IAC-08-E8.2.9

THE RESCUE AGREEMENT AND PRIVATE SPACE CARRIERS

Miss Zeldine Niamh O'Brien L.L.B.*
University of Dublin, Trinity College, Ireland
zeldineobrien@gmail.com

Abstract

The Rescue Agreement imposes several obligations on State parties, specifically in Article III, contracting Parties must extend assistance in search and rescue operations to assure the speedy rescue of spacecraft personnel where they have alighted in any other place not under the jurisdiction of any State if necessary and where they are in a position to do so. While the scope of those who may benefit from the application of the duties imposed by the Agreement is unclear, it is certain that only State parties and other contracting international intergovernmental bodies are bound by them. However, it may be envisaged that by the end of this decade, private commercial manned space crafts for the carriage of persons will also be active in low earth orbit and, in time, beyond that. This paper will address whether the duties in the Agreement should be extended to bind commercial entities engaged in space carriage, rather than the Agreement itself.

INTRODUCTION

"Danger invites rescue. The cry of distress is the summons to relief."[1]

The Rescue Agreement is an excellent example of the application of humanitarian principles in international law. The Agreement imposes both substantive and non-substantive duties. These include information-sharing obligations as well as the duty to conduct rescue operations. The duties imposed by the Agreement are on States vis à vis launching authorities but unlike maritime law, these duties do not currently exist between private parties. As pointed out by Jarvis, "a rescue operation involving private parties will not necessarily fall within the parameters of the treaties. Moreover the possibility exists that a rescue operation would involve both private and public parties."[2] The lack of specificity in both the Outer Space Treaty and the Rescue Agreement is problematic. Goedhuis suggested the imposition of an obligation to rescue as far back as 1963 when he observed that 'an obligation to render assistance to space personnel and spacecraft should not only be imposed on masters of ships and aircraft commanders but a mutual obligation to render assistance should also be imposed on space craft commanders."[3] This paper examines the duties imposed and the arguments in favour of imposing these duties on private space carriers as well as the methods of doing so.

THE RESCUE AGREEMENT[4]

The need for an international agreement governing the rescue and return of personnel was recognised by 1958.[5] The U.S. and the U.S.S.R. agreed separately on a working paper - this bilateral draft was pushed through into the multinational arena.[6] At this stage, the Americans had lost three astronauts and the Russians one. The Outer Space Committee was repeatedly requested to continue its work on formulating an agreement on the rescue

and return of astronauts in 1967[7] and, on the 19th December 1967, the agreement was unanimously adopted,[8] coming into force almost a year later. The Rescue Agreement is 'essentially an elaboration of Art.V of the Outer Space Treaty 1967'.[9]

DUTIES UNDER THE AGREEMENT

The Agreement provides for a number of duties on contracting party states. Some envisage the sharing of information and others the provision of more substantial assistance.

Information-Sharing Obligations

Article I envisages an obligation on the contracting state where it receives information or discovers that the personnel of a spacecraft have suffered accident or are experiencing conditions of distress or have made an emergency or unintended landing in territory under its jurisdiction or on the high seas or in any other place not under the jurisdiction of any State to immediately notify the launching authority or make an immediate public announcement where the authority cannot be identified. This information-sharing obligation is one of the least onerous and yet invaluable for those experiencing difficulty. The duty binds regardless of how the State learns of it. It may do so directly from its own emanations or it may learn from private entities. The Secretary General of the UN must also be informed. Under Art.II, the State must inform the launching authority and the Secretary General of the steps taken and its progress. This furthers inter-state co-operation and co-ordination on the rescue effort. Information-sharing obligations extend beyond personnel to cover space objects *simpliciter* under Art.V. Each State that receives information or discovers that a space object or its component parts has returned to Earth in territory under its jurisdiction or on the high seas or in any other place not under the jurisdiction of any State, must notify the launching authority and the Secretary-General.

'Consultation' Obligations

The Agreement envisages direct co-operation in certain circumstances under Art.II. If assistance by the launching authority would help to affect a prompt rescue or would contribute substantially to the effectiveness of search and rescue operations, the launching authority must co-operate with the State affecting the rescue. The operations are to be subject to the direction and control of that State although it must 'act in close and continuing consultation with the launching authority'. This is less onerous that the equivalent search and rescue provisions in air law which require States searching for missing aircraft to 'collaborate in co-ordinated measures'.[10]

Article V(5) of the Rescue Agreement also envisages interaction between contracting states and launching authorities, the launching authority must to take immediately effective steps to eliminate the dangers posed by hazardous or deleterious space objects or their component parts under the direction and control of the contracting state.

