that his is a consumer Ministry and he some difficulty in rail movement would join in the protest against the Railways have been insisting on moving it Ministry of Impation and Power also talked about the captive plant 1 want to ask him whether there is such a thing as inter Ministerial relation This is a core sector and if the core sector is not being supplied electri city it is very scrious. If you are going to have captive plant for every core sec tor plant, that would mean duplica Therefore, I would like tion of efforts to ask him whether at the highest level certain decisions are taken that whatever ma, le the circumstances, the core sec tor plant will not suffer for want of elec tricity or other raw materials. Has such a decision been taken or is it likely to be taken?

SHRI T A PAI There is a Committee of Ministers looking into power problems seriously and trying to bring about co ordination in order to see that as far as possible the break downs that have happened will not occur agam In the meanwhile the question is whether of these strategic areas should be completely starved or exposed to these or whether captive plant would not be an This is under consideration On the balance, I entirely agree with the hon Member that it would not be proper to have captive plants everywhere is not an answer because those who ought to work should work and should not be replaced

SHRI A G KULKARNI The Minister said that production of ingot steel has not suffered, but alloy steel has suffered Is the Minister aware that it is not only in Durgapin plant that employees have suffered, but in other industries which are dependent on supply of ingot steel like pig iron. The price of pig iron has shot up from Rs 300 to 800 in black market Will you give an assurance to this House that it least the small industries depending on your Ministry will not be exploited by the Hindustan Steel itself?

SHRI T A PAI I am aware that the price of pig iron has gone up but not because there has been fall in production It is primarily because there has been

The He in block load

But the pig non has got to be moved sometimes by wagons Invuay, this question is being looked into to see that the distribution system does not make a difference between the prices in Bombay and Madras and Delhi and I find from the prices that they have been varying 1 shall certainly from place to place give in issurance and carry it out also that the needs of the small scale tries and the industries that my friend, Shit Kulkirni has brought to my notice will be satisfied

SHRI A G KULKARNI Sir, I want to submit

MR **CHAIRMAN** Next question, please

SHRI A G KULKARNI Sir, I want to submit to you that the Railway Minister must always be present here. It is be cause every Minister says that he is responsible and when he is asked, he says other are responsible

MR CH MRMAN Next question. please

Testing of H 5 748 Plane in U.K.

*503 SHRI SUNDAR MANI PATEL: SHRI DEBANANDA AMAT SHRI K P SINGH DEO † SHRL K (PAND A

Will the Minister of DEFFNCE be pleased to state

- (a) whether it is a fact that HS-748, plane was accently flown to United Kingdom for tests by its principal manufictures Hawker Siddeley Aviation Limit ed and
- (b) whether they have completed tests and if so the report given by the principal manufactures in this regard?

[†]The question was actually asked on the floor of the House by Shri k P Singh

THE MINISTIR OF STATE (DE FENCE PRODUCTION) IN THE MINISTRY OI DEFENCE (SHRI VIDYA CHARAN SHUKLA) (a) Yes, Sii.

(b) The tests that are considered necessary so far by the Principal manufacturer have been completed and his report is awaited

SHR1 K P SINGH DEO: Sn, I want to know whether this plane was flown to Ingland, to the manufacturers, Hawker Siddeley Aviation Limited, as a result of the Indian Ardines having refused to have the seven. Wros in their present state and whether it is a fact that they wanted a modified version of the engine, of the Dart engine 532/2L, which is now being operated in the U.K. as well as in Nepal and it so, what is the increase in the Horse Power which is now being envisaged and what will its effect be on the cost structure, on the operational cost?

Then, Sir. the other part of inv question is this II there is an increase in the Horse Power what will be its effect on the gas turbine temperature, what will be the consequential effect on the plane and the life of the engine and the operational cost of the whole system as it is?

MR CHAIRMAN. How many questions are you going to put?

SHRI K P SINGH DEO: It is also a connected question, Str.

MR. CH MRMAN . All right Then put it.

