# The Loss of F-149, The INS Khukri: Reminiscences of a Survivor — Commander Anil Kumar Kakar

## Shri Sagat Shaunik®

#### Abstract

The sinking of the INS Khukri, which was torpedoed off the cost of Diu by a Pakistani submarine PNS Hangor, in the 1971 war was a great loss for the Indian Navy after a very successful missile boat attacks on Karachi harbour. This article about the reminiscences of a Survivor — Commander Anil Kumar Kakar (Retd) is derived from the interview of the survivor by Sagat Shaunik and his subsequent article "1971: Salute to the 'Silhouette of a Man" which appeared as a chapter in the book 'Untold Battlefield Tales' by Sagat Shaunik as well as in the Fauji Magazine.

#### The Beginning

Ommissioned as a Sub Lieutenant in the Indian Navy on 13 July 1970, Commander Anil Kumar Kakar completed basic training on 01 November 1971 and was posted on board INS Khukri as his first deployment. Captain Mahendra Nath Mulla was in command when he joined the ship. At that time war clouds were looming over East Pakistan (Bangladesh). INS Khukri was deployed at sea as part of the Western Fleet. Whilst at sea, war was declared on 04 December 1971. Captain Mulla was the Flotilla Commander for INS Khukri (F-149), INS Kuthar (F-146) and INS Kirpan (F-144). All three were anti-submarine-warfare (ASW) frigates (Type 14 Blackwood class) with dedicated anti-submarine munitions. Unfortunately, one of the flotilla's ships developed a

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problem and on around 05 December, she had been escorted back to harbour. By night 05/06 December 1971 it had docked safely.

#### **Background**

Short range of underwater target detection was a very serious shortcoming in the ASW frigates. The Navy was looking forward to overcoming and augmenting the detection range of sonar systems fitted on Khukri Class ships. On-board Khukri was an add-on equipment developed by BARC, Mumbai, aimed to improve the performance of Kukhri's British design Sonar 170B. Lieutenant AK Jain of the Indian Navy was the naval liaison officer working with BARC on this project and was on-board INS Kukhri.¹ Captain Mulla was very concerned with it because this was a nascent system whose efficacy was not validated. The ship put out to sea on night 6/7 December. It was reported that there was a Pakistani submarine operating off Kathiawar coast. The mission to Captain Mulla was to seek and destroy it. INS Khukri was accompanied by INS Kirpan.

Lieutenant Jain requested Captain Mulla if he could be given the assistance of an officer to operate his system along with him. Amongst the available junior officers on the ship, Captain Mulla nominated sub-lieutenant Kakar to be with Lieutenant Jain and told him to give Jain full assistance in all he required. The Torpedo & Anti-Submarine Warfare Officer (TASO) Lieutenant Manbar Singh; Lieutenant VK Jain and Anil Kakar had a small meeting to determine which of the two sonar systems namely Type 170 or Type 174 could be dovetailed with the new system created by Lieutenant Jain. A choice had to be made, as it needed a transducer from either of the sonars. Captain Mulla; Lieutenant Commander Joginder Krishan Suri (Executive Officer); Lieutenant Kundanmal Suresh Hiranand (Navigation & Direction Officer) and Lieutenant Manbar Singh (TASO) held a meeting, which Sub-Lieutenant Kakar attended being associated with Lieutenant Jain. After much deliberation and considering the requirement of the ship, with the possible benefits that may accrue with the new system; Captain Mulla decided that since war was on, the better system -Type 170 Sonar- must be available to the ship and Type 174 could be dovetailed with Lieutenant Jain's invention as he needed its transducer only.

The efficacy of the new system with 100% assurance was amiss, even the most sophisticated sonars today get false signals, which could be due to school of fish, sea bottom refraction, or even ambient noise. The new system was no exception, if at all, it was more pronounced towards getting marred by these concerns. As the ship commenced operating the new system married to the transducer of Type 174, many false signals raising undue alarms were being detected. Once again, Captain Mulla was very annoyed and wondered aloud "how could the quarters that matter, allow a new system, that has not been tried, be fitted on the Ship at such a time, when war is in progress"!