Substantive Obligations to Personnel[11]

Article II requires a contracting state to take all possible steps to rescue and render all necessary assistance to the personnel of a spacecraft where they have landed in its territory owing to accident, distress or unanticipated landing. Assistance in this regard may involve the 'launching authority, which would possess advanced knowledge and experience in locating space vehicles, and, perhaps, available aircraft or ships to join in a search' given that it might in certain circumstances "be crucial to saving the life of an astronaut."[12] However, where the State and the launching authority disagree, the former would have the final say. Article III provides for a more onerous duty by extending contracting states' obligations beyond their own jurisdiction. Where the personnel of a

spacecraft have alighted on the high seas or any other place not under the jurisdiction of any State, contracting parties must, if necessary,[13] extend assistance in search and rescue operations for such personnel to assure their speedy rescue. This is subject to the proviso that this applies only to contracting states that are in a position to affect a rescue or aid in a search.[14] Therefore only states that have geographical proximity to the scene and technological capability to conduct a rescue are bound to act.[15] As Art.II applies only where the information concerning the astronauts is received or discovered, Art.IV fills the lacuna that would otherwise exist where a State finds those concerned without receiving or discovering any information. It provides that if, owing to accident, distress, emergency[16] or unintended landing, the personnel of a spacecraft land in territory under the jurisdiction of a Contracting Party or are found on the high seas or in any other place not under the jurisdiction of any State, then they are to be safely and promptly returned to the representatives of the launching authority. Some countries adopted Art.IV on condition that it would operate where there was no conflicting law, such as asylum.[17]

The proviso in Art.III is one of central limitations on the scope of the duties towards the personnel of the space craft. Other limitations also derive from the wording adopted by the Agreement. The most obvious limitation that gives rise to much debate is the use of the term 'personnel of the spacecraft' and 'astronaut'[18] as this gives rise to the question as to whether spaceflight participants/space tourists would be covered by the definition. One response to this *quare*, is to look to humanitarian law as a basis for imposing a duty to aid a space tourist in distress. Indeed, it would seem rather idiosyncratic if a private space launch vehicle for the purpose of space tourism was in distress but the duty to search for and rescue or otherwise aid extended to the pilot and crew but excluded all passengers. Gorove submits that while accompanying scientists are within the scope of the term, passengers and stowaways are not.[19] However, regardless of whether the Agreement in its current form extends to space tourists, the central argument of this paper is an examination of not whether the contracting parties owe duties to space tourists but rather whether the duties in themselves should bind private space carriers, especially those that engage in the carriage of persons given the potential risk to human life, albeit a risk taken with full knowledge and consent.

Another limitation derives from the use of the term 'alighted' which suggests some form of landing whether upon water or ground. Clearly, it applies to landings upon the Moon or other celestial bodies. Although, it is questionable if the personnel of a spacecraft are in distress while present in outer space,[20] whether they would come within a strict literalist reading of the provision. However, the spirit, if not the letter, of the provision would mandate contracting parties extend assistance in such circumstances, and it would appear to be covered by Art.V(2) of the Outer Space Treaty in any case.

Van Traa-Engelman observes that the Rescue Agreement, like Article V of the Outer Space Treaty, is primarily focused on distress and emergency situations arising from an unintentional landing.[21] Ogunbanwo notes that landings coming within the scope of the Agreement include 'those caused by a malfunction of the spacecraft, a collision between the spacecraft and another object, a physical disability suffered by the astronaut or by navigational error'.[22] This suggests another limitation on the scope of the duties envisaged by the Agreement as it:

> "... leads to the conclusion that intentional landings, with a specific amount of accent on landings on foreign territory, will probably fall outside its scope of application, in which case the principle of state sovereignty will prevail leaving it to the

discretion of the territorial state how it should act in such a situation."[23]

However, there is no limitation on the extent of the State's obligation to provide assistance to personnel where the spacecraft lands in territory under its jurisdiction. The obligation is to render all necessary assistance. The duty is not limited by practicability as is the case under Art.V. The extent of the remedial action is determined by the nature and scope of the emergency.

Substantive Obligations Regarding Spacecraft

Where a space object or its component parts has been discovered in the territory of a State, the State which has jurisdiction over that territory must take such steps as it finds practicable to recover the object or component parts when requested to do so by the launching authority and with its assistance if asked.[24] Those objects that are so recovered are to be returned to or held at the disposal of representatives of the launching authority upon its request. But where a State has reason to believe that a space object or its component parts discovered in territory under its jurisdiction, or recovered by it elsewhere, is or are of a hazardous or deleterious nature, it may notify the launching authority of this.[25]

Cost of Recovery

Diederiks-Verschoor notes that one of the most remarkable shortcomings of the agreement is the lack of any provision concerning expenditure for the rescue and return of the astronaut, due to their status as 'envoys of mankind'.[26] This is in contrast to the obligations under Art.V(2) and (3), where the expenses incurred are expressly stated to be borne by the launching authority.[27] Ordinary principles of restitution would fill this void. Thus assisting states may be able to recover the costs of aiding the astronaut and returning him/her.

