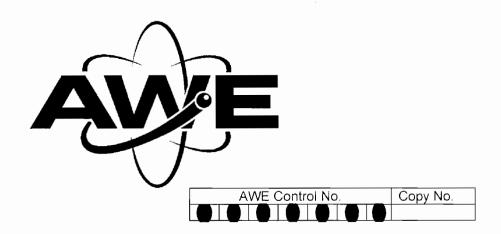
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AWE Proposal for TP1 for the Implementation of the Nuclear Warhead Capability Sustainment Programme

VOLUME 1

ANNEX C

Approaches to Improved

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ANNEX C

APPROACHES TO IMPROVED

Originated by:		_ Date:	
	Programmes	_	

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AMENDMENT RECORD

Amendment Number	Date Issued	Date Inserted	Amended by (signature)	Pages Affected
1	20 April 2007			Full revision
2	25 April 2007			Minor corrections
3	26/4/07			Minor corrections

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	an acceleration	or some	

The NWCSP (05/08) AWE programme (ref 2) was structured to deliver	increasing levels of
capabilities, measured against definitions of	(ref 3).
These metrics were developed within the AWE R&D communities in response	
TRL and definitions. From their inception it was recognised by both I	
there was not a simple correlation with the standard definitions, ie in Annex	B of the URD (ref 4)
it was noted that were represented by for the	
design. Further, these were developed largely in isolation for each	of the various sub-
components and so do not fully represent the	As an early output

	the capability p	rogramme wer	e recognised, in	particular	
				_	
			past levels of inversing and Integra		
the NNC work is a NNCs		ing Co-ordinati	ng Design Author	ity (CDA) status	for the
	The	us an accelera	ted programme	of achieving CD	A status is
uired.					
uired.					
the NWCSP has	WIPT, DGStra	tTech and AV	a number of cha /E team investiga		
the NWCSP has ne 2006 a joint N s for UK warhea	IWIPT, DGStra ad project optio eport recomme	tTech and AV ons that could	/E team investiga support the		, costs and

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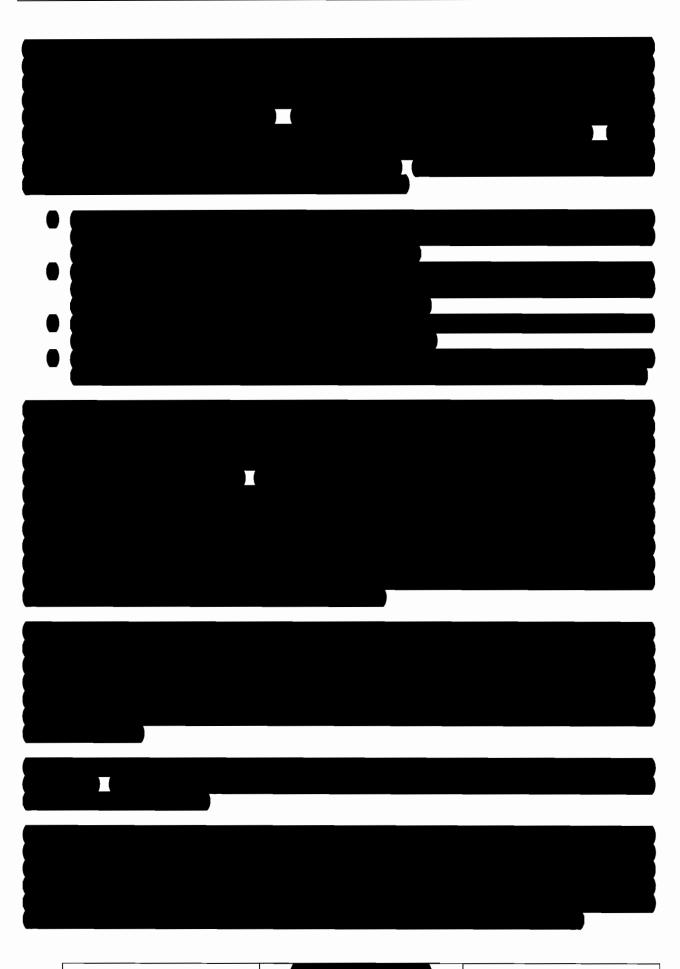
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IOD's expectation of the timescales for a	have become clearer, with
ssumptions for a energy in a series is not, as yet, a formal requirement for either a	respectively. Although project, or for
tudies to specifically	the TP1 programme is
ddressing the capabilities these would require. A Capability has been proposed for and	the TDF programme has been
tructured to provide early experience in	capabilities and to provide early
dications of	
8. STRATEGIES TO IMPROVED	
the SPD (ref. 1) identifies a (SPD 9209) and a	ooka .
he SRD (ref 1) identifies a (SRD 8298) and se	eeks
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		icular requirements of Main Gate for
Handbook (ref 11).	ble to make general obse	rvations based on the Acquisition
and the "not-to-exceed" figures Business Case requires a ful understood, with "robust coste naturity, and fall-back plans	for the project are approved Ily mature requirement and of plans to bring relevant te should technical challenge s together with System Inte	quisition cycle, at which the solution ". In order to achieve Main Gate the I that technological risks are fully schnologies, across DLODs, fully to es be insurmountable", noting that egration Readiness Levels, if used
confidence levels) to include a " s fully affordable - Clear plan rading cost for capability in procurement strategy: including	"not to exceed" cost for the p as are set out to manage to the event of unforeseen g a robust TLMP, properly as posal arrangements" and "as	ust three point estimates (10/50/90% roject are developed and the project he programme within approvals by cost growth" with a "fully mature sessed whole life costs and support surance that the industrial base has ge its risks".
n future, all projects coming fo	orward for Main Gate appro	I IAB are determined to ensure that, wal are appropriately de-risked and ming of the Main Gate and whether
The technical requirement on herefore focused in demonstrate imenability to		
echnical requirements for a	en established, with defined	ed in TP1 is against a broad set of The elements of a Project Integrated Project Teams and a project to be early engagement in
		ognised in the TDP plan, but may
eed enhancing in order to fully ne	y meet this challenge. Esse	ntially, all features of
Sanfidanaa in make a laada	desire define	
Confidence in such a level of o	<u>design definition would be e</u>	nnanced through

