COMMENTS

AN EXPLOSIVE ISSUE IN INTERNATIONAL LAW: THE FRENCH NUCLEAR TESTS

France's recent and proposed nuclear testing[1] over Mururoa Atoll in the South Pacific has produced certain issues at international law which one, with some justification, could label explosive. Politics,[2] religious and moral judgment,[3] and pure ecological interest[4] all figure heavily in this unhappy course of events, but the content of this comment will focus on the international law aspects.

At the time of writing, the Australian Government has just filed its claim before the International Court of Justice. The possible outcome of this claim will be considered, in light of the issues of tortious damage to Australian peoples,[5] pollution, and freedom of the seas.

BACKGROUND

In the course of developing a new generation of submarine-launched ballistic missiles designed to strike further and harder than the present

[1] Reference is made to the 1972 and 1973 tests, as fresh evidence of damage, *infra*, has been produced since the 1968 series. For commentary on the 1968 series, see Mercer, 'International Law and the French Nuclear Weapons Tests' (1968) *New Zealand Law Journal* 405-8; 418-21.

[2] 'Nuclear Arms and the Pacific' (1971) 25 *Australian Outlook* 295.

[3] See *The Age*, 3 May 1973, 10 for a report of the French Reformed Church calling on the government to halt tests.

[4] *Ibid.* The ecological movement, Friends of the Earth, commenced demonstrations in Paris on 6 May 1973. It is noteworthy that a necessary part of the ecological argument considers the fish affected by the radioactivity in the area. Margolis points out the devastating effect of the 1954 American tests in this respect. See Margolis, 'The Hydrogen Bomb Experiments and International Law' (1955) 64 *Yale Law Journal* 629, 638. His figures are illogically called into question (emphasis being placed on the fact that Japanese condemnation of the fish was 100% effective, not that the fish had to be condemned in the first place) by McDougal and Schlei, 'The Hydrogen Bomb Tests in Perspective: Lawful Measures for Security' (1955) 64 *Yale Law Journal* 648, 693-4.

[5] Another issue considered by Mercer, *op. cit.*, 419, is the rights of *colonial* peoples based on Articles 73 and 74 of the *Charter of the United Nations*. These articles would be contravened by France should injury and damage occur to inhabitants of her colonies. The *raison d'etre* of these articles is to preserve the notion of self-determination and protect the colonies from flagrant abuses. They will be violated should proper evidence be tendered, and in this respect constitute an issue at international law. However, since this comment is primarily concerned with the tests *vis-à-vis* Australia and the damage outlined in the report of the Australian Academy of Science, tabled in Federal Parliament on 2 May 1973 (see also Atomic Weapons Tests Safety Committee and the National Radiation Advisory Committee reports tabled concurrently), and since Australia would not be a sufficiently 'interested party' in the sense of raising this argument against France in international litigation, this issue will not be discussed in the test.

M-1,[6] France chose in 1966 the Mururoa Atoll of the Tuamoto Archipelago above which to explode the nuclear weaponry which is undergoing development, and tests have continued in this area of the Pacific with almost annual regularity. This Atoll is away from the major shipping and air lanes, and is some 3,700 miles away from Australia. Exploding the device high above the ground, as France is doing, minimizes danger from radioactive fallout. A 30 day advance warning of the tests is usually issued by France as a further safety measure in order to clear the area. However, many States were still unhappy that the tests were being carried on at all, and began conferring with one another as to the possible solution as well as protesting to France,[7] but neither course of action proved fruitful as France did not halt her testing.

In February, 1973, the Prime Minister of Australia, Mr Whitlam, commissioned the prestigious Australian Academy of Science to report on the effects of past and future nuclear testing. The report, brought to the attention of the French Government by Senator Murphy in April and tabled in Federal Parliament on 2nd May, 1973, is not sensational. It reveals that French nuclear tests could result in more than 1,000 deaths and disabilities in subsequent generations of Australians; that the tests could cause about 10 cases of thyroid cancer in Australia and many more cases of other forms of cancer. The French have seized upon the conditional nature of the damage and have rejected the report of the deleterious effects of the testing to Australia,[8] and as at writing have agreed only to a meeting between French and Australian scientists in Australia.

