

**Zeitschrift:** ASMZ : Sicherheit Schweiz : Allgemeine schweizerische Militärzeitschrift  
**Herausgeber:** Schweizerische Offiziersgesellschaft  
**Band:** 140 (1974)  
**Heft:** 9

**Artikel:** A European Nuclear Force  
**Autor:** Dodd, Norman L.  
**DOI:** <https://doi.org/10.5169/seals-48831>

### **Nutzungsbedingungen**

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

### **Conditions d'utilisation**

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

### **Terms of use**

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

**Download PDF:** 17.07.2025

**ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>**



## A European Nuclear Force

Colonel Norman L. Dodd Retd.

In the summer of 1973 the French, in spite of almost hysterical protests from the Labour Governments of Australia and New Zealand and an outcry from the Lefties of the world, exploded a series of nuclear devices in the Pacific as part of their continuing drive to become a first rate nuclear power.

At the same time the British House of Commons' Expenditure Committee reported that the "Polaris" submarine fleet provided an adequate British nuclear deterrent for the present, and Lord Carrington, the Defence Minister, testified that Britain had every intention of retaining an independent nuclear deterrent for the years to come.

These two facts are inter-related: they are both costly political decisions, they are made by two of the members of the European Economic Community and by two members of the NATO Alliance albeit one of them no longer takes any part in the integrated military arrangements. On the surface it would seem sensible that the two countries should move even closer together and combine to form some form of joint nuclear force. But because of the historical back-ground and for reasons of national prestige things are not as simple as that!

### *The British Point of View*

The British Conservative Government is, perhaps, more willing to consider moves towards such a force than are the French. Mr. Edward Heath, the Prime Minister, has said that the future of nuclear power in Europe depends upon the British and French nuclear forces being, in some way, "held in trust" for Europe coming under the control of a planning committee modelled on the present "McNamara Committee". During the negotiations which led to Britain's entry into the Common Market Mr. Geoffrey Rippon, the British "Mr. Europe", stated that once Britain had joined she would help in setting up consultative machinery aimed at harmonising foreign policy and strengthening European defence; this would have to include nuclear arrangements.

Lord Carrington went further when he said during a defence debate in the Commons that he could foresee the creation of a European nuclear force. He did not visualise such a force being comparable in size to that of the United States. He continued that he hoped its creation would not result in any weakening of Britain's partnership with the United States.

### *The French Point of View*

It is the latter point which is perhaps the most important because the whole of Britain's nuclear programme since its conception in World War II has been completely involved with her Trans Atlantic Ally, whereas that of France has been built up by her own efforts and at a vast cost in money, time and material. She feels strongly that her position as a "great power" depends upon her possession of adequate nuclear forces and that the defence of France must remain solely in the hands of her own National Government.

M. Michel Debré has made this very clear. He said in 1972 that "defence has to be national if it is to be credible" and added that as far as Anglo-French nuclear co-operation was concerned



Illustration 1. The BAC-Breguet Anglo French "Jaguar" will have a tactical nuclear capability. It is now entering service with the RAF and French Air Force.

"we know the impossibility of going beyond mere words". This is Gaullist talk and maybe President Pompidou or his successor may not feel quite so strongly in the years to come especially as the cost of the national programme becomes increasingly onerous.

It is therefore worth examining the nuclear forces of the two Nations, both present and foreseeable future developments, to see whether they are in any way complementary and could, in the future, form the basis of a European Nuclear Force. A force which could become an essential part of Europe's defences should the Americans decide to withdraw their forces from the Continent.

### *The British Nuclear Force Navy*

The principle British deterrent consists of her four nuclear "Polaris" armed submarines built in Britain at a cost of about 160 Million pounds and even then with extensive help from the Americans. These submarines displace 8,400 tons submerged and have a crew of 13 officers and about 125 ratings. Their maximum speed submerged is believed to be in excess of 25 knots. Sixteen "Polaris A3" missiles bought from America are carried in each submarine but the warheads are British designed and manufactured. Each warhead carries three 200 kt weapons but, unlike the United States multiple warheads, they cannot be separately tasked. Each missile must be launched independently but all sixteen can be fired in about 16 minutes with the submarine still submerged. The range is about 2,500 nautical miles which allows the submarines considerable latitude in their cruise areas; the principle Soviet targets can be reached from the Eastern Atlantic, the Arctic and Pacific Oceans.

The nuclear submarines, which must keep radio silence during patrol, are controlled via Very Low Frequency stations at Rugby and elsewhere in the world. They are tasked in conjunction with the United States nuclear forces through the Joint Strategic



Planning System at SAC Headquarters in Nebraska though ultimate control resides with the British Government. The cost of the operation is borne by the British taxpayer and comes to about 2.5 % of the total defence budget.