Desirability of Duties Binding Private Parties

Should a commercial entity be held to have to respond to a distress call in outer space? It may be argued that given the difficulties inherent any space rescue operation, particularly in relation to the ability to in fact reach those in distress, the law should utilise the presence of privately manned vehicles in outer space to minimise any loss of life. If it is accepted that all aboard a space object will benefit from the duties as provided for under the Agreement, regardless of whether they are crew or not, it would not seem unreasonable to extend duties to the carriers whose crew and customers benefit from its provisions. In addition, international maritime custom, upon which the Agreement was in part modelled, would analogically favour the creation of such a duty. However, a key difficulty is the question of who must pay for the cost of the rescue. The Agreement itself requires the launching authority to bear the expenses involved in the recovery and return of the space object (Art.V(5)) but it does not extend this to the rescue of personnel. It is submitted that the burden should not fall on the rescuer in order to encourage acts of rescue. This would also acknowledge that while private carriers may be obliged to divert to respond to distress calls, they are not operating an emergency service but a business for profit.

Humanitarian Law

In 1984, Fawcett posited the question of whether *inter alia* humanitarian protection had become a general form of state responsibility in outer space.[28] Certainly, the ITU Convention prioritises absolutely all telecommunications concerning life at sea, on land in the air or in outer space.[29] Article V of the Outer Space Treaty and Article 10 of the

Moon Agreement appear to favour this conclusion as well as the Rescue Agreement,[30] although it does not expressly refer to outer space. The argument is that this humanitarian aspect is furthered by the imposition of responsibilities on private actors.

Another approach is to consider why the duty to rescue was adopted in the first place. Astronauts were first recognised as envoys of mankind in 1963 and thus States were obligated to render them all necessary assistance, a principle subsequently embodied in the Outer Space Treaty. As Matte notes, this 'attitude towards astronauts in particular reflects the spirit of international co-operation and mutual assistance governing space activities'.[31] The Rescue Agreement refers to the personnel of the spacecraft. It is questionable whether non-personnel, such as space tourists, should be considered envoys of mankind[32] but it is arguable that they should be protected under equivalent duties as arise under the Rescue Agreement for humanitarian reasons.[33] However, while this is uncertain, it is clear that the personnel of a private carrier's craft come within the terms of the Agreement and will have the benefit of the duties owed there under. This weakens any conceptual argument based on the distinction between public (in the sense of State-owned or run or owned and run by an emanation of the State) and private spacecraft personnel, as it is not borne out by the law. Given the current state of humanitarian law, it is also arguable that there should be no distinction between personnel and non-personnel. No distinction is made in maritime law between passengers and crew in terms of the obligation to render all necessary assistance or, indeed, to rescue. Once a spacecraft in distress has been reached, there would seem to be no reason to distinguish between personnel and non-personnel in the provision of aid from a humanitarian standpoint, although practical and pragmatic arguments may justify prioritising assistance to the crew before passengers (as some of the personnel may in fact possess information critical to bringing about a successful rescue). An explicit endorsement of an extension of the protections to space tourists would provide clarity and certainty and also strengthen fairness-based rationales for imposing a duty on private space carriers towards others.

However, the humanitarian argument does not stretch so far as to justify the recovery of a space object or a component part. In maritime law, the duty to render assistance or rescue does not extend to the recovery and return of crashed vessels; this is properly consigned to the law of salvage.[34] Therefore, it must be examined whether an alternate argument can be made to support the extension of this duty to private spacecraft commanders.

FAIRNESS-BASED RATIONALES

Currently, those personnel on privately-owned and manned space craft would be entitled to the protections under the Agreement, though the obligations are owed as and between the State(s) and relevant launching authority. However, as they are not emanations of the State, there is no binding obligation in international law on the commander of the spacecraft in such circumstances owed to any other spacecraft; this is even so in relation to non-substantive duties such as the sharing of information. A fairness-based argument can be made on a *quid pro quo* basis for extending such duties to the private craft operators. There is much value in collective action in relation to search and rescue operations. In this form, this argument for expanding the scope of duties may appear unduly simplistic in failing to take account resource issues – a state has far greater resources to fund a rescue operation than a private operator which may be crippled by the loss. It is possible that these difficulties could be resolved by applying strict restitution principles but this will still not answer the question of whether recovery should be permitted for pure economic loss consequent upon taking actions to rescue or recover others. While the response of 'what price for a human life?' does not address the underlying difficulty, it illuminates the core

issue that States, in imposing such obligations on private space operators, are being asked to make a value judgment, a choice which they are not unfamiliar with making.