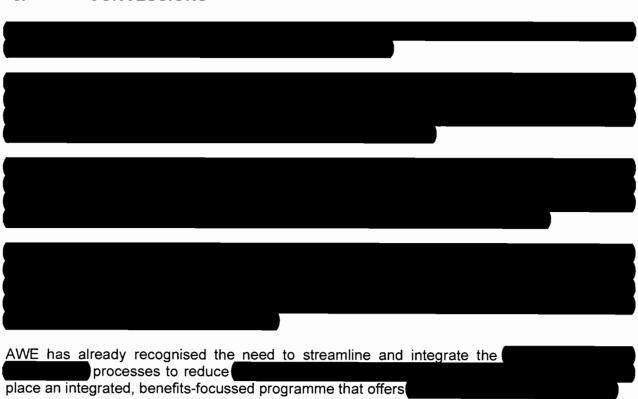
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In addition to this early definition of the need to be challenged	to improve concurrent working, increase the
	nimise timescales for
AWE is aware of these issues and there have	a been initiatives in a number of
areas, eg MBA, Lean. Recently	the Connect project, initiated in
has become the integration point, with its high le	ever project requirement to significantly reduce
This project will streamline and integrate the	
· ·	
Whilst TP1 already assumes significant benef	(as described within the Volume 1 AWE
Programme Plan) is vital in providing the corenvironment that will be needed	rrect "right first time" culture and innovative
4. THE IMPORTANCE OF	

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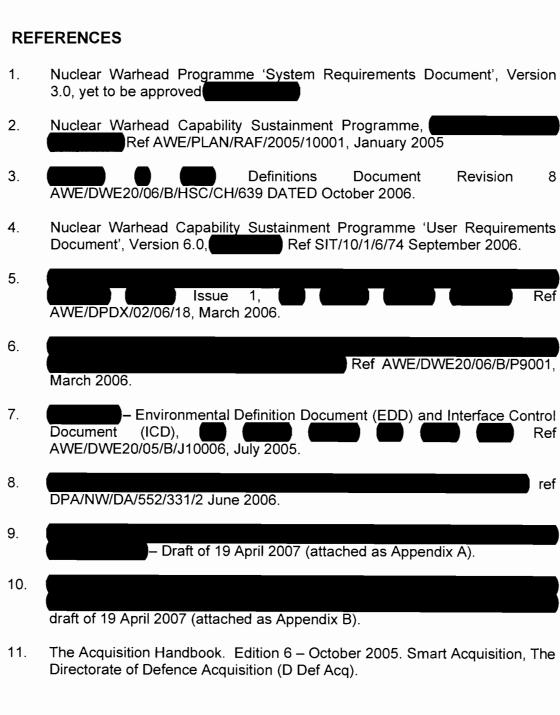
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5. CONCLUSIONS

