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PRIME MINISTER

NATO LONG-RANGE THEATRE NUCLEAR FORCES

The modernisation of long-range theatre nuclear forces is of high importance to NATO defence. It has moreover become of political significance reaching beyond the strictly defence considerations; it is now a key test of NATO's collective will to ensure its security. The attached memorandum sets out the issue, the present position and the options open to us.

2. I am convinced that we must give our full political support to a resolute Alliance effort in this field; and that we must play a positive practical part. I am not yet ready to recommend what form our positive participation should take. We need to know more before we choose among the options. I intend, when I visit Washington on 16th - 18th July at Dr Harold Brown's invitation, to carry forward the process of exploration. I would make clear to him that while our general approach is firmly positive we have not at this stage reached decisions, even in principle, as between the main options.

3. In approaching this issue we must of course have in mind also the matter of a successor to Polaris, which I regard as the top priority in the nuclear field. I do not believe, however, that the implication of this need be regarded as narrowing our options in the LRTNF field. LRTNF decisions at least in principle are the more urgent, since NATO Governments all have to take a view by the end of the year.

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4. Meanwhile I should be grateful for my colleagues views on the issues and their agreement to my exploring them with Dr Brown in Washington. I am copying this to the Chancellor of the Exchequer, the Home Secretary, the Foreign and Commonwealth Secretary and Sir John Hunt.

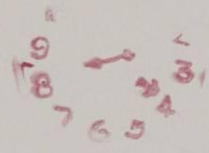
J.H.

5th July 1979

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LONG-RANGE THEATRE NUCLEAR FORCES

1. Great attention has become focussed upon the modernisation of NATO's long-range theatre nuclear forces (LRTNF). The issue is of high direct importance in terms of Alliance defence and deterrence. But its practical significance now goes wider. Particularly after the "neutron bomb" fiasco, this has become a major public test of the Alliance's ability to act resolutely and cohesively on security issues under the pressure of Soviet or Soviet-manipulated propaganda. If the Alliance's response is again weak or disunited, the repercussions may be far-reaching.

The LRTNF Role

2. NATO strategy is based on having a range of capability such that the Soviet Union could never be confident of overcoming NATO at one level without triggering a response at a higher level leading ultimately, if it persisted, to full-scale nuclear war. For this NATO needs options linking conventional forces to strategic nuclear ones. (The Soviet Union, though having a different doctrine, has itself a very full set of options). One of the major links is the option of limited nuclear strike into the USSR while still holding back the main strategic attack. The advent of US/Soviet strategic parity, codified in SALT, enhances the importance of this "sub-strategic" link.

3. The link is provided now mainly by a mix of NATO-committed submarines carrying ballistic missiles (SLBMs) and aircraft carrying free-fall bombs. The SLBMs are powerful weapons for this role, but NATO does not regard them as militarily ideal in all circumstances, they are not always seen as closely engaged to Europe and they tend to be identified with the strategic level of conflict. (This is true even of the UK weapons, not counted in SALT II, it seems unlikely that HMG would use our small Polaris force in "sub-strategic" strikes).

4. The present aircraft are 55 UK Vulcans (with UK weapons) and 170 US F. 111s, all based in England. The Vulcan cannot credibly be kept beyond 1982/83; the Tornado, which replaces it, is of considerably shorter range. The F.111s are more modern (though dating back to the 1960s), but they face improving Soviet air defences and an improving Soviet capacity for accurate pre-emptive strike provided by new weapons like the SS20 MIRVed IRBM, the BACKFIRE supersonic bomber and the F.111-equivalent FENCER swing-wing fighter-bomber. For all these reasons, NATO needs some new long-range in-theatre capability.

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5. The new Soviet weapons do not create NATO's military need to modernise, but they intensify it. Politically they have greatly heightened Western public awareness of the big and increasing lead (certainly over two to one) which the USSR has in long-range TNF targeted on Europe, notably the SS20, which are not constrained by SALT.