However, if there is a dispute about the effects of the testing at scientific level, the International Court of Justice could appoint its own independent experts to tender evidence.

INTERNATIONAL TORT: STATE RESPONSIBILITY

Although there was considerable protest against the United States testing in the Pacific in 1954, and against France's previous Pacific tests, this is the first major attempt by a Government to discover as far as science permits the exact damage wrought to its peoples by the arms race, and to use this report as the basis for international litigation. This scientific evidence may, therefore, be the pivotal element in the present

[6] The range of the M-1 is 1600 miles, and its warhead is atomic; the proposed weapon will travel 2,000 miles and carry a thermonuclear payload.

[7] See September, 1971 *Current Notes on International Affairs,* 509. *The Australian,* 21 April 1973, 1, and *The Age,* 23 April 1973, 1.

[8] See Mercer, *op. cit.* who suggests that international law was not contravened by the 1968 series at the same location because no damage had been established. Also see McDougal and Burke, *The Public Order of the Oceans* 772, and McDougal and Schlei, *op. cit.* 692 ff, who attempt to show what minimal damage was caused by the United States testing at Bikini and Eniwetok Atolls in 1954. For a contrary opinion to this, see Margolis, *op. cit.* 637. However, he deals with damage to fish and to a vessel on the high seas rather than to people within another State's territory.

case. Its adequacy will be the determinant in arguments of international law and it will hopefully bring success to Australia in international law, if not in international relations, where other States have failed. It will be the basis of the claim under international tort and abuse of right.

The development of international law is not as precedent-oriented as the common law. However, since one of the sources of international law is judicial decisions,[9] the relevant international precedent will be examined: the *Trail Smelter Arbitration,*[10] and the *Corfu Channel* case.[11]

The former case involved a Canadian smelter in the Columbia River Valley not far from the Canadian-United States boundary. An increased output together with installation of higher smokestacks combined to produce more sulphur dioxide fumes in higher concentrations which travelled further afield, particularly across the United States boundary. The United States complained that the area of damage in the State of Washington was thereby increased and based its subsequent legal claim on nuisance, alleged to have been committed by a Canadian corporation and to have caused damage to United States citizens and property in the State of Washington.[12]

This is distinguishable from the present set of facts because the subject matter of the dispute did not directly concern the two Governments, but this distinction can be overlooked in the light of the greater significance of the Tribunal's decision that international law principles regarding trans-boundary pollution are applicable.[13]

The Tribunal accepted the principle (which was not questioned by Canada) that a State at all times has a duty to protect other States against injurious acts by individuals from within its jurisdiction, but encountered some difficulty in determining what, *pro subjecta materie,* it deemed to constitute an injurious act. The latter question was never answered by the Tribunal *per se,* but precedent was used apparently to illustrate that a test of reasonableness should be applied.[14] The Tribunal then concluded that[15]

> No State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the

[9] Satute of the International Court of Justice, s. 38(1)(d).

[10] 3 *Reports of International Arbitral Awards,* 1905.

[11] *The Corfu Channel Case* (Merits) (1949) I.C.J. Rep. 4.

[12] For a thorough account, see Read, 'The Trail Smelter Dispute' (1963) 1 *Canadian Yearbook of International Law* 213.

[13] 3 *Reports of International Arbitral Awards* 1905, 1963. The mode of incorporating international law into the judgment was to follow decisions of the Courts in the United States, which are 'in conformity with international law'. Note page 1966 of the report, which held Canada responsible 'in international law' for the conduct of the Trail Smelter.

[14] *Ibid.* a case between two cantons decided by the Federal Court of Switzerland was used as precedent. Citations given for this case: R.O. 26, I, p. 450, 451; R.O. 41, I, p. 137.

[15] 3 *Reports of International Arbitral Awards* 1905, 1965-6.

properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.

