## OUTER SPACE, OUTER SEA, OUTER LAND AND INTERNATIO-NAL LAW (1987). By J.N. Singh. Harnam Publications, Pp .XI+ 296. Price Rs. 180.

AS KNOWLEDGE is exploding and human potential expanding day by day, one comes to feel that the universe is shrinking. Science has unfolded many mysteries of nature and enabled man to reach to the heights of outer space and depths of oceans. The manifold increase of population, the necessity to meet the food requirements of the ever growing number of mouths and the gradual realisation that the resources of the biosphere are not everlasting, have driven man to explore new sources and means of survival. It was at this time that discoveries revealed that there exist vast resources at the bottoms of the high seas and in the areas outside the national jurisdictions of states. The actual and/or potential usefulness of the outer space has indeed created a gold rush. However, if these resources are to be explored in the best possible way for the benefit of mankind as a whole, ensuring an equitable distribution of the same, the activities of the states have to be regulated in order to establish an orderly regime in outer areas. While it is a scientist's job to explore the universe, it is a lawman's job to demarcate the limits of freedom of each nation and their rights in the areas hitherto unclaimed by any. It is here that international law steps into the field.

The book under review<sup>1</sup> presents the existing regimes in the three "000"'s, *i.e.*, outer space, outer sea and outer land in the light of International law. The book is divided into three parts which deal respectively with outer space, outer sea and outer land. All the three parts follow a similar pattern of discussion.

Before we talk of the regime of the outer space, it is very essential that we should be able to identify what constitutes the "outer space"? But this question however could not be satisfactorily answered as yet. There is no consensus so far as to the inner limits of the outer space. This identification issue is the subject matter of the first chapter. Chapter II deals with the "Sovereignty and Legal Status Issue." The question here is whether the outer space is *res nullius, res communis, res publica, res extra commercium* or the common heritage of mankind.<sup>2</sup> However, this has no clearcut answer. Chapter III is devoted to the issues of sovereign right, freedom, control and jurisdiction over outer space. Some of the important freedoms discussed are the freedom of exploration, freedom of scientific investigation, freedom of use *etc.* The author also discusses the presence of nuclear power sources (NPS), the status of the geo-stationary orbit (GSO) and legality of remote sensing (RS)

<sup>1.</sup> J.N. Singh, Outer Space, Outer Sea, Outer Land and International Law (1987). 2. Id. at 30.

Chapter IV discusses the issues of obligation, compulsion, responsibility and liability. A notable feature of this part is the discussion of the star wars programme, which of course is legally questionable. The author emphasises on the need to evolve a new comprehensive legal regime for the outer space which must be self sufficient normatively as well as institutionally, and the need to solve the problems like remote sensing and direct television broadcast on the basis of justice, equality and mutuality and in the overall interest of humanity. He suggests the establishment of an independent and full-fledged outer space organisation (OSO) under a new convention to regulate state activity in the outer space. The structure and functions of the OSO have to be largely based on the pattern of the UNO and the International Sea-Bed Authority under the Law of the Sea Convention (LOS) 1982. The author visualises the OSO consisting of five main organs-space assembly, space council, space count, space secretariat and space wings and also gives details of their membership, constitution, election and functions. However, an effective international space legal order must basically be a human legal order to serve the interests of the humanity as a whole.<sup>3</sup> The discussion of the regime of outer space in this part proceeds on an analysis of treaties on outer space, *i.e.*, the Space Treaty, Rescue-return Agreement, Liability Convention, Registration Convention and the Moon Agreement, the provisions of which have been regrouped under different headings.

Part II of the book is devoted to treatment of the law of the outer The discussion is based almost entirely on the provisions of the LOS sea. Convention. The concept of "outer sea" necessarily includes the high But, the term 'high seas' itself defies any precise definition, not even seas. the LOS convention attempts to define it. Whatever may be the definition, outer sea consists of high seas or open sea and the area. Chapter VI deals with the issues of sovereignty and legal status which are different in case of high seas and the area. On the high seas, under the LOS convention, the states have retained their traditional freedoms as well as acquired some new ones like for e.g., the freedom of marine scientific research. These rights, freedoms, control and jurisdiction are the subject of discussion of chapter Then there is the question of institutional regulation of the state VII. activity in the area which is sought to be achieved through International Sea-Bed Authority and the parallel system of exploration of the resources in the area, which is declared to be the common heritage of mankind. The LOS convention has elaborated upon the aspect of obligation, compulsion, responsibility and liability of states for their activities of the high seas and in the area. There are explicit obligations to explore seas only for peaceful purposes which makes specific reference to the treaty prohibiting emplacement of nuclear weapons and other weapons of mass destruction, the obligation to preserve the marine environment and to prevent pollution. The

states are internationally liable for failure to comply with their obligations. These issues figure in chapter VIII of the book.

Part III discusses the regime of outer land, by which is precisely meant the Antarctica. This part also follows the same scheme of discussion starting with identification issue<sup>4</sup> and then dealing with the sovereignty and legal status issue.<sup>5</sup> sovereign right, freedom, control and jurisdiction issue<sup>6</sup> and finally obligation, compulsion, responsibility and liability issue.7 This part contains a systematic analysis of the Antarctica Treaty 1959 which obviously is a package of compromises. The treaty has frozen all claims to sovereignty over Antarctica and no act or activity shall constitute a basis for asserting or supporting territorial sovereignty. There are also the Convention for the Conservation of Antarctic Seals 1978 and the Convention on the Conservation of Antarctic Marine Living Resources 1982 which further regulate the regime of Antarctica. However, there is dissatisfaction as to the existing regime. The author stresses on the need for the conclusion of a Comprehensive Convention on Antarctica (COANT) to regulate its various aspectspolitical, economic, scientific security, environmental etc. He suggests a wide spectrum of models on the basis of which COANT could be prepared which include the Space Treaty, the Moon Agreement and the LOS Convention.<sup>8</sup> and highlights on the need to declare the territory as the common heritage of mankind. There is also a suggestion for the creation of an independent organisation with separate divisions to look after the various matters. The contemplated organisation would have a secretariat, a polar wing, and an operator to undertake scientific and other activities over Antarctica.<sup>9</sup>

As is claimed, perhaps it is for the first time that the study of the three outer areas is presented in a single book. The book provides all the basic material on the topic and is very helpful to students as well as laymen. The language is simple and treatment of the subject is satisfactory. The international lawyer and the teacher may also find it useful for cross reference.

The author has taken pains to present the national view points expressed through official statements and discussions in international fora on several issues. However, one major drawback of the book is that it contains more of philosophical ramblings of the author than law, especially so in the first part.<sup>10</sup>

10. See for *e.g.*, *id* at 23.

<sup>4.</sup> Id., ch. IX.

<sup>5.</sup> Id., ch. X.

<sup>6.</sup> Id., ch. XI.

<sup>7.</sup> Id., ch. XII.

<sup>8.</sup> Id. at 213-14.

<sup>9.</sup> Id at 233.

Outer space...is limitless, endless, timeless, directionless, everythingless and beyond exact Earthly descriptions. Man-coined expressions or terminologies do not really have valid circulation over there. Every worldly concept seems to get diluted when we talk about the Universe, Cosmos or Brahmand.... It is the least known, almost completely at the verge of being unknown. Every worldly thing looks so small, so insignificant in this vast and mysterious Universe.

One would wonder whether a study of international law should start with theories as to the origin of the universe, the birth of galaxies, the shape of the earth and the description of the planets.

The book also contains three appendices. The first contains the space treaty, and the second and third respectively contain some relevant provisions of LOS Convention and the Antarctica Treaty, 1959.

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