6. There is a firm consensus among NATO Defence Ministers that NATO needs to modernise and somewhat augment its long-range in-theatre (ie other than US SLBM) capability. As has been publicly acknowledged, a decision on how to do this should if possible be taken this year. The Alliance need is clear and increasingly urgent, and the US cannot go on funding costly development options without deployment plans. Moreover, both they and the FRG are keen to get the matter settled before their 1980 election campaigns get under way. All this points to the November/December NATO Ministerial meetings as crucial.

The Attitudes of Our Allies

7. The US fully accept the case for action in response to European concerns and have made it clear that they do not regard the SALT II Treaty and Protocol of the SALT III prospect as closing off any of the system options. They are plainly willing to make substantial deployments themselves, but not without firm support and the widest possible participation from their Allies.

8. The FRG strongly support the basic case, but for political reasons domestically and eastward set two limiting conditions:

- i. they do not wish to own (even under "dual-key" arrangements) nuclear systems capable of striking the USSR;
- ii. they will accept basing of US-owned systems of this class only if at least one other non-nuclear country will also accept.

Of these conditions the first will not change. We suspect, but cannot be sure, that the FRG may not in the end insist on the second if an impasse is reached.

9. Other NATO members generally accept the basic rationale for TNF modernisation. But only Belgium, the Netherlands and Italy look serious candidates for meeting the second FRG condition. Various modes of basing participation are being explored, but none is yet certain to be acceptable in any of the countries. The Dutch Government in particular faces grave domestic difficulty on the whole issue.

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Force Requirement and System Options

10. The issues have been processed by a US-led NATO body (the "High-Level Group" - HLG) of senior officers and officials not formally committing Governments.

22. There is no precise way of quantifying the requirement, but the HLG consensus favours a scale of new deployment giving a capability of between 200 and 600 warheads in all. The main options identified are:

- a. an extended-range version (PIIXR) of the Pershing ballistic missile system of which current shorter-range versions are already based in the FRG;
- b. cruise missiles of the type already being developed by the US. They could be air-launched (ALCM), ground-launched (GLCM), or sea-launched (SLCM) from submarines or surface ships;
- c. a new US MRBM existing as yet only on paper.

All these would be of US origin - European development and production procurement is wholly unattractive on cost and timescale grounds. PIIXR and the CMs could be available from 1983, a new MRBM (if proceeded with at all) not before the late 1980s.

12. The HLG consensus, which we believe is also the US preference, favours a mix based wholly or mainly on PIIXR and GLCM, though there remains some FRG interest in the possible addition of a surface-ship SLCM element.

Options for the United Kingdom

13. We do not have to commit ourselves immediately. But we must indicate our own preferences soon if we are to help forward an effective Alliance package and to influence its construction. In principle, we have four options:-

- I. Make no change in plans - let the Vulcans phase out, and point to our Polaris and Tornado contributions and our provision of bases for US F.111s.
- II. Make no change in UK plans, but agree to the basing of new US-owned systems - probably GLCMs - in the UK is the US so wish; they have so far made no enquiries. A possible variant might be to offer to man and operate the systems for the US, though they would still need to provide warhead custodians.