#### *Air Force*

The second string in the British "nuclear team" is the fifty strong "Vulcan" bomber force, ageing but by no means obsolete. These aircraft first went into squadron service in 1957 and, before handing the task to the Royal Navy, for many years provided Britain's only strategic deterrent. They are now part of Saceur's strike forces. The "Vulcan Mk 11s" presently in service are no older than the US B 52s or the Russian Tupolev 16 "Badgers". "Vulcans" are configured to carry both conventional and nuclear weapons over very long distances in all weather conditions at any level from "low Low" to over 50,000 feet at nearly the speed of sound. Still a formidable force they can be re-fueled in flight by "Victor" tankers and are therefore strategically very mobile. They have a quick reaction time because all four Rolls Royce engines can be started simultaneously allowing the aircraft to be air borne within 2 minutes of starting up.

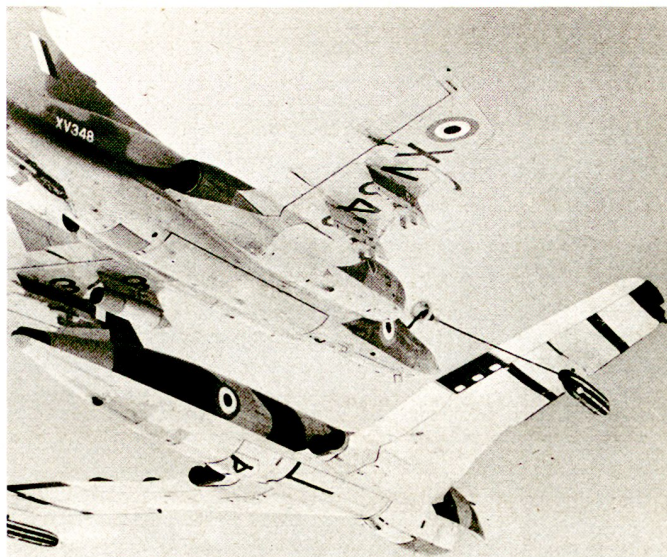


Illustration 3. A "Victor" tanker refuels a "Buccaneer 2". – The latter is nuclear capable, and some squadrons are allocated in a strike/attack role to NATO.

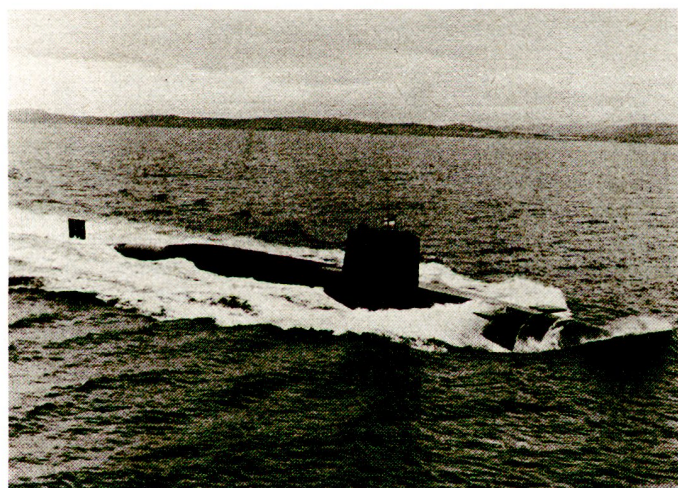


Illustration 2. Britain's nuclear deterrent is now in the hands of the Royal Navy. HMS "Resolution"; a "Polaris" submarine.

Next comes Britain's force of about ninety "Buccaneer" tactical strike/attack aircraft. These aircraft carry a crew of two and a very sophisticated navigation and attack system for use in the low level in support of Saceur in the European theatre. The "Buccaneer" was first designed for use by the Royal Navy but on the cancellation of the order for the US F 111 and the decision to phase out Royal Navy fixed wing aircraft it became part of the RAF's armoury. Although it lacks the speed, range and load carrying capacity of the F 111 it is still an excellent aircraft which would be able to give a good account of itself until it is augmented in the late 70s by the BAC-Breget "Jaguar" and replaced in the early 80s by the Anglo German Italian Multi Role Combat Aircraft.

#### *Army*

Lastly the British Army in Germany has the nuclear "Honest John" rockets of the 1st Artillery Brigade and the 8 inch bat-

teries in each divisional artillery. But the warheads for these tactical weapons remain firmly under the control of the US Authorities and Britain, as far as is known, has not developed any purely British warhead for any land weapon.