Of the false signals that were being picked up, any one of them could have been a lurking submarine, so, we had to go after those signals and verify them. Even Lieutenant Jain was a worried man. Jain and Kakar discussed on the 7th evening that they would request the TASO to give us Type 170 for a couple of hours, so that we could associate the new equipment with it. After seeking permission from the chain of command, they were allowed to do it for a couple of hours on morning 08 December 1971. With this, there was an appreciable improvement in the performance of equipment given by Lieutenant Jain. Then, the system was reconnected to the Type-174 transducer. As a matter of statement, the difference in range-detection capabilities of this system versus the system already fitted on the ship was 2.5 to 3 times. Captain Mulla with each passing moment was getting more and more disturbed and somehow controlled his anger. At one stage, he thought of disconnecting the new system and reverting to the legacy fitted transducer.

To clarify the subject as to how sonar systems function one can consider this akin to a visually disabled person looking for a small person in a big hall where the smaller person can always see him. So, ASW is a very challenging form of warfare as it is difficult to detect a submarine, which is the smaller person. The submarine in turn can detect the larger person (ship) earlier and with ease. The ship is the visually disabled person operating in the large hall called ocean. This analogy very roughly explains ASW challenges.

#### 'Action Stations' on 09 December 1971

On 09 December, the Khukri picked up a contact three or four

times and went to attempt prosecuting the submarine by launching anti-submarine projectile ammunition (Limbo Mark 10 Anti-Submarine Mortars) that could be launched up to a range of 1000 yards (1 km) away from the ship. In comparison to these projectiles, a torpedo has a range to the tune of 15-20,000 yards (13-18 km) and many torpedoes are homer-type that use acoustic sensors to home on to the target. As it is difficult to distinguish between false and true signals; there was little option than to attack every strong signal. A paradoxical situation arose that if it were a false target, it would lead to guick attrition of the limited ammunition on board. The Captain was a very concerned man as it could be that either the contact was false or the submarine was beyond the detection range of our Sonar systems. Simultaneously, the ship was also having a bit of a problem in one of its operating systems. That evening, the ship took some time for repair, and it was brought back to operational state.

During wartime, operations of our ships were in a two-watch system called defence-watch system, implying that 50% of crew would be always closed up in their fighting quarters. As and when action-stations are sounded everybody closes up at respective battle stations. This is an established modus operandi and best way of working on a ship, so it was being followed. Anil Kakar had completed his watch at about 2015 hrs and Lieutenant Jain took over from him. Finishing dinner by 2035 hrs or so, Kakar went to his cabin to take some rest because at midnight he had to again close up on duty.

At 2046 hrs, the first torpedo hit the Khukri, knocking out its propeller and setting the ship ablaze on the aft side. Several failure alarms started ringing; Kakar recalls that he reacted and ran towards the bridge, which was three companionways ahead, to find out what was happening. By the time he was climbing up the second companionway to the bridge, the ship had started listing very rapidly to starboard (right) side. In that inclined position, he climbed up one more companionway to reach the bridge with difficulty. He did not find anybody in the bridge except for Captain Mulla who was sitting in his chair in a very calm and poised manner. As Kakar came up the companionway, he could only see Captain Mulla's back, water was gushing in rapidly, and his thought was to get to the port wing as quickly as possible. He glimpsed the silhouette of a man sitting on his chair in a calm and poised

manner, knowing fully well that he was staring into his death. His posture indicated that he was fearless, and the thought of death did not disturb him. Legend has it that Captain Mulla had a whiskey and a cigar in his hand. But Kakar states that neither did he see this nor could there have been any time for that. Captain Mulla simply discharged his directions and occupied his position with a lot of élan, that's all!

As the the ship was hit on its aft and the Bridge and living quarters were located forward of the vessel, therefore, the violent torpedo impact was perhaps not perceived in these areas. The off-duty crews had assembled on the alleyway, thinking that the ship was under some kind of aerial attack, and they didn't want to come out less they be strafed. We had power failure and all systems were affected. Our public-address (PA) system was not available and there was no way to communicate with crew except for personally going down and telling them.

Kakar's assigned duty was in the TAS control room, which was a deck below the bridge, so he wanted to reach TAS as quickly as possible, but the crew assembled in the alleyway blocked the way. While climbing, he realised that the ship had sustained an attack and was sinking, he then moved to the Bridge and Port Way. The ship sank in a matter of about two and a half minutes. Anybody who had not started coming out initially had no chance of escape. Indeed, there was a bit of panic which is but natural and could not be addressed through PA system. It was the brave actions by Captain Mulla and some other officers in taking the initiative to abandon ship and bring some control as also by the good training of our sailors which enabled the survival of those who got out.