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- III. Acquire from the US a new UK-owned missile system, but with US warheads under dual-key custodial arrangements. We have done this in several fields in the past, and still do it for certain of our systems deployed in the UK and the FRG.
- IV. Acquire from the US a new UK-owned missile system and fit it with UK warheads. This is the only option which gives us a fully independent long-range theatre nuclear system (apart from any marginal capability provided by the Tornado).
14. Given the domestic political difficulties our Continental allies face and the exceptions they will certainly have of us, Option I - dissociation from a new Alliance effort - would probably cause its collapse. In my view our effective choice lies between II, III and IV.
15. For selective use on a limited scale BMs are much better than CMs; most of the USSR has no effective ABM defences, so that the number of missiles launched can be kept very low with good assurance that the target will be hit. However, PIIXR's range (1800 Km, against a CM figure on around 2500 Km) gives little coverage of the USSR from the UK. A new MRBM will be expensive; it may not be available at all; if it is, it will not be until about seven years or more after the Vulcans go. We are left therefore with CM options.
16. There is still uncertainty about the reliability of cruise missiles to air defences, and to ensure penetration it would be necessary to launch a considerable number. ALCMs and SLCMs give most scope for outflanking defences; submarine-launched CMs are moreover very hard for the enemy to pre-empt. But ALCMs would be more expensive than GLCMs. So would CMs on dedicated submarines; and adding a CM role to the task of our existing submarine force would degrade its conventional capability. On balance, GLCMs seem the most likely choice for any UK-owned force. (The Annex herewith reproduces some outline information on GLCMs provided by the US to the HLG).
17. Subject to more detailed study, it should be possible to base GLCMs (whether US or UK-owned) on existing UK airfields already housing nuclear forces. There would be plans for dispersal in emergency.
18. The size of any UK GLCM force (as in Option III and IV) is matter for judgment, in the light of total Alliance effort (paragraph 11 above) and of cost. A reasonable level might be 4-6 flights - 64-96 missiles. But this needs further consideration.

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19. Cost figures at this stage are very tentative - close estimates could be framed only after discussions with the US. On HLG information, however, the capital cost of a force of 64-96 GLCMs, excluding warheads, might lie in the bracket £100-200M. It might be possible to get some of the installations paid for by NATO common funding. (There are no proposals yet, but some are bound to be made, for Alliance cost-sharing of some kind). Annual running costs should be modest - perhaps around £5M - though any options other than just providing basing for US forces would add some 400-700 posts to the demands on our currently hard-pressed Service manpower.

20. We would not pay for US warheads (Option III). The cost of UK warheads, excluding special nuclear materials, might lie in the bracket £50-60M. Special nuclear material (being reusable capital assets managed as a single stock) are hard to cost for individual projects, and the net effect of a GLCM-warhead programme cannot be assessed in isolation from a general appraisal of our nuclear programme as a whole. All figures must be regarded as tentative at this stage.

21. Our predecessors made no specific forward financial provision for any LRTN effort (or for a Polaris successor) though there is some general contingency allowance in our forward costings. Though the costs in this area may not seem very large in relation to the role's importance, we shall not be able to accommodate them, save at severe damage to essential existing programmes, without continuing defence budget growth.

22. Costs aside, we should note that problems over nuclear warhead supply bear upon Option IV. Even if the urgent measures which I am recommending separately to put right the disastrous employment situation at Aldermaston are accepted and successful, we could not have UK warheads for a new GLCM force before about 1986, three years after the Vulcans go; and I cannot be confident even of this date until further studies, taking account of Polaris successor possibilities and any resultant questions of priority, are complete.

Next Steps

23. I am not ready yet to propose a particular choice among Options II-IV. We need further information on important aspects, notably the cost of GLCMs, the degree of their vulnerability to likely Soviet defences in the middle 1980s and later, and the position on US supply and continuing support. We must carry further our own studies bearing on UK warhead availability. And we need to know US views on how an adequate Alliance package can best be assembled.