The *Corfu Channel* case,[11] decided by the International Court of Justice, strengthens this pronouncement. Although the conditions leading to adjudication did not consist of transboundary pollution as in *Trail Smelter*[10] but of Albania's failure to give notice to British ships of minefields in her territorial waters, the decision was essentially based on the doctrine of State responsibility.[16]

> (Albania's) obligations are based as certain general and well recognized principles, namely: elementary consideration of humanity; the Principle of Freedom of Maritime communication; and every State's obligation not to allow knowingly its territory to be used for acts contrary to rights of other States.

Applying the doctrine of State responsibility without more to the explosions, it would appear that France is not acting in accordance with this principle if it is causing damage in or acting contrary to the rights of another State. Hitherto argument applying these principles in the context of nuclear testing has principally been confined to damage to the high seas rather than to other States,[17] so it is now necessary to balance interests and determine what are a State's reasonable rights.

The problem of reasonableness can be stated in terms of France's unreasonableness in undertaking the testing, and in terms of whether Australia's rights have been unreasonably affected. McDougal and Burke[18] have argued in terms of the American *Restatement of Torts*,[19] which determines reasonableness by balancing the utility of the conduct causing damage and the gravity of harm to the injured party. They apply this definition to international law to show that the utility of providing for national defence was supremely more important than was any harm inherent in the inevitable radioactivity. This is in contradistinction to the international authority of the *Trail Smelter* case,[20] which suggests that unreasonableness be viewed in terms of serious consequences, and utility

[16] (1949) I.C.J. Rep. 4.

[17] See Margolis, *op. cit.* 692, who attempts to apply the doctrine of the high seas, but concludes that it is difficult to reconcile with the notion of freedom of the seas, especially since no comprehensive anti-pollution convention regarding radioactive pollution of the seas has been effected. McDougal and Schlei justify the pollution in the interest of national defence; *op. cit.* 692 '. . . the fact that a copper company in British Columbia was required to take measures available to minimize damage to a downwind agricultural community, scarcely reflects policies relevant for appraising the reasonableness of measures taken in mid-ocean by a nation-state faced with imminent threats of atomic attack'. One suspects that the cry of 'wolf' is couched in this evaluation. In any event, this cannot be applied with equal force to France, who is not a major world power, is technologically behind current nuclear developments, and who could easily turn to collective self-defence in lieu of duplicating existing nuclear technology.

[18] *Ibid.* 691.

[19] *Torts Restatement* ss. 827, 828 (1939).

[20] 3 *Reports of International Arbitral Awards*, 1905.

of conduct is not mentioned.[21] The latter was not an issue, of course, but it is still noteworthy that the Tribunal did not hand down *dicta* on that point.

In any event, it is imperative that the interests be balanced in determining reasonableness, and in doing so a wider view must be taken than that propounded by McDougal and Burke. Regarding the harm done, it is obvious that this should not be a statistical issue; one cannot compare the number of deaths and diseases from natural causes or accidents with the number of like afflictions caused by irreversible radioactive fallout in an effort to illustrate that the latter damage is minimal. Emotive as this sounds, it possesses legal significance in postulating how many people must be so afflicted before the line can be drawn establishing 'serious consequences'.

Against the humanitarian view that this type of consequence is quite serious even if it is relatively minimal, lies consideration of the utility of the conduct, and the following should be taken into account: the possibility of underground testing which will cause no radioactive harm during or after the tests; the trend towards collective self-defence, and regional groupings (in point is the European Economic Community to which one other nuclear power belongs); the attempts to limit the arms race,[22] rendering rapid weapon development superfluous especially considering France's technologically retarded position in the arms race; and other political and economic advantages[23] which France would stand to lose if she continues the tests.

All things considered it may confidently be stated that in the balance, the utility of the conduct must be secondary to the gravity of harm. Applying the 'serious consequence' test alone, the same result can be achieved.

POLLUTION

The pollution of the high seas and atmosphere may be regarded as another factor in assessing the position of the parties at international law. Specifically, the argument of maritime environmental preservation, particularly with regard to the subsistence and economy of Pacific Islanders has been employed in the past by Australia to attempt to enjoin France from testing.[24]

[21] Recall *Trail Smelter* words, see text at n. 15. '. . . when the case is of serious consequence and the injury is established by clear and convincing evidence.'

