›nal studies were employed.
›/in^2, the alloys were
:e complete homogenization.
ınneal and after the com-
' with the approximate per-
'or compositions greater
›ha phase produced was 1%

& :)	% Alpha after Compression	T_f (3) °C
	62.0	250
	35.0	260
	17.0	230
	4.5	240
	-	-
	1.0	-

ired for completion of

ıring Compression of

:rature on percent alpha
ıs illustrated in Fig 6-H.
forming from alpha, beta
ıl temperature. Complete
only after heating to
› the cored alloys, it was
formed in homogenized
' wt.-% Ga is stable.
ıge with respect to stor-
› to three months.

mation has been considered

by Lomer[9]. He proposed a correspondence matrix which relates the lattices, accounting for nearly all of the atomic portions and suggests that the transformation is martensitic.

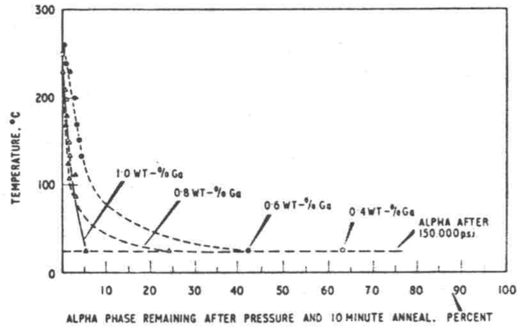

Fig 6-H Effect of 150,000 lb/in^2 Pressure on Alpha Phase Formation and Effect of Anneal Temperature on the Alpha to Delta Transformation.

4 Conclusions

4.1 A lattice parameter determination on solid specimens produces a 0.1% larger lattice parameter for a given composition than when annealed powder is used.

4.2 Lattice parameter and density data decrease with increasing gallium content while hardness increases.

4.3 The density data of all investigators are in good agreement while the hardness data contain discrepancies.

4.4 The compositional dependence of alpha phase formation after application of 150,000 lb/in^2 pressure was found to be in the same direction but displaced from that of a previous investigator. The method of alloy preparation may be the cause.

4.5 In cored alloys, alpha-delta phase mixtures formed by pressure are metastable both with respect to anneal temperature up to 280°C and subsequent room temperature storage. The increase in room temperature stability with increasing anneal temperature was attributed to gallium diffusion resul-