The ship was listing rapidly towards starboard, Kakar jumped into the port (left) wing to escape the ship. No sooner did he jump to the port wing the ship quickly sank and he began to drown with her. The ship just took a couple of minutes to be obliterated from the horizon. The aft of the ship had taken in a lot of water, became heavy and listed to starboard. Commander Kakar recalls that he must have gone down 25-30 feet during the process of listing, aft sinking and the ship gyrating to become vertical with bows pointing skywards. He was disoriented and spinning underwater, in retrospect he states that he did not know what was happening to him!

But it appears God almighty has his own design. When a ship sinks as rapidly as the Khukri did, a lot of air gets trapped inside and under pressure seeks its way out. Perhaps, the bridge was one such escape route for the air and maybe God timed Kakar's location. He was being propelled in a circular fashion; the trapped air seeking its way out facilitated his escape from the sinking situation. Somehow, the timing was right, and the vortex moved him towards an opening and the escaping air ejected him clear off the ship. Had he been near that exit, a moment earlier or later, he would have been sucked down and wouldn't have been alive to narrate this experience!

During his traumatic experience Kakar had taken in seawater and furnace oil, upon surfacing he recalls the most unforgettable experience of racking regurgitation and gasping for air. Kakar states that even today his sleep is often disturbed by this experience. By God's grace a floating wooden grating piece came in his way, he caught hold of it and remained afloat in the water for over an hour. Khukri was operating off Diu, an area notorious for sea snakes. Kakar sensed a tingling sensation on his left leg and thought a snake was slithering. He involuntarily jerked his leg to discover that it was not a snake, it was the line of an inflatable life raft that got inflated by the jerk. Suddenly, he had this big life raft in front of him. He was tired and exhausted, his body coated with oil, and so it took an effort to get inside the life raft. The irony was that he apparently was the last man out of INS Khukri and the first man on that life raft. He thereafter started picking up anyone he could find. The first person he pulled in was Sub Lieutenant MS Ahluwalia, together they kept pulling in survivors. It was a 21-man life raft; they were able to pack in 29, they didn't want to leave anyone.

10 December 1971. On the morning of 10 December, Navy Search & Rescue (SAR) operations aircraft sighted the survivors. The survivors in the life raft where Kakar was were picked up by INS Katchall (P-81) an Arnala Class ASW Corvette commanded by Commander KN Zadu. His ship, with the survivors it had, was directed for a hunter-killer mission to seek and destroy the submarine and returned to Bombay harbour only on 14 December. Until then, Kakar states that he didn't really fathom what had happened. It was only when he finally stood on *terra firma*, he recalls a great feeling of thanksgiving.

#### The Aftermath

The survivors were given 30 days leave to go home, recuperate, and come back to continue service. Most of them suffered mental trauma, not openly talked about in those days. What could have happened if Captain Mulla had evacuated himself? Commander Kakar feels that a man of his intelligence and capabilities would have been an asset to the Indian Navy. In his death, the Indian Navy lost his great experiences of real time situations. Kakar strongly feel that if he had survived, he would have motivated many young officers towards a higher dedication that he personally exemplified in his own life. Administratively, there were two situations he would have faced, he could have either been rewarded or punished. What Commander Kakar says is that all this happened in his infant days of service. In a sub-Lieutenant's perception, Captain Mulla was a man who could have taken the navy to a greater place, so his loss was a great loss not just to the navy but to the nation as well.

Captain Mahendra Nath Mulla's brave act has motivated thousands of Indian Navy personnel who joined and served in the Indian Navy after 1971. His story always motivates all to perform to the best of their abilities. As for Commander (then Sub-Lieutenant) Kakar, he always held that Captain Mulla's silhouette placed him on a higher pedestal of thinking. Captain Mulla exemplified acceptance of responsibilities with a passion to serve. It took him a long way in life.

There were 67 survivors including 05 officers, 01 midshipman and 61 crewmembers. There were 194 men on board who were killed in action. The officers who survived in order of seniority were Lieutenant Commander Manu Sharma, NM; Sub Lieutenant MS Ahluwalia, NM; Sub Lieutenant VB Khanzode; Sub Lieutenant SK Basu, NM; Sub Lieutenant AK Kakar and Midshipman SN Singh. The list of the crew killed in action, is given below. Commander Anil Kumar Kakar believes that God has brought us in this world, so do our job well. He will only take you when either you are useless, or he needs you more! He is certain that God would have told Captain Mahinder Nath Mulla; "bus karr yaara, saari duty kar lee, ab tu aithe aaja, aithe teri jaroorat bahut hegee" (enough my friend, you have done your duty, now you come here, your presence is required more in heaven).