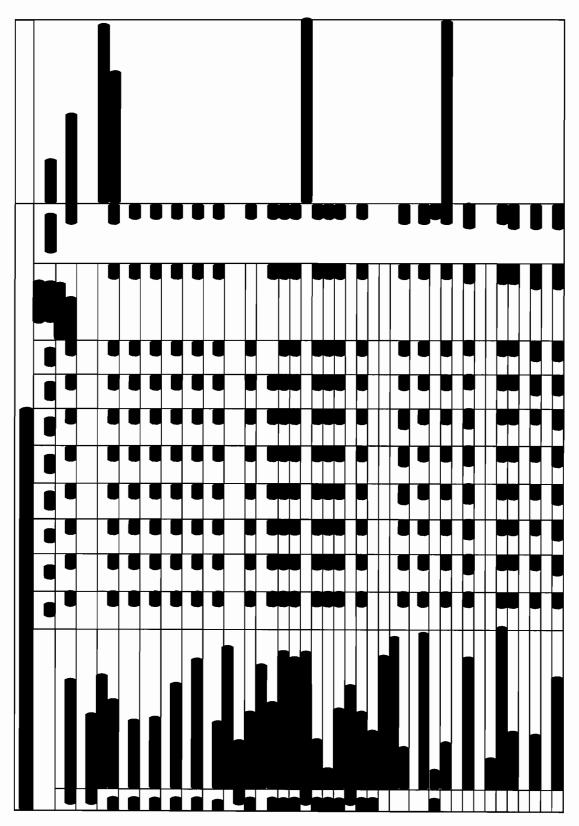


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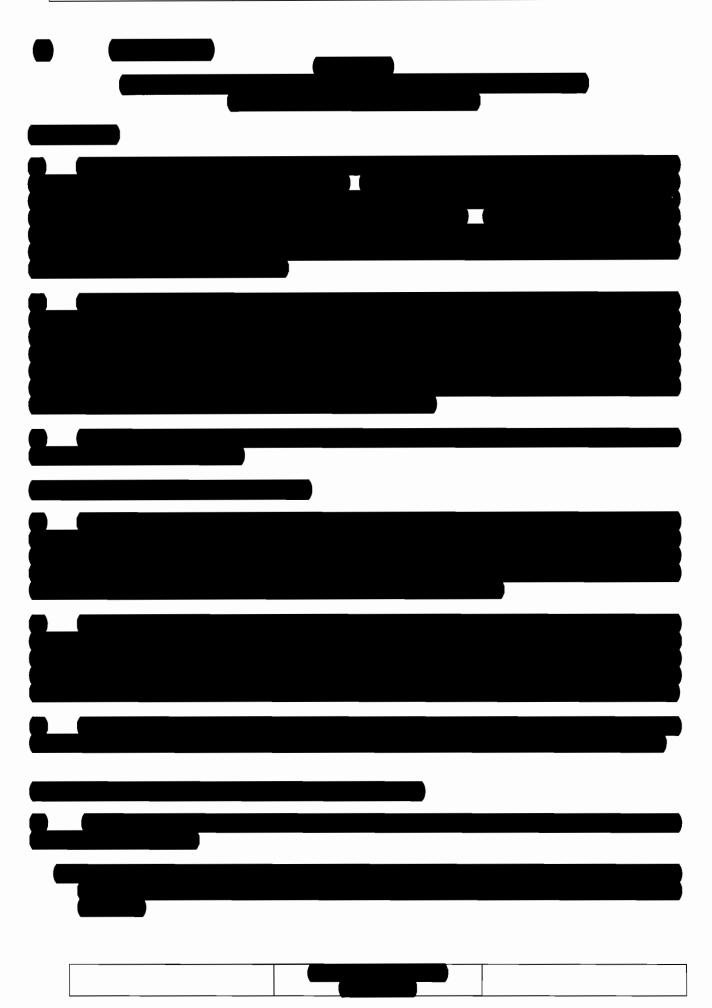


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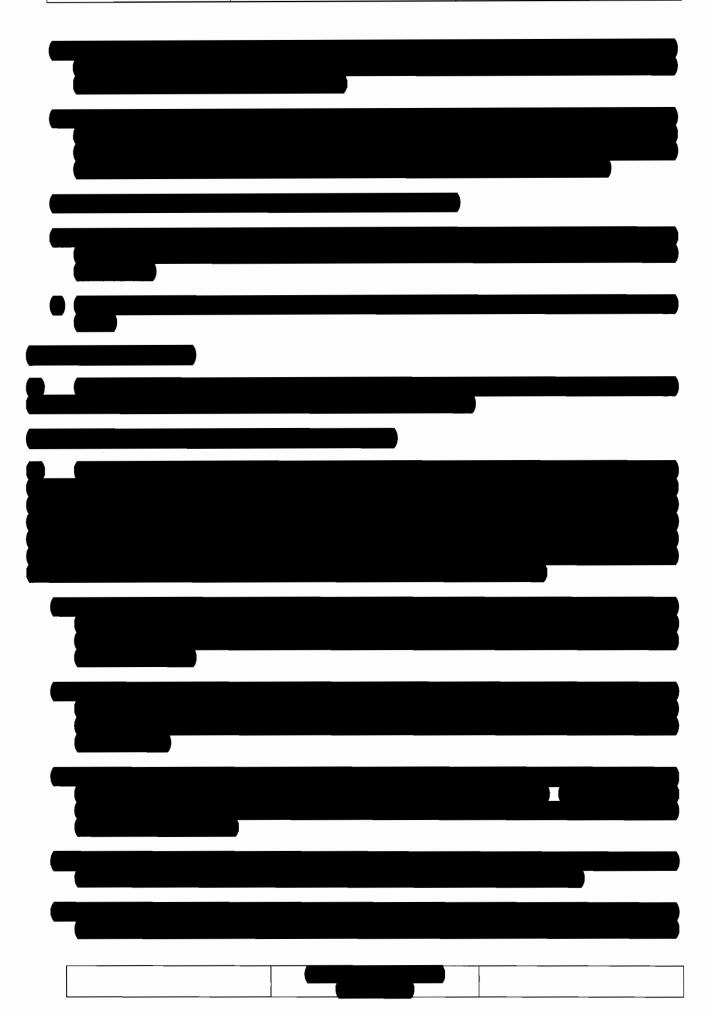