However, the human life counter-argument cannot be used in relation to the recovery and return of a space object. The resource arguments have therefore greater weight in denying existence of any duty in this regard. It is submitted that the duty to recover and return should not be extended to private operators and should be left to the law of salvage.

THE DUTY TO RESCUE

Unlike civil law systems which have Good Samaritan laws in place,[35] the majority of common law states (with the exception of Vermont[36] and Minnesota[37]) do not recognise a general duty to rescue[38] even where there is no risk to the potential rescuer.[39] While the common law will not generally require a person to engage in a rescue, rescuers may recover against rescuees in tort.[40] The most obvious parallel to draw is to the duty to aid ships in distress.[41]

The analogy with maritime law suffers from practical differences. It remains cheaper and easier to aid those on the high seas than to render assistance to those in outer space. While assistance in the form of expertise has a value, it may not always be welcome. Nonetheless, assistance could be rendered while on the High Seas as a part of maritime law. The main benefit of the analogy is however observing the existence of reciprocal duties to rescue and aid those in distress imposed on both public and private parties towards each other regardless of nationality.

OTHER RATIONALES

The notification requirement in Art.V(5) is justified by the need to protect and safeguard both earth and the space environment from hazardous and deleterious space objects and their component parts. This is particularly important in relation to space activities given the use of nuclear power sources. There is no reason why this rationale is less potent in relation to private operators where a notification requirement is envisaged.

METHODS OF IMPOSING DUTIES

While it is possible for custom to develop in this area, it is unlikely that a single instance of a private party aiding another when alighting on the high seas would be recognised at an international level to constitute what Cheng describes as instant customary international law.[42] Given these reservations, and the desirability of having a formal document, particularly where the obligations imposed by the document bind private parties that include those of varying size and economic strength is more pronounced, a formal multilateral agreement would be the preferable mode of imposing such obligations.[43] Article 98 of the UN Convention on the Law of the Sea provides an example of how this may be done. This article imposes the burden on States to ensure that the master of a ship flying its flag renders assistance to any person found at sea in danger of being lost or after a collision, to the ship, its crew and its passengers.

INFORMATION SHARING OBLIGATIONS

The least onerous of the obligations concerning the sharing of information could easily be adapted to apply to between private entities and their own launching authority. Once in the possession of the launching authority, the information could easily reach the relevant parties, indeed the authority as an emanation of the State may be bound by the obligations in Art.I of the Rescue Agreement. Under the Merchant Shipping Search and Rescue Manual and under domestic laws, information sharing obligations are imposed on the masters of ships. The relevant UK regulations require the masters of assisting

vessels to inform the appropriate search and rescue services, if possible, that they are aiding the vessel in distress.[44] Applying this and borrowing from the terms of the Rescue Agreement, there should be an obligation imposed on all commanders of spacecraft to inform their own launching authority where they receive information or discover that the crew or passengers of a spacecraft have suffered an accident or are experiencing conditions of distress or have made an emergency or unintended landing or alighting immediately of that fact and any other pertinent information. If any substantive action is undertaken, the launching authority of the assisting vessel should be informed of the nature of the assistance being rendered or the rescue being undertaken.

In addition, there should be an obligation to inform their own launching authority where it has reason to believe that a space object or its component parts discovered or recovered by it is of a hazardous or deleterious nature.

SUBSTANTIVE OBLIGATIONS

The basic substantive obligation would relate to the rendering of assistance to or rescue of another spacecraft, its crew or passengers. As the extension of the duty to private operators is in part justified on humanitarian grounds, a distinction in the duty owed to personnel and non-personnel or crew and spaceflight participants is unnecessary and undesirable. The duty, if modelled on Art.98, would extend to those found and in danger of being lost, those in distress who have requested assistance and to render assistance/rescue post-collision. These grounds have been moulded by time and are suited to the High Seas. However, given that the space environment poses *sui generis* problems, it may be preferable to develop the substantive obligations using the more familiar vocabulary of the Rescue Agreement.

The imposition of any substantive obligation would need to be limited by pragmatic considerations. The Rescue Agreement itself provides examples of the kind of limitations envisaged, phrased in terms of the practicability of rescues. Under Article 98, masters of ships are only required to render assistance to those found lost at sea or after a collision *in so far as they can do without serious danger to the ship, the crew or the passengers*. This pragmatic limitation also applies to the duty to proceed with all possible speed to the rescue of persons in distress, if informed of their need of assistance which is also further limited by the phrase 'in so far as such action may reasonably be expected of him.' These limitations are reflected in national instruments,[45] for example, Irish law imposes the duty unless the master is unable to comply, or in the special circumstances of the case considers it unreasonable or unnecessary.[46] The same law also releases the master from his duty in two other circumstances.[47] There is no duty to render assistance where the master is informed of the requisition of one or more ships other than his own and that the requisition is being complied with by the ship or ships requisitioned[48] nor if his ship has been requisitioned and if he is informed by the persons in distress, or by the master of any ship that has reached the persons in distress, that assistance is no longer required. Similar pragmatic constraints should be adopted in relation to spacecraft commanders.[49]

In addition, domestic laws which have provided for the duties in Article 98 have also made it an offence to send out distress signals for any purpose other than that prescribed.[50] Such a provision should be included when incorporating into national law in relation to spacecraft to prevent abuse. Some laws also make it an offence to ignore the duty to render assistance,[51] although the duty is generally unenforced against masters;[52] such a matter is better left to the discretion of the State.