1971: INS Khukri (F-149) Honours List						
Rank	Name	Gallantry Award	Appointment	Actions		
Captai n(X)	Mahendra Nath Mulla	Maha Vir Chakra (Posthumous)	Commanding Officer	Supervised arrangements for evacuating ship, continued directing rescue operations and refused evacuation giving own lifejacket to a sailor. Having directed as many of his men as possible to leave ship, went back to Bridge to ensure further rescue operations. Last seen going down with his ship.		
Lt Cdr (X)	Joginder Krishan Suri	Vir Chakra (Posthumous)	Executive Officer (2IC equivalent)	Rushed to cut life-saving floats and rafts, threw them in sea and directed men out. Continued evacuation after second torpedo.		
Cdr (E)	Ommen Mukadavil Ommen	Vir Chakra (Posthumous)	Engineer Officer	Went below Ship to inform others to evacuate. Continued evacuation after second torpedo.		
Lt Cdr (X)	Rajat Kumar Sen	Vir Chakra (Posthumous)	Supply Officer	Went below Ship to inform others to evacuate. Continued evacuation after second torpedo.		
Surge on Lt	Sudhansu Sekhar Panda	Vir Chakra (Posthumous)	Surgeon (RMO equivalent)	Went down to Ship's sick bay, ensured sick and wounded were brought on deck for evacuation. Continued evacuation after second torpedo.		
Lt Cdr	Manu Sharma		Communicati			
Sub Lt	Madanjit Singh Ahluwalia Samir Kant Basu	Nao Sena Medal	ons Branch Officer	Post Combat Survival Operations.		

# ROLL OF HONOUR (Derived from Website of the National War Memorial)

SI No	NAME		
1.	CAPT M N MULLA, MVC LT CDR PRABHAT KUMAR, VrC		
2.	LT CDR PRABHAT KUMAR, VrC		
3.	LT CDR J K SURI, VrC		
4.	CDR M OMMEN, VrC		
5.	LT V K JAIN, NM		
6.	LT S H KUNDANMAL, NM		
7.	SURG LT S S PANDA, VrC		
8.	LT MANBAR SINGH		
9.	SLT S P S KUSHWAHA		
10.	SLT SHASHI PRAKASH		
11.	SLT SUSHIL KUMAR		
12.	LT M SAMPAT KUMAR		
13.	LT D K SHARMA		
14.	SLT S C SAPRA		
15.	SLT SAMUEL ABRAHAM		
16.	LT CDR RAJAT KUMAR SEN		
17.	MIDSHIPMEN A G PATIL		
18.	SLT G S SANDHU		
19.	STD - II R MAHTO		
20.	SEA - I A K JHA		
21.	WTR -I M HALIM		
22.	ERA IV G P SINGH		
23.	EAP IV S SINGH		
24.	ERA 3 B N SINGH		
25.	POME C KACHOHAP		
26.	PO S N RAM		
27.	SEA - II OM PRAKASH TYAGI		
28.	SEA -II R S YADAV		
29.	EMR -I P L SHEEMAR		
30.	TOP - I P SINGH		
31.	SIG I H SINGH		
32.	ME-I HARI LAL		
33.	TOP - I NANDU BHAI		
34.	LME R S NIMON		
35.	SEA - II S S NIRWAL		
36.	SEA - I RAJ KUMAR		
37.	LSIG S S YADAV		
38.	LME S S MALHAN		
39.	LME RAMESHWAR		
40.	SEA - I I SINGH		
41.	TEL - I PARMA NAND		
42.	POWTR R SINGH		
43.	SEA - II M RAM		
44.	POSTD K SINGH		
45.	TEL P S DHIMAN		
46.	SEA - II R SINGH		
47.	SIG I K K SUD		
48.	LTEL R S PARMAR		
49.	POME M SINGH		
50.	SEA - I MOHINDER PAL		
50.	CLA - I WOITHVOLITTAL		