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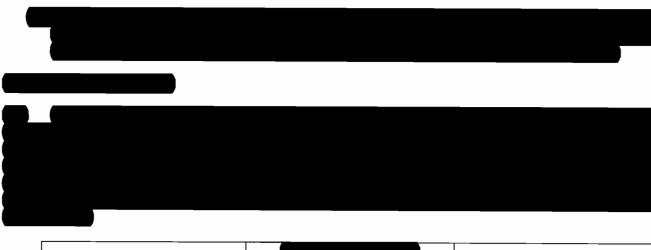
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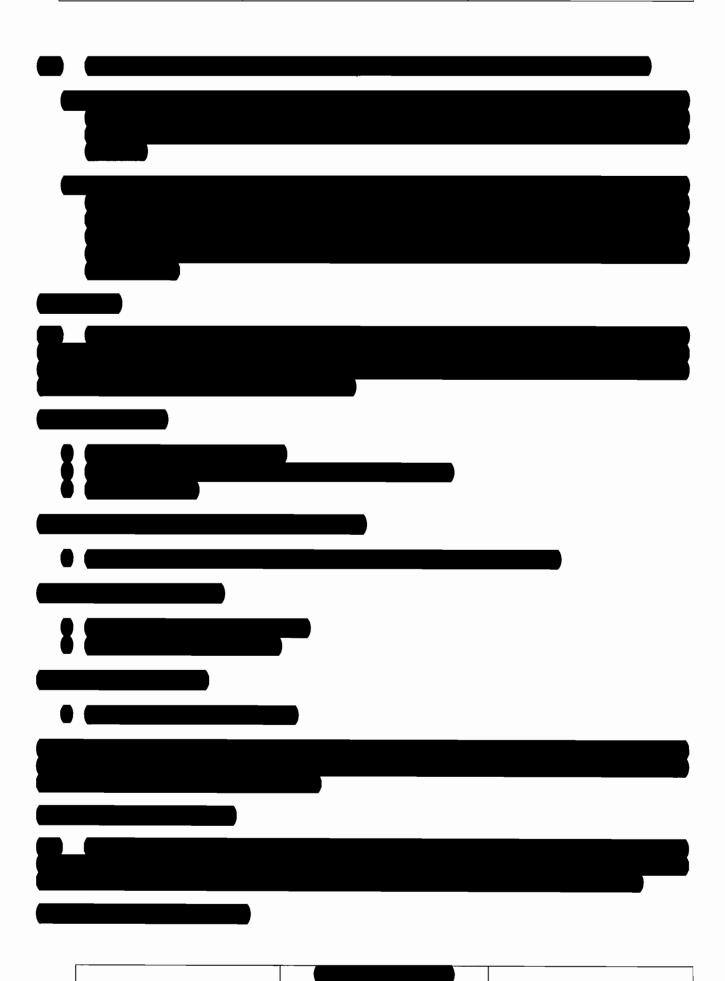
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