Substantive obligations concerning the rescue of stricken spacecraft should be considered under the current admiralty rules on salvage.

THE FINANCIAL BURDEN

Given the high cost of launching and of space activities, as well as the physical constraints in launching such as fuel and oxygen, it may not always be possible to render assistance. However, in the event that these obstacles are overcome and a rescue is attempted, several issues in relation to costs arise. First, whether it should be possible to recover for the cost of a rescue including an attempted rescue. Second, whether it should be possible to recover for financial loss consequent upon engaging in a search and rescue operation, even where the loss is purely economic. Third, if financial recovery is possible, upon whom should the burden fall?

On the first issue, arguably a rescuer should be allowed to recover for a rescue. To hold otherwise would allow the commander of the craft and ultimately to its owners or charterers as the case may be, to suffer a pecuniary detriment where he/she acted to his disadvantage in order to preserve the life of others. The same argument can be applied to attempted rescues, provided they did not fail because of the gross negligence of the rescuer and there has been a sufficient proximate act to count as an attempt. This is however in direct contrast to the long-established rule in admiralty that prohibits recovery for 'pure life salvage'.[53] The reason for this is:

> "traditionally explained by reference to the costs of collecting an award where there is no property saved to constitute a fund out of which to pay it. An additional element is altruism.... Lives at sea are not only extremely valuable (as elsewhere) but usually can be saved at less cost than the ship itself or its cargo. Hence altruism may provide an efficient level of rescues in the pure life salvage situation notwithstanding the competitive constraints that limit altruism to professionals."[54]

However, by allowing recovery for property but not life, this creates a disincentive to rescuing people over property. In addition, while there may be some difference in cost between the rescue of persons and the rescue of property in outer space, the cost of launching where a rescue commences on the surface of the earth, which represents the bulk cost of such a rescue itself would exist regardless of the nature of that which is to be saved. The pure-life salvage rule has been heavily criticised[55] and it is not applied uniformly.[56] In addition, the rule does not prohibit an enhanced award where both lives and property has been salvaged.[57] Furthermore, it has been limited by case law so that it no longer operates between two seaworthy vessels where there is a transfer of an ailing seaman from one to another.[58] As to attempted rescues which ultimately fail, if reasonably undertaken with due skill and care, recovery should be permitted. However, aborted rescues, i.e. where there has been no proximate act of rescue before any rescue effort is abandoned, should not result in any recovery. Otherwise recovery is being permitted for nothing more than a diversion with no potential benefit or obviation of a disbenefit to the rescuee.

In relation to the second issue, while recovery for the actual costs of engaging in the rescue is unproblematic, the idea of permitting recovery for pure economic loss consequent upon fulfilling the duty to render assistance is. Different legal systems have different approaches to pure economic loss; divergent attitudes are apparent even among common law states.[59] Agreement on this issue may be difficult to achieve and the better approach may be to allow recovery for the actual cost and leave the issue of pure economic loss aside until there is a general consensus on how to treat the issue in law.

On the third issue, as noted above, under the Rescue Agreement, there is no provision for recovering costs for the rescue and return of an astronaut, however, the launching authority bears the cost of the recovery and return of the space object. This is, of course, a separate head from liability caused by the object. In relation to the rescue of persons by private

operators, given the possible costs involved, that financial burden should be allocated by law. However, the costs of rescue are variable. In the case of a rescue on the High Seas or on the land, the cost of search and rescue of persons may be no greater than the cost arising from the equivalent operation in relation to an aircraft. The risk of requiring a rescue could be taken as a factor in assessing the insurance premium. It may rightly be imposed on the rescuee. In the case of State-owned and manned space objects, the recovery would be against the relevant state agency. For a privately-owned space object, recovery may be against the legal person that owns and manned the object. Although, such a position may discourage the parties at risk of harm from requesting assistance resulting in delays, leading to more complex rescues attendant with higher degrees of risk. In any case, it is untenable for a claim to be made against a spaceflight participant or other fee-paying passenger at the international level. Nonetheless, it is not likely that persons on a space object landing on earth or alighting on the High Seas would be aided by a private space operator before any other aid could reach them. Therefore the issue is more of form than substance.