W	/ar N	lemorial)
	SI No	NAME
	51.	SEA - II N CHAND
	52.	SIG P CHAND
	53.	LS SRIDHAR
	54.	CK(S) B RAM
	55.	LS DESONDHI MAL
	56.	STD - I P RAM
	57.	EAP 4 A SINGH
	58.	ME -I K B S GULERIA
	59.	LEMR SALG RAM
	60.	EAR 5 K C NANDH
	61.	EAR 5 M SHARMA
	62.	EAR 5 K CHAND
	63.	MCPO - II BANSILAL
	64.	WM 3 K S MANKOTIA
	65.	LME Y S BHARDWAJ
	66.	STD - II JAGDISH CHAND
	67.	POSTD H R SHARMA
	68.	MCELP II O P KOHLI
	69.	SEA - I G R NAIR
	70.	POME M R C NAIR
	71.	SEA-1 V K R PILLAI
	72.	SEA-I N S G K NAIR
	73.	SEA-I JOHN THOMAS
	74.	SEA-I K GURUDAS
	75.	LS B SASIDHARAN
	76.	SEA-I R N SAHADEVAN
	77.	SEA-I ZAINUDDIN
	78.	PO T C SIDHARTHAN
	79.	SEA-I E P VERGHESE
	80.	ME-I V N NARAYAN
	81.	TEL K P BHASKARAN
	82.	PO TEL K S JOHN
	83.	ERA 3 P BALACHANDRAN
	84.	PO TEL W P MANUEL
	85.	SEA II V VENUGOPAL
	86.	ERA 2 M K UNNIKRISHNAN
	87.	SEA II C P KURIAN
	88.	EMP II A P MAHANAN
	89.	LSTD T O VERGHESE
	90.	ME II J N K NAIR
	91.	TEL I S THOMAS
	92.	SEA I M V SOMRAJ
	93.	TEL N BALAN
	94.	SEA II P L DEVASSY
	95.	LEMP K M KURIAN
	96.	EMP II S N KRISHNAN
	97.	EAP 4 P R KRISHNAN
	98.	EAR 5 E JOHN
	99.	EAP 3 T R RAJU
	100.	ERA 4 K B SADHIES