#### *The French Nuclear Force*

The French nuclear armoury is still being developed. It is based primarily on three strategic forces: the nuclear submarines, intermediate range ballistic missiles and thirty six "Mirage IV" aircraft. Tactically she is developing the "Pluton" rocket missile with a range of about 75 miles and carrying low yield warheads. The first of these weapons are coming into service in 1973 and it is thought that about 100 will be produced.

#### *Navy*

Two nuclear submarines carrying atomic missiles are already at sea. They are the "Redoubtable" and the "Terrible", a third one enters service in late 1973 and a further two are due by 1976. They displace 9000 tons submerged, are 220 feet long, have a crew of 12 officers and 130 men and a similar speed to the British submarines. Presently they are armed with the comparatively short range 1200 nautical mile M 1 missiles which considerably restricts their operating area and so makes them more vulnerable to detection. The longer M 2, which weighs 44,000 lbs, is due in service in 1974 or 1975, it should have somewhat better characteristics but the greatest improvement is believed to be in the warhead rather than in the range. The M 4, which is not due until the 'early eighties, is expected to have a range of about 3000 nautical miles. These missiles have single warheads, a decision made to reduce the delay in making the system operational.

The French, like the British, hope to keep at least two submarines on permanent patrol. At present they attempt to keep one but this must be difficult to carry out. The submarine fleet is controlled from radio stations at Rosnay (Indre) and Penearau (Finistère) and their home base is near Brest at L'île Longue.





Illustration 4. An "Honest John" rocket. The Army is to be re-equipped with the longer ranged US "Lance".

### *Strategic Missiles*

The land based SSBS S 2 ballistic missiles, of which there are at present two squadrons totalling eighteen, are part of the "Groupement des Missiles Stratégique" and are in hardened silos in the Plateau d'Albion north of Marseilles. The silos are about 80 feet deep and can withstand the over pressure of a medium sized nuclear weapon exploding about a mile away but not a "direct hit". For this reason they are all at least 2 ½ miles apart. The range of the missiles is about 1,500 miles with what is reputed to be a 150 kiloton warhead. The first squadron became operational in the summer of 1971, the second soon followed and a third of nine more missiles is scheduled in the next few years. The next development is expected to be the SSBS S 3 with a IMT warhead.

### *Air Force*

The "Mirage IV A" force has been operational in this strategic role since 1964 and are scheduled to continue past 1975. The "Mirage" only has a range of 1000 nautical miles and so, unlike the «Vulcan», can hardly be considered a true long range bomber. It would have to be re-fueled in the air before it could reach anywhere of importance in Russia; an operation which would be extremely hazardous. There are only 36 aircraft in all and they are dispersed on nine bases in France and would be vulnerable to a "first strike" attack. It would seem improbable that many, if any, would reach their targets.

### *Army*

Until very recently the French Army has been without any form of tactical nuclear capability for in 1966 the intensely nationalistic de Gaulle withdraw France from the integrated agencies and military headquarters of NATO and so lost the tactical warheads supplied by the United States under the "double key" arrangements. The gap will be partly filled by the already mentioned "Pluton" 75 mile range missiles coming into service in 1973/74. To be of any use in the early stages of a Soviet onslaught they will have to be assigned to the 60,000 strong French Army in Germany. Which will raise the inevitable political question of whether the German Government will allow the stationing of nuclear weapons on their soil without having some control over their targetting and release. A control which, according to present German defence policy, must be co-ordinated through the NATO Alliance.

### *The Advantages of Co-operation*

From this cursory glance at the nuclear capabilities of both countries, and leaving aside the important political considerations, it seems obvious that there are fields where co-operation would be both economically and operationally beneficial.

### *Navy*

The British will shortly need a new or improved range of missiles for their submarines as the present "Polaris" become outdated. The US "Poseidon" which is heavier and has a very long range is not really suitable for their requirements. The next US generation of missiles are the "Tridents" which will require a new submarine and will be vastly expensive. If the French and British combined their technical efforts using elements of the French M series missiles and the British multi war heads time and money could be saved. Presuming, of course, that the Americans would allow the British to pass on some of the "know how" in the mounting and operation of missiles in the British built but partly American designed submarines. There are signs that the United States Government would not be too adverse to this course. Secondly the British, and other European countries, are due to replace the outdated "Honest John" rocket using the US controlled low yield warheads. Maybe the "Pluton" could have become a joint weapon; though it is already probably too late for this to happen because Lord Carrington has been nominated the "European Negotiator" for the purchase of the US "Lance" missile on behalf of Belgium, Germany, the Netherlands and Britain.