But the possibility of rescue by a private space operator is much higher where the rescue occurs in outer space, such as in-orbit. The cost of a rescue in such cases will be significantly higher. It is by no means certain that the rescuer would be able to recover as against the rescuee even where the action is expressly permitted by law, for example, where the cost is high enough to drive the latter into liquidation. This could discourage potential rescuers from taking any substantive action. It is submitted that recovery should therefore be allowed directly against the launching authority of the rescuee in such circumstances. This would create a distinction regarding entities against which the rescuer may recover on the basis of the locus of the rescue. Such a distinction can be justified on the variability of the cost of rescue but is ultimately a decision of policy and not law. It may be preferable to permit uniform recovery against the launching authority, regardless of the locus of the rescue. By rendering the launching authority liable for costs, the law would also better harmonise with the existing space law.

If, however, the method of incorporating the obligation is phrased in terms of the private operator's spacecraft being requisitioned for a rescue attempt, then it is arguable that the appropriate entity to claim for recovery is the requisitioning state, which could be the state of registry or the launching state. This possibility depends entirely on domestic law and the terms used in the transposing instrument.

CONCLUSION

The Rescue Agreement was a great advancement for space law in imposing duties for the protection of astronauts. However, the lack of clarity endemic to international instruments has meant that the duties of private parties have not been clarified and certain situations involving private party rescuers may not come within the scope of the Agreement at all. For primarily humanitarian reasons, it is preferable to impose duties to rescue on the commanders of spacecraft akin to those on the masters of vessels with some modifications suitable to space law. The contentious pure life salvage rule should not be incorporated into space law given that the economic reasons for favouring the rule in admiralty are less potent in relation to space rescues. Information-sharing obligations, requiring commanders to inform their launching authority of any distress call received should be imposed in addition to more substantive duties to rescue the lives of those aboard. No distinction should be drawn between personnel and non-personnel in this regard and the burden for reimbursing for the rescue may fall either on the rescuee or the launching authority of the rescue depending on the circumstances, though the latter is preferable. The duty to render assistance or to

rescue should be subject to requirements of practicability and no commander should be required to risk the safety of his own crew or vessel. Where another spacecraft has already responded or where the problem giving rise to the emergency has been resolved, the commander should be freed from his/her obligations. The recovery of another's craft should be left to the laws of admiralty. A new multilateral convention which requires States to ensure the obligation is placed on the commander of spacecraft is one method of imposing these duties and is the most desirable for the sake of certainty and clarity.

---

* My thanks to Dr. Gernot Biehler for his comments and advice on an earlier draft. All errors and omissions are my own.

[1] *Per* Cardozo J. in *Wagner v International Railroad Co.* (1921) 232 N.Y.S. 176; 133 N.E. 437.

[2] Jarvis, Robert M., "The Space Shuttle Challenger and the Future Law of Outer Space Rescues," (1986) 20(2) *International Law* 591 at p. 608.

[3] See "Conflicts of Law and Divergences in the Legal Regimes of Air Space and Outer Space" [1963 11 *Recueil des Cours* 332.

[4] See Agreement on the Rescue of Astronauts,the Return of Astronauts and the Return of Objects Launched into Outer Space [1969] 63(2) *American Journal of International Law* 382-385; [1968] 7 ILM 151.

[5] U.N.G.A. Resolution 1348 (XIII), 13 December 1958. See Matte, Nicholas M., *Space Activities and Emerging International Law*, CRASL, McGill University, 1984, pp.94-97; Doolittle, William, "Man in Space: The Rescue and Return of Downed Astronauts," (1967) 9 *U.S.A.F. J.A.G. L. Rev.* 4; Dembling and Arons, "The Treaty of the Rescue and Return of Astronauts and Space Objects," [1968] 9 *William and Mary L. Rev.* at 646 and Riccio, Charles, "Another Step for Mankind: The Agreement on the Rescue of Astronauts and the Return of Objects Launched into Outer Space," (1970) 12 *U.S.A.F. J.A.G. L. Rev.*142.

[6] See Houben, "A New Chapter of Space Law: The Agreement on the Rescue and Return of Astronauts," [1968] XV *Netherlands L. Rev* at p.121 quoted by Ogunbanwo, *infra*, at p.127.

[7] See Resolution 2222 (XXI) para. 4a and Resolution 2260 (XXII).

[8] See Resolution 2345 (XXII) passed 115-0 votes. See generally Cheng, Bin, "The 1968 Astronauts Agreement or How not to make a Treaty" [1969] 23 *Y.B.W.A.* 188 and Ogunbanwo, Ogunsola O., *International Law and Outer Space Activities: Proefschrift Ter Verkrijging Van de Graad Van Doctor in de Rechtsgeleerdheid Aan de Rijsuniversiteit Te Leiden, Op Gezag Van de Rector Magnificus Dr. A. E. Cohen, Hoogleraar in de Faculiteit Der Letteren*, Brill 1975, p.126 *et seq.*

[9] Diederiks-Verschoor, Isabella, *An Introduction to Space Law*, Kluwer Law International, Alphen ann den Rijn, 2008 p.31.