SHRI K. P. SINGH DEO: Sit, I want to know whether it is a fact that the present engine, when fitted to the airframe manufactured by the Hawker Siddeley Aviation Itd., performed according to the Flight Manual and whether it is also a fact that the British engine, when fitted to our HAI airframe, also performed in conformity with the Hight Manual and whether it is not a fact that when the

HAI engine was put in the HAL airframe it did not conform to the Flight Manual and, if so, what is the reason for this?

to Questions

SHRI VIDYA CHARAN SHUKIA: It is a fact, Sil, that a plane was flown to the U K for tests to determine the cause of certain problems that we came across during the manufacture of the Avio aircraft in Kanpin. The aircraft was flown to the U.K. in the month of January...

AN HON. MEMBER: A little louder please.

SHRI VIDYA CHARAN SHUKLA: It was flown to the U.K. in January and tests were held and then, Sit, tropical tests on this engine were held in the months of May and June in Kanpur and the results of these tests are being analysed at present. The Horse Power that is sought to be taised is 90 over and above the present HP which is 1900. Sii, this technical defect has been looked into. It is not really a defect, but it is only emphasise and 1 must before this House that this is a problem that we have come across and this is a problem which not only we in India came across, but this was also faced by Hawker Siddeley Aviation Limited and they have solved it by the wet injection method in the engine and they have prescribed now and the Indian Anlines raised the question whether this would affect engine life and they have said that it would not affect the engine life provided the turbine blades are treated a certain way which will increase the engine life by four times.

And all these technical discussions have been gone over by the Hawker Siddeley Aviation Limited and Indian Airlines. As a matter of fact, a team came and they discussed this matter with the Indian Airlines people and we have decided to defer this matter also The Satish Dhawan Committee is going into the question of suitability of Ayro, and production problems and all these things—a technical committee chaired by Dr. Satish Dhawan who is the Chairman of the Space Commission of India.

The last question raised by the hon. Member was specifically enquired into personally by me, and the Managing 11

Director of Hawker Siddeley Aviation told me that the engine manufactured India, if fitted in a Butish airframe, performed perfectly well and the Indian British engine, air-frame, if fitted with also performed perfectly well. They also told me that the engine manufactured in India was equally good, if not better than the one manufactured in British today. But because of certain problems-and I suppose they are not very major problemsthe Indian Airlines have not taken delivery of these Avros. But as soon as these problems are sorted out, we hope to

SHRI K. P. SINGH DEO: Sit, did not get any answer to my last question as to what happens when Indian manufactured engines are fitted into Indian manufactured air-frame . . .

CHAIRMAN . You put your MR second question also

SHRI K P. SINGH DEO: My second question is: What is the production rate? How many Avros have been produced since 1961 till date? What is the cost of manufacture, and what is the imported content, and what are those components?

SHRI VIDYA CHARAN SHUKLA: Sir, regarding the earlier question as to what happens when Indian manufactured engines are fitted into Indian manufactured an frame, the answer is that the same results were obtained which were obtained when Indian manufactured engines are fitted There is no English airframes. difference in the performance Let me explain this properly to you Sir, this problem arises mainly because of temperature difference between the two countries. This is why we misist that there should be a tropical trial in our own country Now the problem that arose was regarding the power of the engine. As I indicated in answer to an carlier question, that problem was sought to be solved by wet power, which means that methanol injection has to be given into the engine. It has been tried in UK. This was not acceptable to the Indian Airlines. There have been talks going on on this matter which have not yet concluded. A trial was held in May and June and the data

collected is being analysed to the exact nature of difficulty. The same kind of difficulty was found by HSAL in UK. But, as I said, Sn, although the nature of the difficulty was the same, but since the operating conditions are different we cannot apply the same solution to our problems because our operating conditions and temperature are different and, therefore, we have to take a completely different view of this matter. is the answer to the earlier question.

About the second question, Sir, normally we do not give out the rate of production. The production of Kanpur factory is utilized by the Air Force as well as by the Indian Airlines. Therefore, Sit, I will give the production, because if I don't give this, hon. Members will take it otherwise. We normally produce a plane a month in this factory. Sir, I do not have at present the figures of indigenous parts and imported parts. But I shall collect these figures and lay them on the Fable of the House.