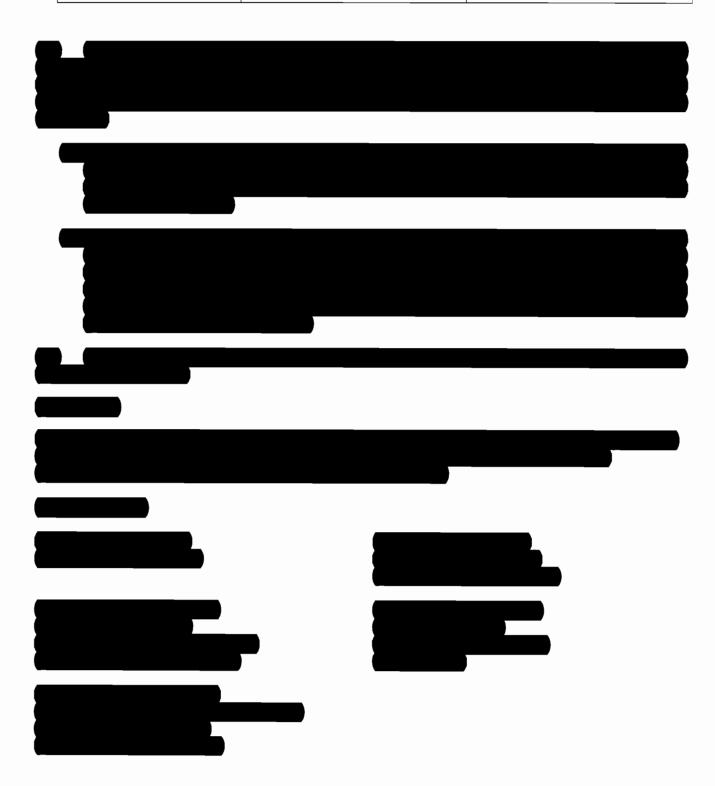
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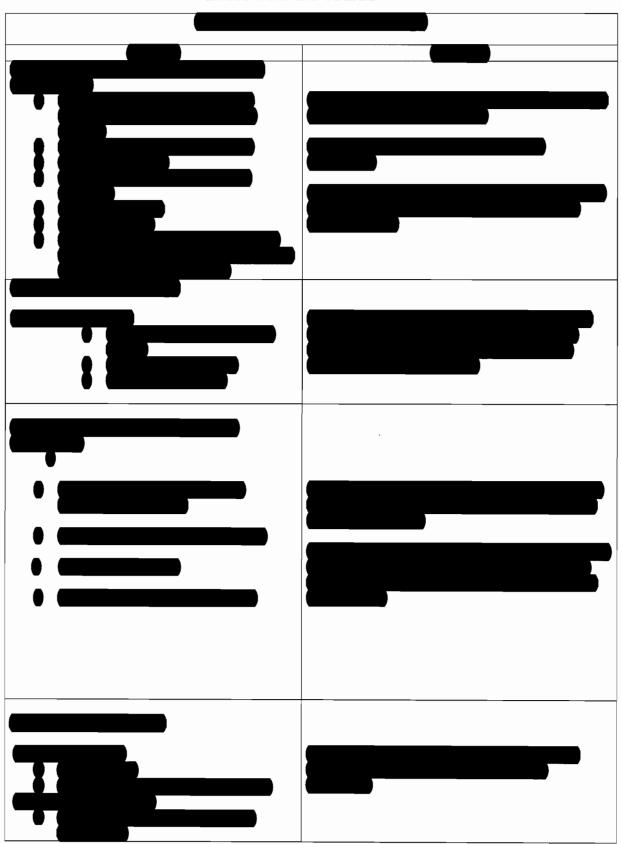
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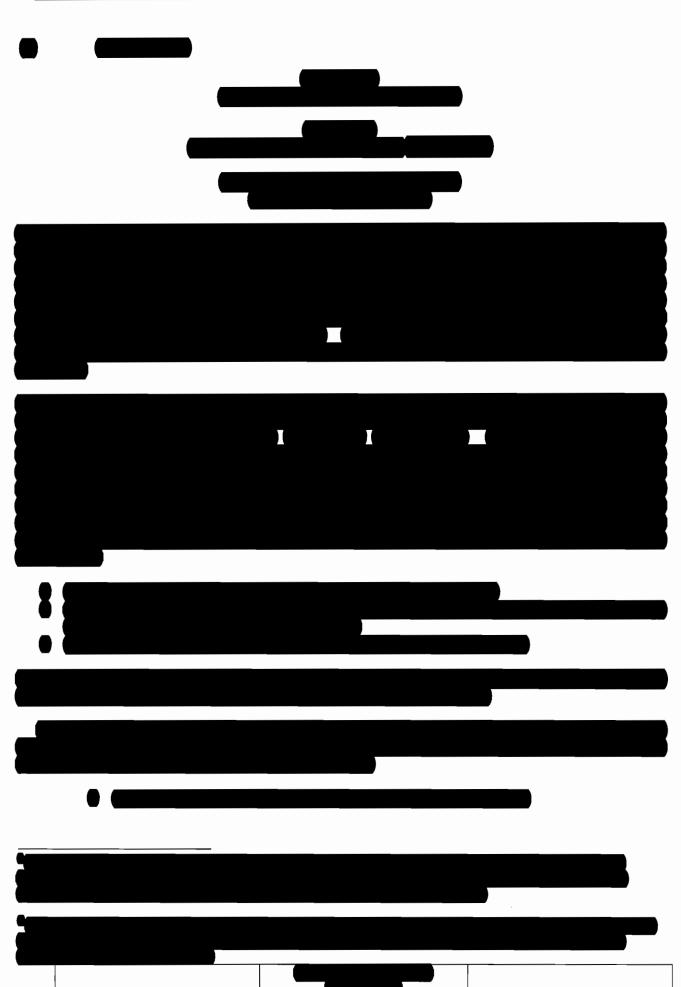