[22] The relative success of the S.A.L.T., the *Moscow Treaty* (1963) and the *Treaty on Non-Proliferation of Nuclear Weapons* (1968); it should be noted that there is no customary international law prohibiting nuclear testing.

[23] See *The Australian,* 19 April 1973, p. 15: 'In particular, the most serious risk for the French would be the loss of the uranium-enrichment project in Australia. Because of the path French nuclear engineering has taken in the past decade, some independent access to a source of enriched fuel appears crucial to the future of the French Programme.'

[24] *Current Notes on International Affairs* 509.

There is no universal convention or widely-recognized international customary law barring pollution of the high seas and the atmosphere, but it is submitted that a substantial *corpus* of practice and conventions has been accumulating in recent years to give this tack of the case against France some strength. Attention will be limited to that part of the *corpus* which applies to radioactive pollution as opposed to other types, such as oil or smoke pollution. However, it should be borne in mind that this is just a part of the myriad conventions, treaties and practices which constitute the emerging field of environmental law.[25]

Because, therefore, protest against this specific type of pollution has been made at international level, it is desirable to examine the pertinent body of law to lend support to that protest[26] even if it is in embryonic stage and not ultimately decisive at international law.

Article 25 of the 1958 *Geneva Convention on the High Seas* deals with radioactive waste and materials.[27] It does not thrust a direct duty upon the shoulders of the individual States to refrain from causing radioactive pollution, except with respect to the dumping of radioactive waste. In all other situations, conceivably including fallout from nuclear testing, States are merely invited to co-operate with the competent international organizations in taking measures for the prevention of pollution of the high seas or superjacent air space. The effect of this article is little more than mere recognition of the problem. It is helpful, however, in showing that States agree that radioactive pollution is a matter to be solved, even if they did not make it illegal *per se*, which would be in any event a difficult consensus to achieve at international law.

There are also a number of private international conventions[28] which impose strict liability for nuclear damage. Again, while they do not constitute a general rule of international law against pollution, and thus are not binding either publicly or on non-signatories, they manifest a growing concern over the matter and go towards making up a general practice which may eventually be accepted as law.

To augment evidence of a growing general practice with respect to radioactive pollution from nuclear testing, one may also look to additional sources: the resolution against nuclear testing passed at the Stockholm

[25] See, for an example of the body of environmental law: (1971) XXI, 2, *University of Toronto Law Journal*, 173-252.

[26] See, for example, the *Anglo-Norwegian Fisheries Case*, (1951) I.C.J. Rep. 116 for the issue of the importance of protest at international law.

[27] Article 25 reads:

'1. Every State shall take measures to prevent pollution of the seas from the dumping of radioactive waste, taking into account only standards and regulations which may be formulated by the competent international organizations.

2. All States shall co-operate with the competent international organizations in taking measures for the prevention of pollution of the seas or air space above, resulting from any activities with radioactive materials or other harmful agents.'

[28] For a full account, see Brennan and Holder, *The International Legal System* (1972) 667-8.

Conference on the Environment in June 1972, which may be regarded as a vehicle expressing world opinion against the dangers of radioactive fallout; and the 1963 *Nuclear Test Ban Treaty* and subsequent *Treaty on the Non-Proliferation of Nuclear Weapons* 1968, both of which banned nuclear tests in the atmosphere, in outer space and over water. Underground nuclear tests were banned only if they 'cause radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted'. An overwhelming majority of the international community have approved the Stockholm Resolution and have signed the Moscow Treaty, which goes toward showing that international society recognizes that nuclear tests and the radioactive fallout resulting therefrom constitute a danger for the human race, and is attempting to institute a regulatory regime to counter this danger. The thorn can be found in the fact that France has been conspicuous in withholding approval from these regimes, lessening their legal force *vis-à-vis* her activities.

The pollution issue by itself is based on a substantial but legally tenuous body of custom, practice and treaties. At best, it can be used to show the unreasonableness of France's actions in the context of the arguments of State Responsibility and use of the high seas.