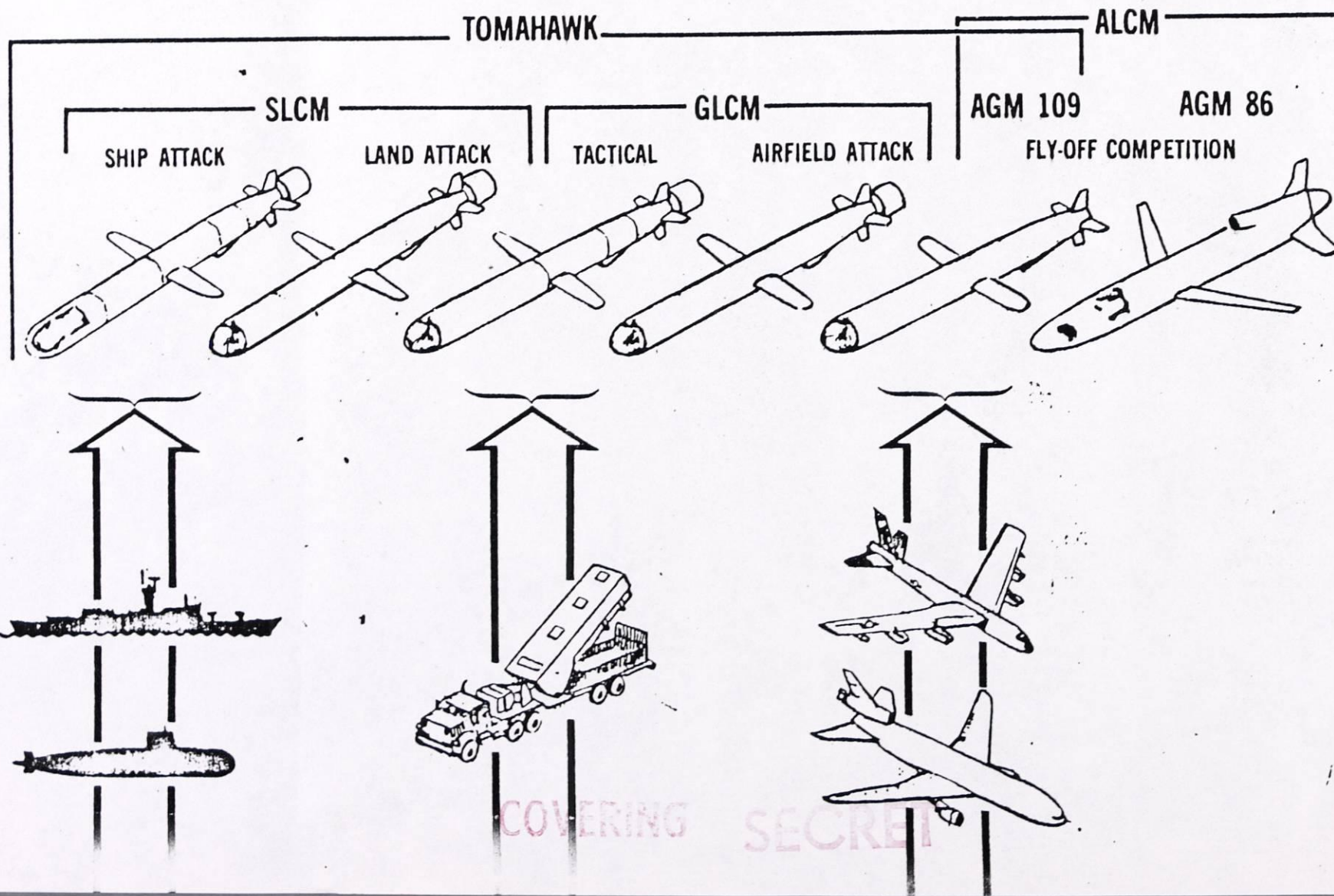
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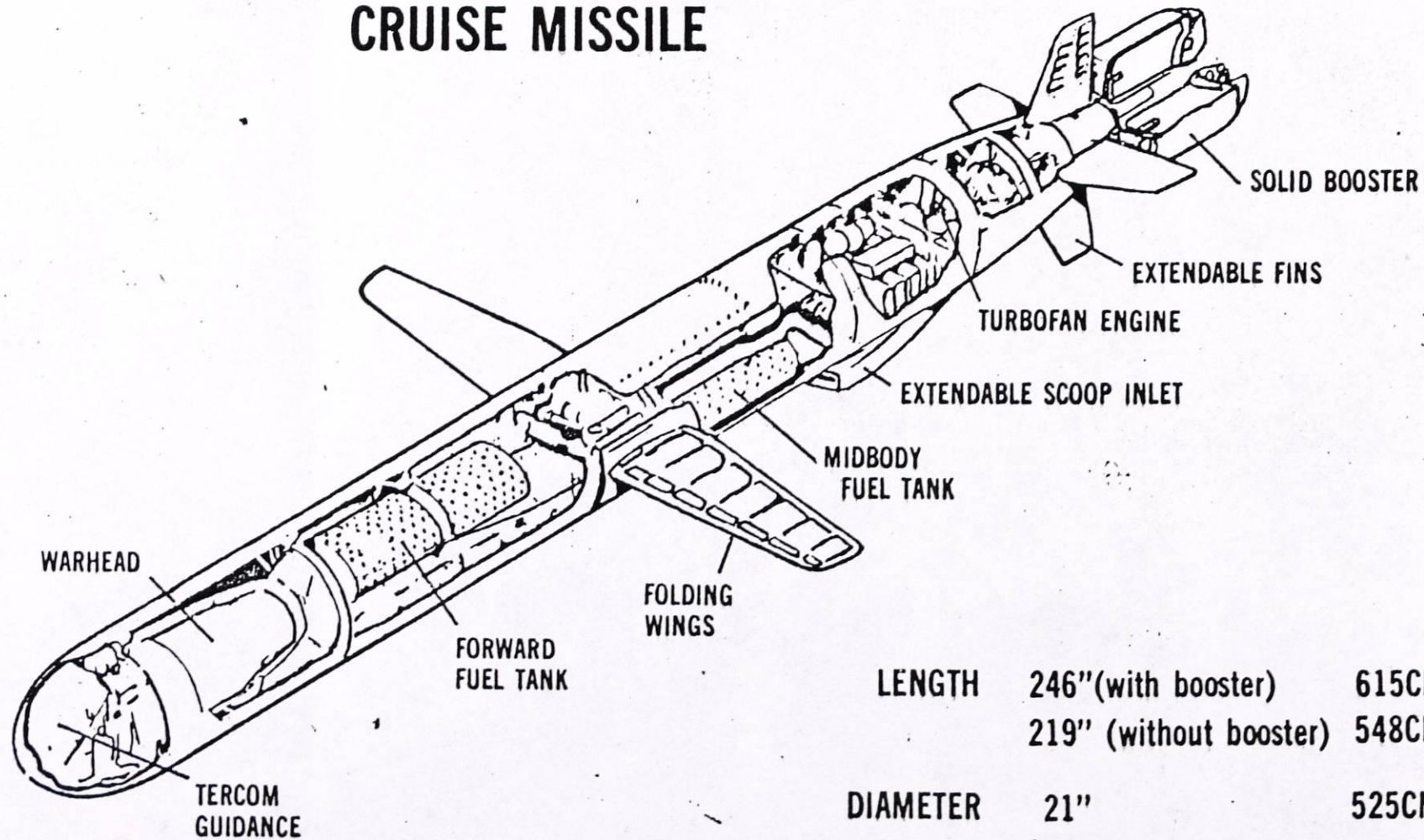
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ANNEX TO
MO 13/17/34
DATED 5TH JULY 1979