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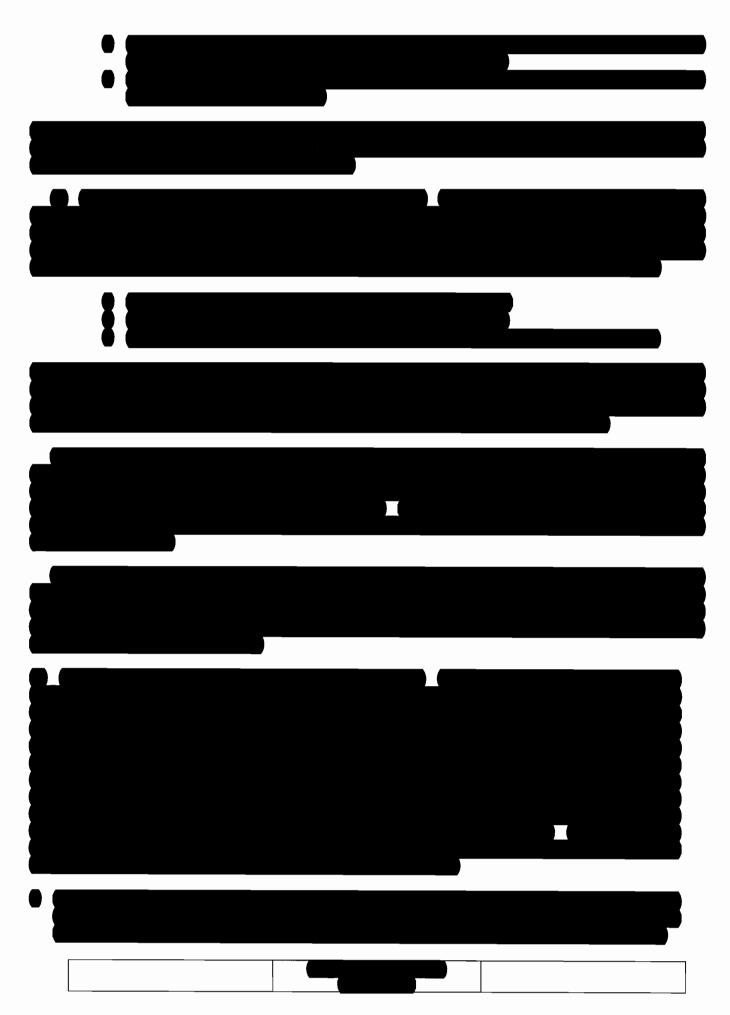
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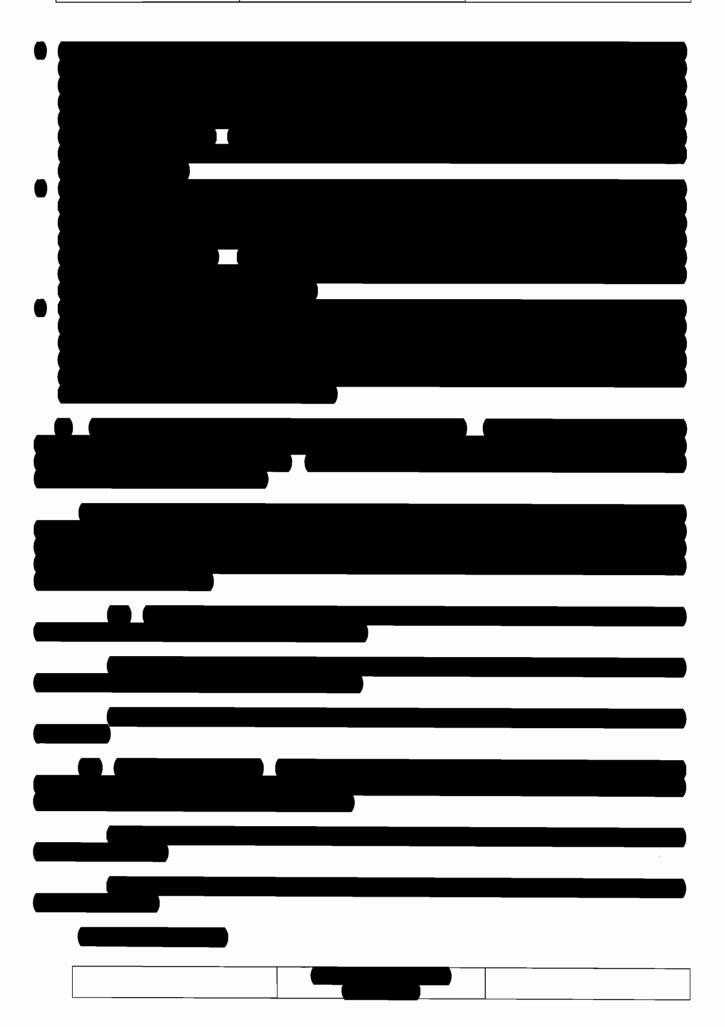
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