FREEDOM OF THE SEAS

The classic notion of freedom of the seas, which Oppenheim says is based on the freedom of communication and especially commerce,[29] has been preserved in the 1958 *Geneva Convention on the High Seas* as follows:

> Article 2.
> The high seas being open to all nations, no State may validly purport to subject any part of them to its sovereignty. Freedom of the high seas is exercised under the conditions laid down by these articles and by the other rules of international law. It comprises, *inter alia,* both for coastal and non-coastal States:
>
> (1) Freedom of navigation;
>
> (2) Freedom of fishing;
>
> (3) Freedom to lay submarine cables and pipelines;
>
> (4) Freedom to fly over the high seas.
>
> These freedoms, and others which are recognized by the general principles of international law, shall be exercised by all States with reasonable regard to the interests of other States in their exercise of the freedom of the high seas.

The importance of this convention is brought out by its preamble, which states that what follows is a codification of the rules of international law relating to the high seas (*i.e.* that it is a declaratory, rather than a

[29] Oppenheim, *'International Law'* (8th ed. 1948), 593.

legislative convention and thus has force as against non-parties), and that it gained almost universal acceptance. The issue to be determined is whether France is infringing the rights of other States to their freedoms, or whether one of the freedoms could be that of testing nuclear weapons, and if so, what restrictions are applicable.

With respect to the first question, it is arguable that all three stages of the testing could be illegal: the creation of large danger zones, the testing itself and the after-effects of the testing.

Prima facie it would appear that the creation of large danger zones by itself constitutes a violation of the traditional freedoms enumerated in Article 2. However, it has been argued[30] that the maritime powers have carried out the practice of creating large danger zones for their naval manoeuvres for such a long time that this has itself become a freedom,[31] and that this freedom is transferable to creation of danger zones for purposes of nuclear testing. This proposal is said to be justifiable because the list of freedoms is not exhaustive, reasonable regard to the interests of other States is being taken, and self-defence is of paramount importance.

What renders the argument unjustifiable is the basic difference of the activity undertaken. Naval manoeuvres have been taking place over a long period of time, whereas nuclear testing has not. Naval manoeuvres only last a limited period of time, whereas the harmful radioactivity lingers on. The maritime countries of the world have accepted the practice of manoeuvres, and have protested against the testing. Taking all this into account, it is with the utmost difficulty that international law could accept first the blocking off of large portions of the sea in contravention of the freedom of the seas principle, then that restriction coupled with such a destructive activity as a reasonable use of the high seas.

Earlier testing on Mururoa itself has been excused by weighing all the relevant factors, said to be:

(a) the degree of pollution already present in the test area,
(b) the necessity of using the high seas as a proving ground,
(c) the size of the danger zone and the degree to which it impinges on navigation,
(d) fishing and aerial flight in the area, and
(e) the period of testing and precautions taken to minimize or obviate any possible harmful consequence.

When compared to the benefits of the testing to France, the author concluded that the latter triumphed.[32]

[30] McDougal and Burke, *op. cit.* and McDougal and Schlei, *op. cit.*
[31] The same authors argued that these zones were justifiable because national defence warranted them.
[32] Mercer, *op. cit.* Added to this list should be the dependence of a territory's economy on the fishing in the area which, as the 1971 protest pointed out, is considerable.

It is submitted that, even accepting the benefit to France, testing in an area which, although directly above French territory is felt in and above the adjacent high seas, is difficult to justify particularly as against (a) and (b). The degree of long-term radioactive pollution in the area cannot be negligible, since the same area has been used over the past several years; and the alternative of testing underground, even though it involves greater expenditure and is technically more difficult, throws serious doubts on the necessity of using the high seas as a proving ground. All this should be considered in light of the various protests made by the South Pacific States against the use of the high seas for those purposes, which reinforce the argument that the freedom of the seas principle has been violated.