CRUISE MISSILE FAMILY



CRUISE MISSILE



LENGTH	246"(with booster)	615CM
	219" (without booster)	548CM
DIAMETER	21"	525CM
WEIGHT	3200lbs (with booster)	1440Kg

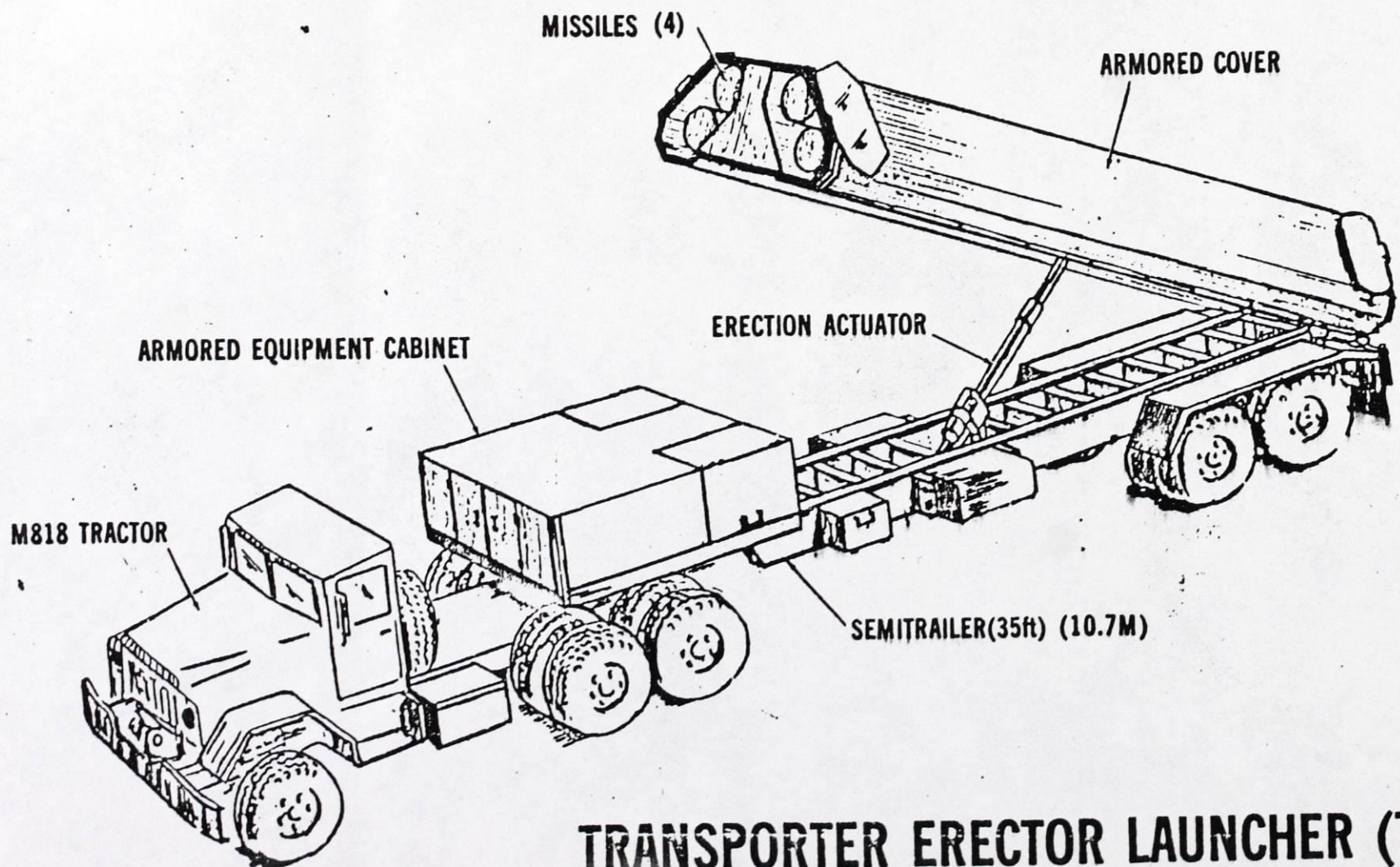
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GLCM PERFORMANCE

MAXIMUM PENETRATION SPEED	.70 MACH	
ALTITUDE	200 FT AGL (SMOOTH TERRAIN)	60M
RANGE	2500 KM SYSTEM OPERATIONAL RANGE	
ACCURACY	200-350 FT	60-107M
WARHEAD (NUCLEAR)	VARIABLE	

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TRANSPORTER ERECTOR LAUNCHER (TEL)

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MOBILE LAUNCH CONTROL CENTER