[10] Article 25 of the Convention on International Civil Aviation 1944 [the Chicago Convention].

[11] See Hall, R. Cargill, "Rescue and Return of Astronauts on Earth and in Outer Space," [1969] 63(2) *American Journal of International Law* 197-210.

[12] Reis, A/AC/105/C.2/SR.86, pp.7-8, quoted in full by Ogunbanwo, *supra*, p.132.

[13] See Riccio, *supra*, p.149.

[14] *Ibid*, at p.150.

[15] See Ogunbanwo, *supra*, p.133. Contrast with Art.25 of the Chicago Convention which is limited by the 'practicability' of a rescue.

[16] Doolittle defines 'accidents' as 'unintentional random event without deliberate design' and 'distress' as 'a state of danger or dire necessity,' *supra*, p.7.

[17] Such as France: A/AC/105/C.2/SR.86, p.14. See Dembling and Arons, *supra*, 653; Gorove, "Legal Problems of the Rescue and Return of Astronauts, (1969) 3 *Int'l Lawyer* at p.900 and Riccio, *supra*, p.147.

[18] See generally, Vereshchetin, V.S., "Elaborating the Legal Status of Astronauts," (1983-4) 7 *Hastings International & Comp. L. Rev.* 501.

[19] Gorove, *supra*, at p.898.

[20] Ogunbanwo submits that they do not come within the scope of the Agreement, p. 134.

[21] Van Traa-Engelman, Hanneke Louise, *Commercial Utilization of Outer Space: Law and Practice*, (Martinus Nijhoff Publishers, 1993), p.39.

[22] *Supra*, p.132, citing Dembling and Arons, *supra*, at 646.

[23] *Ibid.*

[24] Article V(2) of the Rescue Agreement.

[25] Article V(4) of the Rescue Agreement.

[26] *Supra*, 33.

[27] Article V(5) of the Rescue Agreement. The 'launching authority' for the purpose of the agreement refers 'to the State responsible for launching, or, where an international intergovernmental organization is responsible for launching, that organization, provided that that organization declares its acceptance of the rights and obligations provided for in this Agreement and a majority of the States members of that organization are Contracting Parties to this Agreement and to the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies' under Article 6.

[28] Fawcett, J.E.S., *Outer Space*, Clarendon Press, Oxford, 1984, p.31.

[29] Article 39.

[30] Riccio, *supra*, p.146.

[31] Matte, *supra*, p.95.

[32] Nandakumar, S., "Legal Impasse – Commercialisation of Space Through Reusable Sub-Orbital Launchers" [2004] 47 *Proc of the Coll on the L of Outer Space* 452, at pp.458-9 and Collins, Patrick, "The Regulatory Reform Agenda for the Era of Passenger Space Transportation," *Proceedings of the 20th ISTS*, paper no 98-f-13, available at http://www.spacefuture.com/archive/the_regulatory_reform_agenda_for_the_era_of_passenger_space_transportation.shtml

[33] See Peyrefitte, Léopold and Confé, Patrick, *Droit de L'Espace*, (éditions Dalloz, Paris, 1993) pp.189-203.

[34] For more on this argument see Jarvis, Robert M., "The Space Shuttle Challenger and the Future Law of Outer Space Rescues," (1986) 20(2) *International Law* 591.

[35] See Ratcliffe, James, ed., *The Good Samaritan and the Law*, Anchor Books, 1966 and Long, Patrick J., "The Good Samaritan and the Admiralty: The Tale of a Statute Lost at Sea," (2000) 48 *Buff. L. Rev.* 591. See for example §323(c) of the Strafgesetzbuch.

[36] Duty to Aid the Endangered Act, Vt. Stat. Ann. Title 12 s.519.

[37] Good Samaritan Law, ch. 319, 1983 Minn Law Sess. 2329.

[38] See generally Ames, James, "Law and Morals" [1908] 22 *Harv. L. Rev.* 97, at 112 *et seq*, Lipkin, Robert Justin, "Beyond Good Samaritans and Moral Monsters: An Individualistic Justification of the General Legal Duty to Recue" [1983-4] 31 *UCLA L. Rev.* 252; Linden, "Rescuers and Good Samaritans" (1971) 34 *MLR* 241 and Rose, "Restitution for the Rescuer" (1989) 9 *Oxford J. of Legal Studies* 167.

