GOVERNMENT OF INDIA
MINISTRY OF DEFENCE
DEFENCE RESEARCH & DEVELOPMENT ORGANISATION
RAJYA SABHA
UNSTARRED QUESTION NO.2258
TO BE ANSWERED ON 9th August, 2021

DEVELOPMENT OF HIGH STRENGTH BETA TITANIUM ALLOY

2258 SHRI SAMBHAJI CHHATRAPATI:

Will the Minister of Defence be pleased to state:

(a) whether the Defence Metallurgical Research Laboratory (DMRL), a unit of DRDO has indigenously developed high strength Beta Titanium alloy to be used in the aerospace industry;

(b) if so, the details thereof and the possible application of this useful alloy in the industry;

(c) whether DRDO has any plan to give license to private players for commercial production of this alloy;

(d) whether Government is considering to make available the aerospace components exclusively to Hindustan Aeronautics Limited for use in fighter aircraft alone; and

(e) if so, the details thereof?

ANSWER
MINISTER OF STATE IN THE MINISTRY OF DEFENCE
SHRI AJAY BHATT

(a) Yes, Sir. Defence Metallurgical Research Laboratory (DMRL), Hyderabad, a unit of DRDO carried out the indigenous industrial scale development of this alloy. The high strength beta Titanium alloy existed in the international market and was being used by advanced nations for its aerospace and aeronautical programs.

(b) A project was taken up and the indigenous industrial scale technology for production of this alloy was set up.

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It is noteworthy that replacement of steel components by high strength beta Titanium alloy forgings will ultimately result in weight saving and is going to be widely used in the future generation aircrafts.

(c) Yes, Sir. Transfer of Technology (ToT) of high strength beta Titanium Alloy has been offered to Indian industries (on Non-exclusive basis).

(d) & (e): Presently, HAL is the only firm in India that manufactures aircrafts and the related components; therefore the closed forging process of the aircraft components was established there.

In case, other firms come up for manufacturing of Titanium alloy components of aircrafts, DRDO would transfer the technology through ToT.

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