### *Air Force*

In the air both the "Vulcan Mk 11s" and the "Mirage IV As", though formidable aircraft, are coming to the end of their useful lives. The "Vulcan" with its longer range still is perhaps more credible than the "Mirage" and some co-operation is lengthening the useful lives of both of them might be possible. In the tactical role the British have the "Buccaneer" hopefully with the Anglo German Italian MRCA following on. It is not known whether the French intend to use any future marks of the "Mirage", or indeed the Mk IVs or "Jaguars", in a tactical role but here again there seems to be a field for economical co-operation. Britain has abandoned any development of "hardened" inter continental ballistic missiles in the belief that they are no longer a military and economic proposition in an island the size of Britain.



## Army

In the field of "pure artillery" no doubt Britain and France could jointly develop nuclear warheads of small yield for the present and future range of heavy and medium artillery. Again a sensible and economic proposition but one which is unlikely because Britain appears to be perfectly satisfied to be dependent on the US for these weapons under the double key system and France, so far, has shown no sign of wanting such weapons. In fact the production of the "Pluton" by France is in some ways in opposition to their view of their defence requirements. General De Gaulle and General Charles Ailleret, when he was Chief of Staff, were both strong supporters of the "maximum deterrent"; should France be seriously attacked all kinds of weapons would be used immediately and, due to the small number of nuclear weapons available, they would be directed upon large Russian cities – or of any country which attacked France. The "tous azimuts" strategy. This has been somewhat modified under General Maurice Fouquet who has moved a little closer to the US and NATO strategy of flexible response; hence perhaps the "Pluton" which at least widens the French option.

Operationally it would certainly make sense for the control of the British and French submarines to be centralised. Both countries are going to find it difficult to keep a meaningful number on patrol at any one time; it would much increase their deterrent threat if their deployment areas and targets at least were co-ordinated.

The same can be said for air force operations and the targetting of the French intermediate range missiles. Such co-ordination could take place without complete integration though this is the goal of the "One Europe" enthusiasts. A goal which way back in the 1950s with the concept of the Europe Defence Union appeared to be within the bounds of possibility. To-day, even with the enlarged European Economic Community, it seems as far away as ever.

### *No European Nuclear Force Without Political Union*

But without this European political union there can be no one European Policy Making Government, and without such a body with sovereign powers there can be no complete nuclear or even military integration between Britain and France either in or out of the NATO Alliance.

We therefore return, as always, to the overriding political problems. Although the British Prime Ministers of both major political parties have stated that "Britain will keep her own nuclear deterrent" they are perfectly willing to have it integrated into the US strategic plan and/or assigned to the NATO Commanders as required in support of NATO defence plans. They have repeatedly stated that Britain's defence depends upon the effectiveness of the NATO Alliance and upon the participation of the United States in the Alliance.

The French have no inhibitions on this score and have repeatedly stated that they trust their security and defence to none but themselves. Part of this attitude is based on past experiences and part on national pride: always of vital importance to a Frenchman. Indeed of such importance to De Gaulle that he withdrew France from the NATO military organisation because he considered it was dominated by the Americans. Until the French Forces return to the NATO fold and take up their vacant chair on the NATO Nuclear Planning Group there can

be no possibility of a nuclear agreement between Britain, France and America even though Britain and France might want it. Although technically the American Government could, under the 1958 Amendment to the Atomic Energy Act, provide assistance to the French politically, she simply could not do so without serious affront to West Germany, Italy and her other NATO Allies.

The circle is therefor complete. Unless France returns to the NATO Military Alliance and so becomes a "fit" partner once again for the United States, there can be no close collaboration or co-operation with Britain in the nuclear field however economically and militarily sensible it may appear to be. This return does not seem probable in the present generation of French political leaders though pure economics might enforce it in the 1980s. Europe is in a period of flux; the enlarged EEC, the SALT disarmament talks, balanced force reductions, the ending of the US draft and the East West detente in Germany all will have their effects. Maybe we will see the beginnings of co-operation in some form of European Nuclear Co-ordination Group as perhaps envisaged by Mr. Heath in his much quoted "In Trust for Europe" speech.

Certainly there is room for Anglo-French economic co-operation in the nuclear field especially in the 1980s when the replacement for the "Polaris" missile becomes essential. Or it may come a great deal sooner should the post Vietnam/Watergate period in the United States produce a total revulsion against overseas commitments. In this event the Anglo/French nuclear force would not be just small pawns in the Great Power Stakes but could become a vital deterrent force against an attack by the Soviet Union and her Warsaw Pact Allies designed only to subjugate Central Europe. Unlikely? Yes, but nothing is impossible in this uncertain world.

Illustration 5. HMS "Resolution" has just fired a "Polaris" missile while submerged.