SHRI K P. SINGH DEO: What imported components which are being used?

SHRI VIDYA CHARAN SHUKLA: I will give the information to you.

MR. CHAIRMAN. This is enough. You have taken 10 minutes.

SHRI C D. PANDE: When this unfortunate plane of AVRO 748 was taken up, at that time our High Commissioner in London forced this plane on India. Fven then the experts believed that AVRO 748 was not a suitable plane for India and that is why it took about 8 years to come into production. It came into production in 1961 and I believe that not more than 50 planes have been produced so far.

MR CHAIRMAN : Are you going to put the question or not?

SHRI (.. D PANDE: You are a great lawvei, Sn. Any law can be understood only with a picamble.

MR. CHAIRMAN: I do not preambles. I have more questions be taken up

SHRI C. D. PANDE: Having come to the view that this plane is not likely to prove successful in India, will the Government bring in a more modern plane with higher speed and with more capacity. This plane which was good in 1961 . . .

Oral Answers

MR. CHAIRMAN: You are giving the history of AVRO. It is not right.

SHRI C. D. PANDE: The place which was good enough 20 years back is obsolete today.

MR. CHAIRMAN: This is your view.

SHRI C. D. PANDF: Will the Government change its view-

VIDYA CHARAN SHUKLA: SHRI The hon. Member is quite wrong when he says that this plane is very unfortunate. It is a very good plane according It has done very good service in the Air Force. Just because it is manufactured in Kanpui, it cannot become an unfortunate or a bad plane, Secondly, as I stated earlier, a Technical Committee headed by an impartial expert, Dr. Satish Dhawan, is going into all these aspects. I shall request the hon. Member to hold his patience. When the Committee's report comes out, we shall accept the technical views expressed by this Committee which is headed by one of the acknowledged scientists of our country. We should come to a conclusion about the suitability of this plane only after As far as our experience in Indian Air Force is concerned, the plane has proved to be a success. There are certain problems which have to be sorted out. These problems do arise whenever we undertake the production of new kind of things in our country like the passenger turbo prop planes which have never been tried before in our country.

DR. V. A. MUHAMMAD SEYID: By stating that it is a problem and not a defect, the hon. Minister has put a metaphysical problem before us. Will the hon. Minister state clearly when exactly a problem becomes a defect?

SHRI VIDYA CHARAN SHUKLA: There is no question of hiding any facts.

I am being very frank and I must very frank before this hon. House. A problem will become a defect when it cannot be solved.

SHRI LOKANATH MISRA: I may be allowed to put a question.

MR. CHAIRMAN: Let this be the last question.

SHRI LOKANATH MISRA: What is the present cost of the plane and to what extent is it going to move up when you enhance the power of the engine? Is it a fact that you are still importing the tyres, the frame, some electronic appliances and the undercarriage from abroad and you have not been able to evolve your own system of manufacture?

SHRI VIDYA CHARAN SHUKLA: Undercarriage, electronic system, hydrolic system, the airconditioning and pressurising system are going to be made in H.A.L. Lucknow which has commenced production. So far as the cost is concerned, when we want to remove this problem, it might increase the cost. But I cannot give any definite figures unless we come to a definite conclusion about this problem and how to remove it.

SHRI LOKANATH MISRA: What is the present cost?

SHRI VIDYA CHARAN SHUKLA: I will require notice to give you the present figures.

*504. [The questioner (Shri Debananda Amat) was absent. For answer vide col. 30 infra]

Lawlessness in the Bhilai Steel Plant

*505. SHR1 K P. SINGH DEO:†
SHR1 SUNDAR MANI PATEI:
SHR1 K. C. PANDA:

Will the Minister of STEEL AND MINES be pleased to state:

(a) whether there have been several incidents of lawlessness in the Bhilai Steel Project during the recent past;

[†] The question was actually asked on the floor of the House by Shri K. P. Singh Dec.