Finally, the after-effects of the testing manifest themselves in radioactive pollution which in turn affects the marine life. It will be recalled that although the emerging body of rules does not render the radioactive pollution illegal without more, it still applies heavily to the reasonableness of the activity on the high seas. As for affecting the marine life, international law has traditionally taken a firmer stand. The International Court of Justice has heeded the degree of dependence of a territory's economy on the fish in the area,[33] and this same principle has been the rationale at international law for claiming exceptionally wide fishery limits. It would have to be shown that the marine life is, or would be likely to be, adversely affected by the tests, and that the economy of the islands is suffering or would be likely to suffer as a result. Substance is given to this principle by the terms of the 1971 *communique* of the forum of South Pacific leaders, attended by the Representatives of Australia, New Zealand, Cook Islands, Nauru, Fiji, Tonga, and Western Samoa, which expressed concern at the potential hazards to health and 'to marine life which is a vital element in islands subsistence and economy'.

On the whole, it is obvious that the *Convention on the High Seas* does not render nuclear testing over the high seas illegal; in fact, the term 'with reasonable regard to the interests of other States' was inserted as a reference to nuclear testing. However, France's testing has now reached a point where the balance against the interests of other States—and not merely those geographically affected, but the interests of the world community as a whole—is found wanting. This therefore leaves room for a well-grounded decision that France is not acting in accordance with international law. Indeed, if it could be smugly contended that the interests of other States have not been offended, one must query how much more evidence must be tendered to demonstrate that their interests at international law are being seriously bruised.

[33] *Anglo-Norwegian Fisheries Case* (1951) I.C.J. Rep. 116.

JURISDICTION OF THE INTERNATIONAL COURT OF JUSTICE

The jurisdiction of the Court in contentious proceedings is based on consent. France has become a party to the Court, accepting its jurisdiction under Article 36(2) of the Statute of the International Court of Justice, but excepting, *inter alia*, disputes concerning activities connected with national defence. It is this exception which France is using to avoid appearing before the Court, and which the Court must consider to determine whether it possesses jurisdiction, enabling it to proceed to judgment. Australia, in an attempt to exhaust every possible legal argument, has countered that both States were parties to the 1928 *General Act for the Pacific Settlement of Disputes*, and that this should be regarded as the governing treaty, with respect to acceptance of jurisdiction of an international tribunal, particularly since it contains no exception with respect to matters of national defence. This appears to be a weak contention, however, as treaty law takes the declaration or treaty later in time as cancelling any conflicting treaty made in the past.[34] Thus, the Court will probably regard the current declaration under the optional clause (Article 36(2)) as the correct position.

Assuming that France does not appear before the Court, that tribunal, if it decides that it possesses jurisdiction in the matter, can still take interim measures for protection[35] and hand down a judgment on the merits. Strictly speaking, France will not be legally bound to follow this decision, but its strength would still be felt in two other ways:

(1) A decision would add to the body of international customary law on the issues involved, and as such would act as a precedent for any future comparable situation, and

(2) it would provide a sound basis which international organizations and other States could employ to justifiably issue extra-legal sanctions, such as economic boycotts.

The remaining action open to Australia in the event of France's non-compliance with a judgment or denial of jurisdiction by the Court would be to raise the matter before the Security Council, which may then either take such action as it sees fit or request an advisory opinion from the Court. Since France is a permanent, veto-wielding member of that body, however, benefits from this course of action would be doubtful.

CONCLUSION

The foregoing evaluation of the issues at international law reveals that legally there is a strong case against France's volatile activity. The

[34] See Article 59 of the *Vienna Convention on the Law of Treaties*, which allows for termination of a treaty if the parties enter into a subsequent and incompatible treaty on the same subject-matter. See also O'Connell, *International Law* 1071 n. 11.

[35] Statute of the International Court of Justice, Art. 41.

doctrines of the State responsibility and of the freedom of the seas coupled with the effects of pollution carry the weight of the argument against France. However, the case is not being contested since France has chosen to make full use of one of the most basic international law doctrines of them all: State sovereignty. As well as relying on this doctrine, she rests her case on national defence to justify both the tests and non-appearance before an international tribunal. France has thereby taken a political decision to invoke one concept of international law in order that she may ignore others.

It is an unhappy reflection on our world that States are reduced to bickering about the magnitude of harm and the requisites of jurisdiction in order to attempt to persuade one State to carry out nuclear testing underground, let alone to discourage that State from developing more destructive thermonuclear warheads.

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