> In the next few days, Proteus will launch a spacecraft to 77 Frigga to safeguard the celestial body from destructive acts by MFA and Despina. Until the United Nations concludes multilateral negotiations regulating future asteroid mining activities, Proteus will act to counter this threat to the province of all humankind.

25. Delayed by unfavourable weather, the PSSRO launched *Vesta I* on 23 February 2045, with 77 Frigga as the intended destination. However, on 26 February 2045, while travelling to the Moon for a gravity-assist boost, *Vesta* collided with a MFA ferry spacecraft on its way from the *AstroCrusher* to 21 Lutetia and was destroyed. Subsequent investigation by a special rapporteur appointed by the U.N. General Assembly found that the ferry spacecraft was ordered by Capt. Johan Picardo, commander of the *AstroCrusher* orbiter facility, to change course to intercept the *Vesta I*. Despina did not cooperate with the special rapporteur and denied their findings.

Effective destruction of the *AstroCrusher* facility

26. Soon after Capt. Picardo first commenced his posting to the *AstroCrusher* in July 2042, he met and fell in love with the MFA's resident chief mineralogist, Dr. Louise O'Hara. In what was promoted as the first wedding in space, the couple were to marry on the *AstroCrusher* on 23 September 2045. The wedding was to be conducted by a celebrant in Despina and broadcast live on the Internet.

27. On 21 September 2045, a group of 9 individuals of Protean nationality from the "Gaia & Space Preservation Collective" (***GSPC***), posing as space tourists, chartered a shuttle spacecraft, the *PSS Bacchus*, with the stated destination to be the Wilton Hotel Earth Orbit. However, the *PSS Bacchus* flew instead to *Palomar* and, on docking, pumped fentanyl gas into *Palomar* and rendered every crew member on board the *Palomar* and the *AstroCrusher* unconscious. The GSPC activists then entered the *Palomar* with gas masks and, after moving all of the crew from the *AstroCrusher* to the *Palomar* and undocking the *AstroCrusher*, they set off a series of small explosions on board the *AstroCrusher* that irrevocably disabled the facility.

28. The destruction of the *AstroCrusher* was captured on holographic video and posted on the Internet by the activists from the *Palomar* before they undocked the *PSS Bacchus* to return to Earth.

29. Capt. Picardo died from an anaphylactic reaction to the fentanyl without ever regaining consciousness. The remainder of the crew of both the *Palomar* and the *AstroCrusher* survived. However, the grief-stricken Dr. O'Hara and killed herself the day after the Capt. Picardo's death by going into an airlock and opening it without wearing a pressurised suit.

30. The explosions on board the *AstroCrusher* that disabled it caused nearly a dozen pieces of extracted ore from 216 Kleopatra to enter the Earth's atmosphere. While most of the pieces were very small and caused no more than a spectacular meteor shower and some minor property damage, a large piece of 6 m in diameter survived re-entry due to its metallic composition and slammed into the small town of Abee Hamlets in Proteus, with the explosive force equivalent to a Hiroshima-size bombs. The impact killed 741 people in Abee Hamlets and injured thousands more. All of the victims, other than four "backpackers" from Themisto, are nationals of Proteus.

31. Instead of the expected hero's welcome, the GSPC activists were arrested immediately on their landing in Proteus. They were charged, convicted of multiple counts of murder, and sentenced to life imprisonment without possibility of release.

32. In protest of the effective destruction of the *AstroCrusher* facility, Despina recalled its ambassador to Proteus for consultations. Meanwhile, MFA has been compelled to resort to ferrying the extracted ore from Earth orbit to Despina for processing. The cost of launching such spacecraft from the surface of the Earth repeatedly to collect the extracted ore from Earth orbit has increased the MFA's production cost substantially.

The Dispute

33. After months of diplomatic efforts having failed to resolve the disputes between the States, including the use of the good offices of the Secretary-General of the United Nations, Proteus and Despina agreed to refer the dispute to the International Court of Justice.

34. Proteus claims that:

    (i) it is unlawful for Despina to conduct mining activities on asteroids 16 Psyche, 216 Kleopatra, 21 Lutetia, and 77 Frigga;

    (ii) it is unlawful for Despina to keep all of the mineral resources extracted from the asteroids for its domestic use on Earth or its lunar settlements;

    (iii) the removal of Cleoselene was unlawful;

    (iv) the interception and the destruction of the *Vesta* was unlawful; and

    (v) Despina is liable to compensate Proteus for each of the above contraventions.

35. Despina claims that:

    (i) the space activities of MFA did not contravene international law;

(ii) it was unlawful for Proteus to seek to deny access to 77 Frigga through the *Vesta*;

(iii) Proteus is liable for the effective destruction of the *AstroCrusher* facility;

(iv) Proteus is liable for the deaths of Capt. Picardo and Dr. O'Hara; and

(v) Proteus is liable for the economic loss suffered by MFA and Despina.

36. Both Proteus and Despina are parties to the Outer Space Treaty, the Rescue Agreement, the Liability Convention, the Registration Convention, and the Vienna Convention on the Law of Treaties. Neither Proteus nor Despina are party to the Moon Agreement.

37. The parties have agreed that the present dispute is to be adjudicated by the state of the law as it was on 1 December 2045, which is materially unchanged in all relevant aspects since 1 May 2015.