[39] See Landes, William M., and Posner, Richard A., "Salvors, Finders and Good Samaritans, and Other Rescuers: An Economic Study of Law and Altruism" [1978] *Journal of Legal Studies* 83 at p.104 and Khalil, Elias L., "Are 'Good Samaritan' Laws Desirable?" (1992) 22(1) *Forum for Social Economics* 71.

[40] *Horsley v McLaren* [1972] SCR 441, (The Ogopogo Case); *Phillips v Durgan* [1991] Irish Law Reports Monthly 321. See generally, McMahon , B., and Binchy, W., *Law of Torts*, 3rd ed., Butterworths, Dublin 2000, paras 20.78-20.92.

[41] For the origins of the rule see Severance, Arthur, "The Duty to Render Assistance in the Satellite Age" (2005-2006) 36 *Cal. W. Int'l L.J.* 378. See Art.11 of the Convention for the Unification of Certain Rules of Law Respecting Assistance and Salvage at Sea 1910.; Art. 12(1) of the High Seas Convention 1958; Ch.2, para.2.1.10 of the International Convention on Search and Rescue 1979; Art. 98(1) UNCLOS. The IMO Treaty on the Safety of Life at Sea (SOLAS) as amended in 2006 following the *Tampa* case, also provides for a duty to assist those in distress regardless of their status and circumstances (see Regulation 10). These obligations are incorporated into national law, for examples see Regulation 5 of the Merchant Shipping (Distress Messages) Regulations 1998 (U.K.) (SI No. 1691 *of* 1998), 46 U.S.C. 2304 and s.37 Merchant Shipping (Safety Convention) Act 1952 (Ireland) (No.29 of 1952).

[42] Cheng, Bin, *Studies in International Space Law*, Oxford University Press, 1997, p.191 *et seq.*

[43] See Jarvis, *supra*, pp.618-619

[44] Merchant Shipping (Distress Messages) Regulations 1998 (U.K.) (SI No. 1691 *of* 1998) Regulation 5 (1).

[45] The U.S. Salvage Act provides that a "master or person in charge of a vessel shall, so far as he can do so without serious danger to his own vessel, crew, or passengers, render assistance to every person who is found at sea in danger of being lost" (46 U.S.C.§ 728).

[46] See section 37(1) of the Merchant Shipping (Safety Convention) Act 1952 (Ireland) (No.29 of 1952).

[47] Section 37(3) and (4) of the Merchant Shipping (Safety Convention) Act 1952 (Ireland) (No.29 of 1952).

[48] Ibid., section 37(3).

[49] Ibid., section 37(4).

[50] Ibid., section 36.

[51] Ibid., section 37(5).

[52] Severance, *supra*, p.387.

[53] Article 9 of the Convention for the Unification of Certain Rules of Law respecting Assistance and Salvage at Sea 1910; Art.16 of the IMO International Conventionon Salvage. See Force, Robert, Yiannopoulos, A.N. and Davies, Martin, *Admiralty and Maritime Law*, Vol.1, Beard Books, Washington D.C., 2005, pp.510-517 at p.515 and *Nourse v Liverpool Sailing Ship Owners' Mutual Protection and Indemnity Association* [1896] 2 QB 16.

[54] Landes, William M., and Posner, Richard A., "Salvors, Finders and Good Samaritans, and Other Rescuers: An Economic Study of Law and Altruism" [1978] 22(1) *Journal of Legal Studies* 83 at p.104 reprinted in Wahl, Jenny Bourne, (ed) *Economic Analysis of Tort and Products Liability Law*, Taylor & Francis Group, 1998, p.157 *et seq*, at p. 178

[55] See Jarett, L., "The Life Salvor Problem in Admiralty," (1954) 63 *Yale L.J.* 779; Severance, *supra*, p.388.

[56] The rule is not applied to lives saved in British territorial waters or to lives saved on British vessels: Jarett, *ibid*, pp.782-83.

[57] See Art.13 (1)(e) of the International Convention on Salvage 1989; Salvage Act; 46 U.S.C. § 729; *Grand Union Shipping Ltd. v. London SS Owners' Mutual Insurance Association Ltd. (The Bosworth No.3)* [1962] 1 Lloyd's Rep. 483 (Q.B.D.) and Hodges, Susan, *Law of Marine Insurance*, Cavendish Publishing, 1997, pp.427-428.

[58] *Peninsular & Oriental etc. v. Overseas Oil Carriers* 553 F.2d 830, 1977 AMC 283 (2nd Cir.), *cert. denied*, 434 U.S. 859, 98 S.Cr. 183, 54 L.Ed 2d 131 (1977), case note at p.512 of Force *et al, supra.*

[59] See McMahon and Binchy, *supra*, ch.10, p.*203 et seq*; *Hedley Byrne & Co. Ltd. v. Heller and Partners* [1964] AC 465 (HL).