

these people in committing this fraud on the common people and eating the money, defrauding the common people's savings by these big business houses. The Company Affairs Ministry has done nothing. In how many cases have prosecutions been made? Of course, they go to courts and all that, but there are many ways to protect them. Has anyone been sent to jail? You talk of equality before the law, but, so far as the big business houses are concerned, they can do anything and get away with it, whereas if a poor man, a factory worker, steals even a nail, immediately his job goes. This is how you have been functioning. Why have it at all? What are its functions? The FERA is now diluted so much, the Monopolies and Restrictive Trade Practices Act is so much diluted that they are practically of no use because you have "liberalised" everything. Then why have it? Abolish this whole thing and do not tell the people that you are wonderfully looking after these people through the Company Affairs Ministry. This is simply a show-piece. The common people by their experience understand that these Ministries do nothing, they do not deserve to exist. They collude with the big business houses in defrauding the people, in cheating the people and in suppressing them.

These are the points I wanted to make against the functioning of this Ministry. Equality of all before law is a fraud, is something which does not exist; for the last 35 years you have not taken any steps whatsoever to ensure equality, a little more equality than what existed. You have done nothing whatsoever and it does not deserve to exist. Better abolish it altogether.

Thank you.

#### STATEMENT BY MINISTER

##### Launching of INSAT-1A

THE VICE-CHAIRMAN (SHRI R. RAMAKRISHNAN): Shri Chandra

Pratap Narain Singh to make a statement on the launching of INSAT-1A.

THE MINISTER OF STATE IN THE DEPARTMENTS OF SCIENCE AND TECHNOLOGY, ELECTRONICS AND ENVIRONMENT AND OCEAN DEVELOPMENT (SHRI CHANDRA PRATAP NARAIN SINGH): Sir, the INSAT-1A satellite was launched at 1217 hrs. Indian Standard Time (IST) on Saturday, 10th April, 1982 by a Delta 3910 launch vehicle from Cape Canaveral, USA. The launch was originally scheduled for 8th April. However, it had to be postponed by a day owing to damage to the solar sail by an inappropriate forced cooling airflow at the launch pad. The damaged solar sail was replaced in time for 9th April but this had again to be postponed by a day as the Advanced Range Instrumentation Aircraft (ARIA) required for down range Delta second stage and PAM (upper stage) telemetry support could not reach its station in time due to engine trouble.

In spite of inclement weather, on 10th April, the countdown proceeded smoothly and the lift-off took place at 1217 hrs. IST. The Delta 3910 launch vehicle placed the satellite and its Solid Spinning Upper Stage (PAM) in a ballistic trajectory over the Atlantic Ocean. After separation from the launch vehicle, an 87 second burn of the PAM motor put the spacecraft in a transfer orbit. Though within specifications, the transfer orbit achieved was somewhat on the low side, the apogee being some 640 kms. less than the nominal (35,780 kms).

The INSAT-1A spacecraft in its transfer orbit was acquired by the INSAT Master Control Facility (MCF) at Hassan about 1257 hrs. IST, and thereafter the control of the spacecraft shifted to MCF. The INSAT-1A spacecraft control Team at the MCF commanded separation of the burnt

[Shri Chandra Pratap Narain]

out PAM motor from the spacecraft, despun the spacecraft, more the spacecraft to acquire the sun and deployed the solar array to its transfer orbit configuration. One other command issued at this stage was for the deployment of the C-Band antenna to open up the reaction control thrusters located on the East face of the satellite. Certain anomalies were noticed with regard to this operation. Subsequently a decision was made not to fire the apogee motor at the first apogee as scheduled earlier. Instead, the 5-lb reaction control system (RCS) thrusters were fired for about 6 minutes and 45 seconds to raise the perigee by about 55 kms.

On 11th April MCF oriented the spacecraft for its first apogee motor firing and at 1411 hrs. commanded the first firing of the 110-lb apogee thruster for about 34 minutes to place the spacecraft in an intermediate orbit.

On 12th April, the second firing of the apogee motor was commanded at 1806 hrs. IST for about 21 minutes to place the satellite in a near synchronous orbit. Another major manoeuvre carried out on 12th April was the successful deployment of the five panel solar array which provides solar power to the spacecraft.