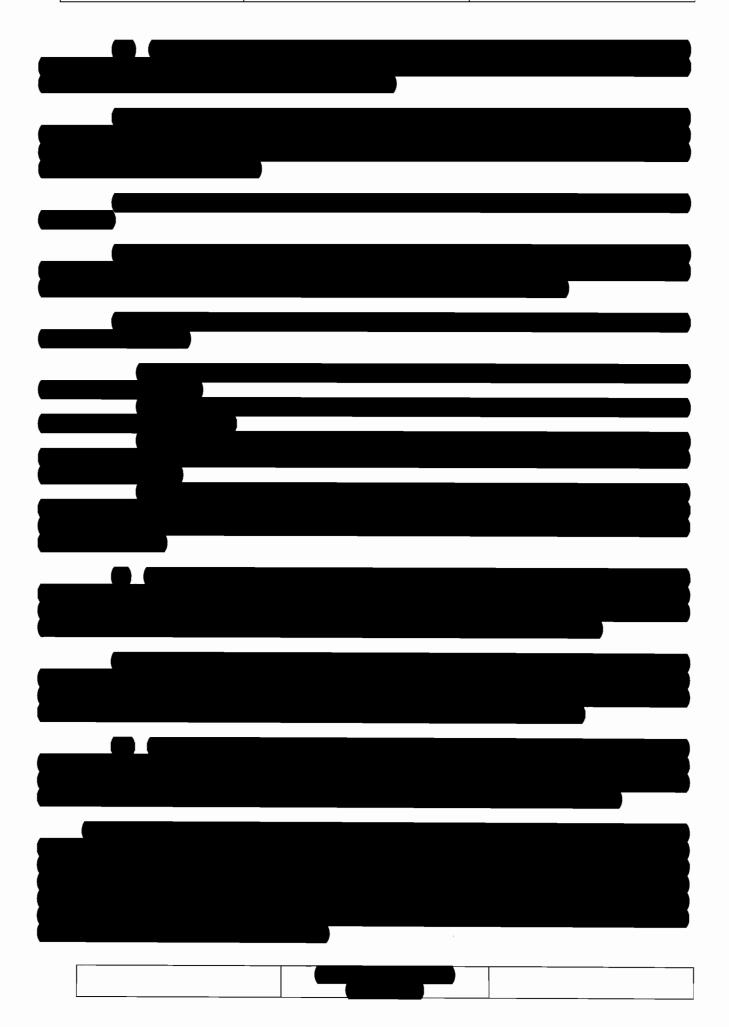
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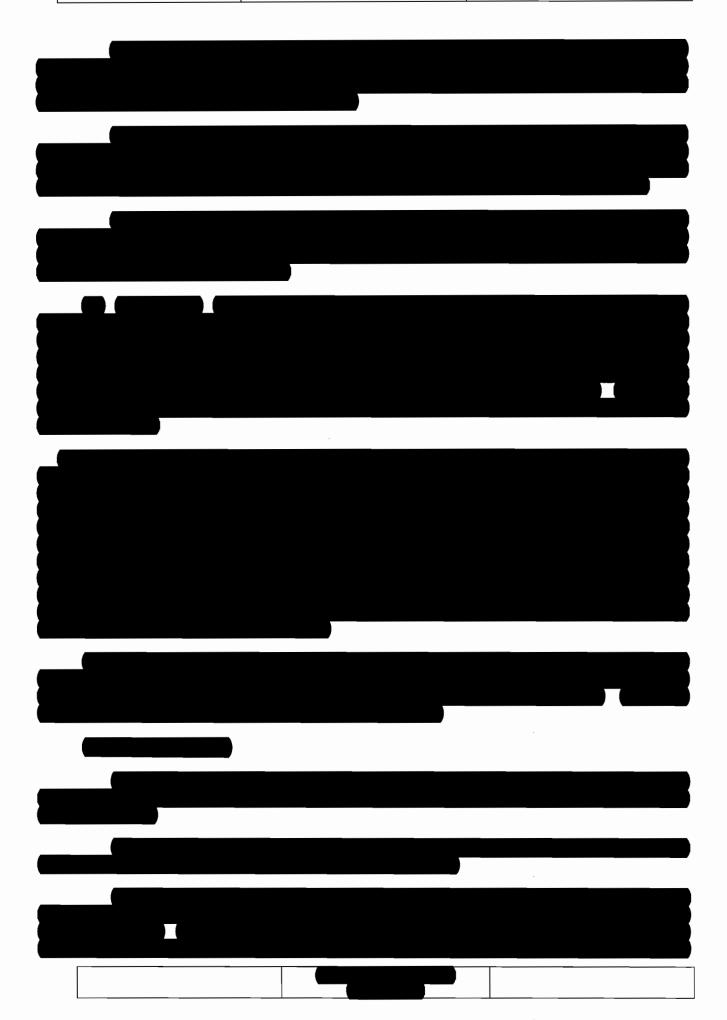
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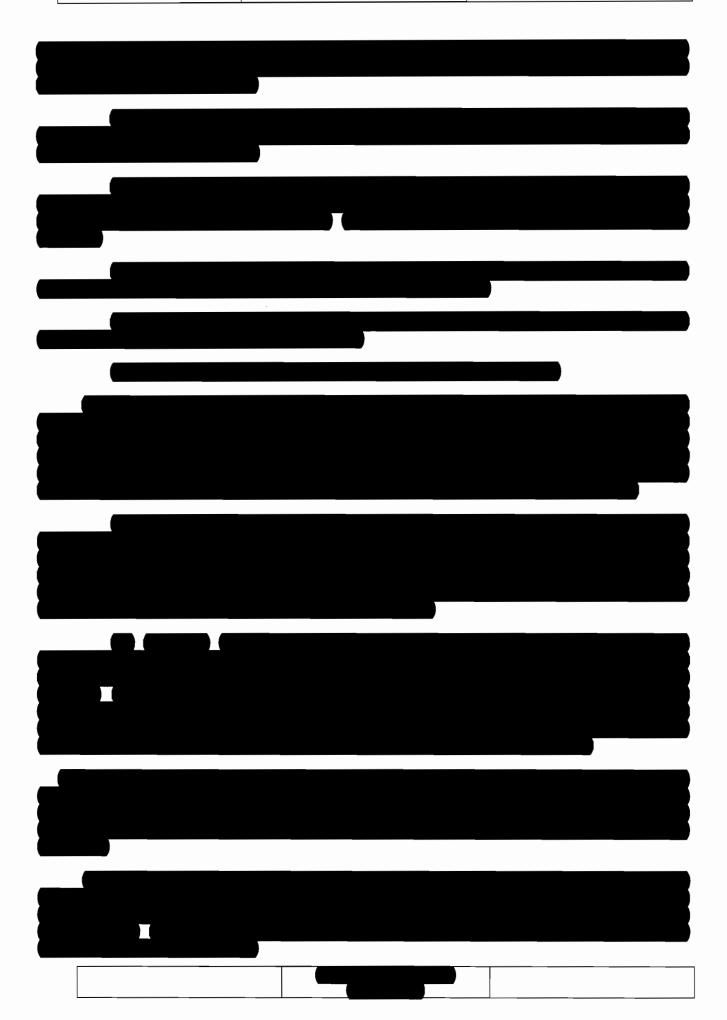