At 1651 hrs. on 14th April and at 0610 hrs. on 15th April, velocity correction manoeuvres were carried out using 5-lb RCS thrusters on the westface to arrest the Eastward drift of the satellite and to induce a westward drift to bring the satellite to its station (74 degree East) in the geostationary orbit. After acquisition of station in the geostationary orbit the spacecraft has been put in three axis stabilisation mode with one momentum wheel and one reaction wheel running. At 1443 hrs. on 20th April the deployment of the C/S-band antenna on the westface of the satellite was successfully commanded. The same command was expected to release the solar sail restraints to

enable solar sail deployment through execution of the same command for an extended time. However, so far solar sail has not deployed despite multiple commands from MCF.

To deploy the undeployed C-Band Reflector a number of contingency operations were carried out after a great deal of study and simulations. The positive indication of successful deployment of C-Band Antenna is available on the telemetry and has been confirmed by radio frequency tests. A colour TV test signal was transmitted to the satellite from MCF at 2110 hrs. on 23rd April and the quality of signal received, using telecommunication transponder no. 12 and C-Band antenna, was excellent. All the twelve telecommunications transponders have since been put on. At 1230 hrs. on 24th April, the functioning of the TV Broadcast transponder no. 1 has also been confirmed by transmitting a colour TV test pattern. At 1310 hrs. same day signals were also successfully transmitted through one of the data relay transponder. At 1300 hrs. on 25th April the MCF verified the functioning of the visible channel of the Very High Resolution Radiometer (VHRR), the meteorological earth imaging instrument and the first image of the earth's full disc was received. Further tests preparatory to getting the spacecraft ready for operational use, are in progress. The deployment of the C-Band Reflector has also made available Eastface thrusters for fine orbit control purposes including East-West Station keeping. Now full attention is being paid to the deployment of the solar sail.

The health of the spacecraft continues to be satisfactory and the spacecraft is responsive to commands from the MCF. The difficulties experienced in INSAT-1A orbit raising and deployment are not uncommon in space missions especially in the case of first flights of new spacecraft.

**SHRI ERA SEZHIYAN** (Tamil Nadu): I want to convey my appreciation to the distinguished scientists and workers who made this very distinguished work in placing INSAT-1A in orbit, and I hope the entire House will join me in sending our warm greetings and deep appreciation for the fine work done by the scientists and workers in putting this satellite in orbit.

**SHRI AMARPROSAD CHAKRABORTY** (West Bengal): I also join in this appreciation. The entire House joins in this.

**SHRI SANKAR PRASAD MITRA** (West Bengal): We all appreciate the efforts that have been made by our Scientists and then co-workers and I associate myself with the statement of Mr. Sezhiyan.

**SHRI HARI SHANKAR BHABHA** (Rajasthan): My party also joins Mr. Era Sezhiyan and sends its congratulations to all the scientists on their fine work.

**SHRI GHULAM RASOOL MATTO** (Jammu and Kashmir): So does my party.

**श्री हुसैन देव नारायण यादव (बिहार) :**  
श्रीमन, मैं भी, जो श्री इरा सैजियान साहब ने प्रस्ताव रखा है। हम लोग भी इसके लिये अपने वैज्ञानिकों को धन्यवाद देते हैं और आशा करते हैं कि हमारे देश के वैज्ञानिक अपनी प्रतिभा का प्रकाश इसी तरह से देश को देते रहेंगे और सरकार की ओर से भी हमारे वैज्ञानिकों को पूर्ण सहयोग मिलेगा और नीकरशाही के चलते उनके काम में किसी तरह की बाधा नहीं आयेगी।

**SHRI DIPEN GHOSH** (West Bengal): On behalf of my party, the Communist Party of India (Marxist), I join others in congratulating the scientists and technologists of our country through whose service this achievement could be recorded.

**SHRI R. MOHANARANGAM** (Tamil Nadu): On behalf of my party, I join Mr. Era Sezhiyan in congratulating our scientists who are responsible for achieving this Herculean task.

**THE VICE-CHAIRMAN (SHRI R. RAMAKRISHNAN):** On behalf of myself and on behalf of the whole House, I wish to say that this is really a great achievement and it has proved that Indian space research has come of age. I join the entire House in congratulating the Government and the scientists on this very unique achievement and hope that greater progress will be made in the years to come.

Now, Mr. Shiva Chandra Jha would like to ask for a clarification.

**श्री शिव चन्द्र झा (बिहार) :** उपसभाध्यक्ष महोदय, इस में हम सब लोग एक साथ हैं कि यह कामयाबी हमारे वैज्ञानिकों की हुई है, इस में कोई दो मत नहीं हैं। हम यही कामना करते हैं कि इस तरह की कामयाबी हमारे वैज्ञानिकों को बराबर मिलती जाये और वह दिन जल्द आये जब भारतीय चांद पर भी उतरें। लेकिन दो तीन बातों की मैं सफाई मंत्री महोदय से चाहता हूँ।

पहली बात यह है कि आपने इन-सेट-1ए छोड़ा अमरीका बेश से। अमरीकी बेश से या दूसरे देश की बेस पर कब तक आप डिपेंड करेंगे? कभी क्या वह समय आयेगा जब हमारे देश का अपना बेस होगा, इंडिया में, जहां से इस तरह इनसेट हम छोड़ेंगे? दूसरे शब्दों में सैल्फ रिलायेंस जिसको कहते हैं, इस प्वाइंट आफ व्यू से क्या आपके सामने नीति है, वह कब तक संभव होगा?

दूसरी बात यह है कि आपने बताया कि वहां से ट्रांसमिशन हुआ है, ट्रांसमिट हुई है, कलर टी० वी० में भी उसको पकड़ा गया है, बहुत अच्छा है, कन्फर्म हुआ है, सब परफेक्ट है, एक्सलेट है।

[ श्री शिव चन्द्र झा ]

हमारे देश में जब कि 48 प्रतिशत लोग गरीबी की रेखा से नीचे हैं, घरों में बहुत कम लोगों के रेडियो और टेलीविजन हैं, इसलिये जनता में इसकी उपलब्धि पहुंचे इसके लिये हर पंचायत में कम से कम एक रिसेविंग सैट रेडियो और टी. वी. का हो। ताकि भारत की जनता जो देहात में रहती है फायदा उठा सके। तीसरा, अब तक कितना पैसा खर्च हुआ इस एक्सपेरीमेंट में—भारत में कितना और बाहर के कारपोरेशन्स पर कितना? चौथा और आखिरी, हमारे वैज्ञानिकों ने जो किया है उस पर हमें नाज़ है, लेकिन वहां से जो छोड़ा गया है, जो सारी प्लटन वैज्ञानिकों की वहां थी उस में कितने लोग हमारे थे, कितने अमेरिकी थे या बाहर के थे? ये चार क्लेरिफिकेशन

SHRI CHANDRA PRATAP NARAIN SINGH: Mr. Vice-Chairman, at this point I do not have a very detailed answer but I would answer three questions that the honourable Member has asked, to the extent that is possible without notice for questions, because on a statement I can merely clarify. Regarding the use of the American launch base, all I would like to say is that we have also used the Soviet Russia's launch bases. At present we do not have the capability and the honourable Member is right. But certain tests and certain flights of lighter rockets are taking place within the country. We do not have capability of this major kind of satellite launching. I can assure the honourable Member, as he has rightly pointed out, the technical ability of our scientific personnel is as good as the best of the world. But we are hampered owing to certain financial constraints. But I can assure you and I hope that within a short period Government would be able to announce in Parliament a similar launching from Indian Space Centres or Indian launch-

ing pads. Regarding the second question, the honourable Member is very rightly concerned about TV facilities in all villages which constitute 76 per cent of our population in this country. The Government of India has taken up a programme, but as I said earlier, within the limited constraints of our financial capabilities we are trying to put up certain community centres all over India. It will not be possible to cover every panchayat in India. But to a certain degree, I can assure the honourable Member, this facility is being provided, specially because in certain areas ground transmission from the INSAT will be available in those States. I would like to mention here and I am sure the honourable Member would appreciate it that portions of Eastern U.P. and Bihar are to be covered in that programme. As regards the third question, as I said earlier, it is very difficult to answer the exact amount of money that has been spent. The honourable Member has asked a Starred Question and on Thursday I shall provide him with the details.

श्री शिव चन्द्र झा : कितने साइटिस्ट य हमारे वहां ?

श्री चन्द्र प्रताप नारायण सिंह : 8 अफसर यहां से गये हुए थे। लांचिंग के समय क्योंकि हम उन की फेसिलिटीज का इस्तेमाल कर रहे थे बहुमत उन्हीं का था। जो अफसर हमारे इस प्रोग्राम से सम्बन्धित थे यहां पर वही वहां गये हुए थे।

#### DISCUSSION ON THE WORKING OF THE MINISTRY OF LAW, JUSTICE AND COMPANY AFFAIRS— CONTD.

श्री असद मदनी (उत्तर प्रदेश) : वाइस चेयरमैन साहब, श्रीकाफ का ताल्लुक ला मिनिस्ट्री से है इसलिए ला मिनिस्ट्री के सिलसिले में मैं कुछ बातें उस के बारे में अर्ज करना चाहता हूं। आज़ादी से पहले हिन्दुस्तान में पूरे मुल्क