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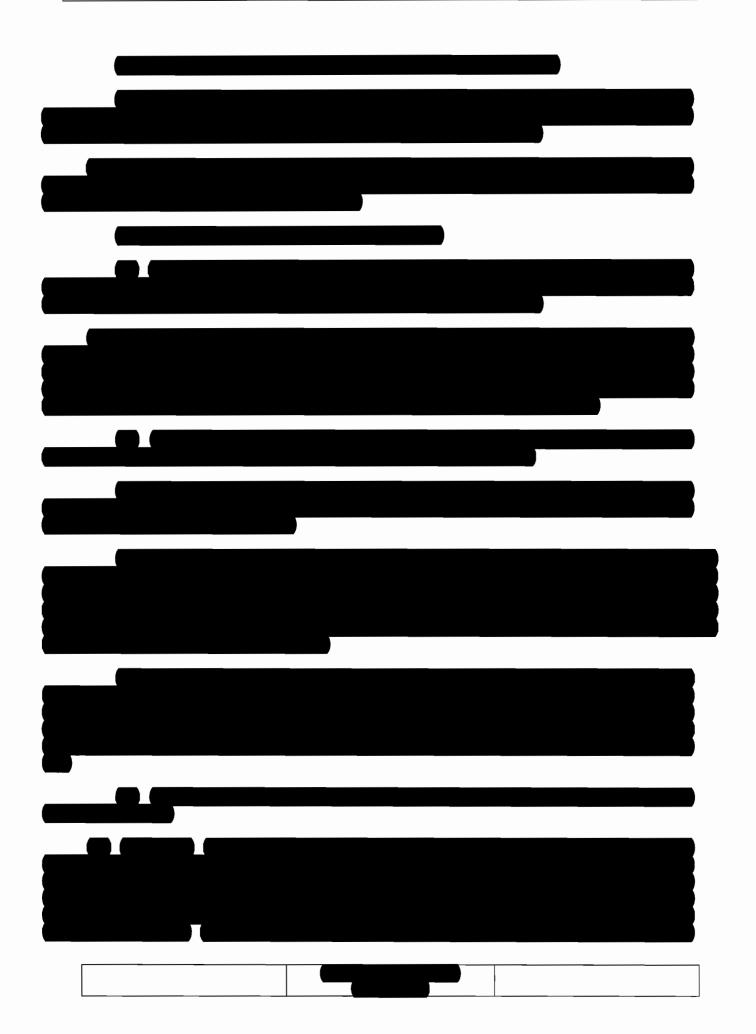
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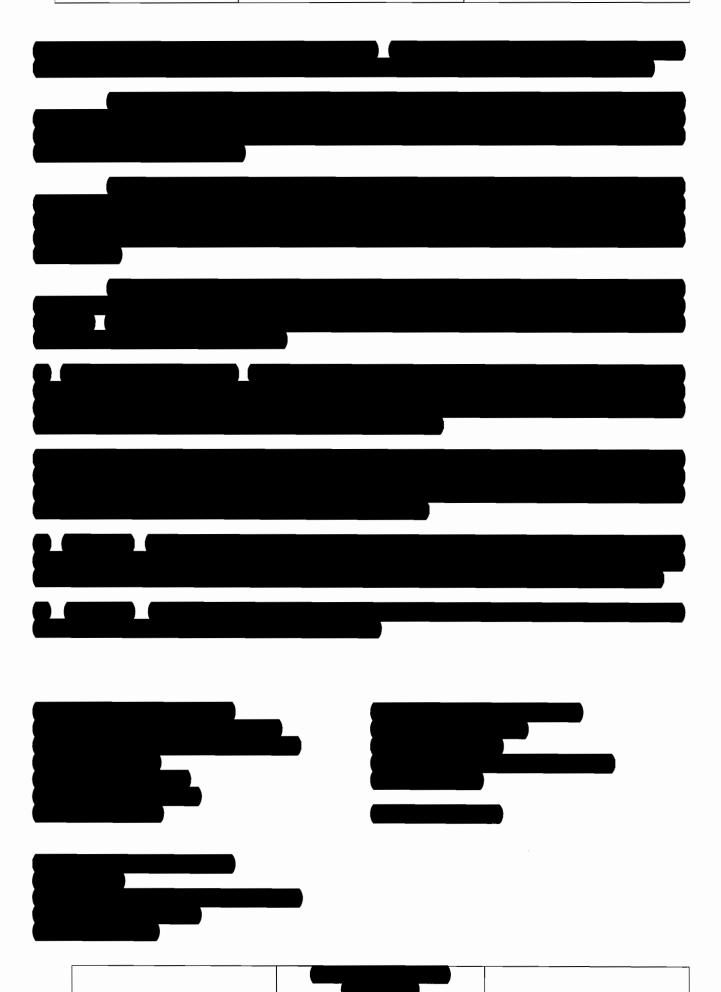
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