SI NO   NAME   148.   SO   NAME   148.   SO   NAME   148.   SO   NAME   148.   SO   SO   SO   SO   SO   SO   SO   S		Reminiscences of a Survivor —		
102. ME II K P MOIDEEN   103. SEA I L G WERULKAR   150. TEL A G RAJMANI   150. TEL A G RA	SI No	NAME	SI No	NAME
103.   SEA   L G WERULKAR   150.   TEL A G RAJMANI   101.   TEL I W RAY   151.   LSIG P R LOKIAAH   152.   LTEL A SABASTIAN   153.   SEA-I S B SAMI   154.   PO C D MANDIRI   155.   SEA-I A KABILAN   156.   ME-I G VENKATESAN   157.   ME-I R GURUMURTHY   158.   CH YS M A PROSPERIAN   159.   MAA K G NAIR   151.   CK (O) A RAJU   152.   CHME N SINGH   164.   SEA I B S TANGNIYA   165.   SEA I I R SINGH   166.   SEA I A K TRIPATHI   169.   MECH-3 A P RANA   170.   SEA I M S NEGI   171.   TEL I H K MEHTA   172.   CHME N SINGH   173.   ERA 4 L S SHARMA   174.   ME II BANSHI LAL   175.   SA I A RAM   176.   SEA I M S NEGI   177.   ME I S N PATHAK   178.   CK (O) A PANDEY   179.   SEA I M S NEGI   179.   S	101.		148.	
104. TEL I W RAY   105. PO A LATIF   152. LTEL A SABASTIAN   106. EMP II K S THAKUR   153. SEA-I S B SAMI   107. LCK(S) S SHINDE   154. PO C D MANDIRI   155. SEA-I A KABILAN   109. STD I V R MORE   156. ME-I G VENKATESAN   110. ME I T R SALUNKE   157. ME-I R GURUMURTHY   111. LME J B PATIL   158. CH YS M A PROSPERIAN   112. ME I K KABBUR   113. LME B MALESAPPAR   160. ME I R SHRINIVASAN   114. TEL V DESHMUKH   161. CK (S) I T N S SHETTY   162. AG, LS K R JOSHI   116. SEA I T SAMANTA   163. SEA I R SANKER   164. SEA I B S TANGNIYA   165. SEA I R SANKER   166. SEA I R SANKER   167. EMP II RAM ANJU   167. EMP II RAM ANJU   168. SEA I R SANKER   169. MECH-3 A P RANA   170. SEA I M S NEGI   171. TEL I H K MEHTA   172. EMR II HARI MITTER   173. SPO R PIARA   174. ME II BANSHI LAL   173. SPO R PIARA   174. ME II BANSHI LAL   173. SPO R PIARA   174. ME II BANSHI LAL   175. SA I A RAM   1	102.	ME II K P MOIDEEN	149.	CK(O) P S RAWAT
105. PO A LATIF   106. EMP II K S THAKUR   153. SEA-I S B SAMI   107. LCK(S) S SHINDE   154. PO C D MANDIRI   155. SEA-I A KABILAN   109. STD I V R MORE   155. SEA-I A KABILAN   110. ME I T R SALUNKE   157. ME-I R GURUMUTHY   111. LME J B PATIL   158. CH YS M A PROSPERIAN   117. ME I K KABBUR   159. MAA K G NAIR   118. LME B MALESAPPAR   160. ME II R SHRINIVASAN   117. ERA 3 S MOHAN   161. CK (O) A RAJU   161. CK (O) A RAJU   161. SEA I T SAMANTA   163. SEA I R SANKER   164. SEA I R SANKER   164. SEA I R SANKER   165. SEA I R SANKER   166. SEA I A K TRIPATHI   162. AG, LS K R JOSHI   166. SEA I A K TRIPATHI   167. EMP II RAM ANJU   168. SEA I R B SINGH   168. POME R SINGH   169. MECH-3 A P RANA   170. SEA I M S NEGI   171. TEL I H K MEHTA   172. EMP II RAM INTERED   173. ERA 4 L S SHARMA   174. ME II BANSHI LAL   174. ME II BANSHI LAL   175. SA I A RAM   176. LS M G PANDEY   177. ME I S N PATHAK   178. PO N S KATHAIT   178. PO N S KATHAIT   179. LS R SINGH   170. SEA I M S NEGI   175. SA I A RAM   176. LS M G PANDEY   178. EAP-4 B SINGH   179. LS R SINGH   180. LTOP OM PRAKASH   181. ME I V SINGH   182. EMR I A K KHANNA   183. LTEL B D MANNA   183. LTEL B D MANNA   184. ME II P C MAITY   184. ME II P C MAITY   184. ME II P C MAITY   185. ME I S K DAS   185. ME I S K DAS   185. ME I S K DAS   185. ME I N SAMANTA   184. ME II P C MAITY   189. SEA I N SAMANTA   184. ME-1 B SINGH   189. SEA I N SAMANTA   184. ME-1 B SINGH   189. SEA I N SAMANTA   189. SEA	103.	SEA I L G WERULKAR	150.	TEL A G RAJMANI
106. EMP II K S THAKUR   107. LCK(S) S SHINDE   153. SEA-I S B SAMI   107. LCK(S) S SHINDE   155. SEA-I A KABILAN   109. STD I V R MORE   156. ME-I G VENKATESAN   110. ME I T R SALUNKE   157. ME-I R GURUMURTHY   111. LME J B PATIL   158. CH YS M A PROSPERIAN   112. ME I K KABBUR   159. MAA K G NAIR   113. LME B MALESAPPAR   160. ME II R SHRINIVASAN   114. TEL V DESHMUKH   161. CK (O) A RAJU   162. AG, LS K R JOSHI   117. ERA 3 S MOHAN   163. SEA I R SANKER   164. SEA I T SAMANTA   165. SEA I R SANKER   166. SEA I R SANKER   167. EMP II RAM ANJU   168. SEA I A K TRIPATHI   169. SEA I A S SEA I R SANKER   167. EMP II RAM ANJU   168. POME R SINGH   169. MECH-3 A P RANA   169. MECH-3 A P RANA   170. SEA I M S NEGI   171. TEL I H K MEHTA   172. EMP II HARI MITTER   174. ME II BANSHI LAL   175. SA I A RAM   176. LS M G PANDEY   177. ME I S N PATHAK   178. EAP-4 INDERJIT   178. PO N S KATHAIT   179. LS R SINGH   181. ME I V SINGH   182. EAP-4 B SINGH   182. EMR I A K KHANNA   183. LTEL B D MANNA   184. EAP-3 S K PATHAK   181. ME I V SINGH   182. EMR I A K KHANNA   183. LTEL B D MANNA   184. ME II P C MAITY   185. ME-1 B SINGH   185. ME I S K BISWAS   186. CK I B K MANDAL   187. AG ERA 4 K MUKHOPADYA   188. SEA I A K SARKAR   181. ME I S N SAMANTA   184. ME II P C MAITY   187. AG ERA 4 K MANDAL   187. AG ERA 4 K MANDAL   188. SEA I A K SARKAR   181. ME I S K BISWAS   186. CK I B K MANDAL   187. AG ERA 4 K MUKHOPADYA   188. SEA I A K SARKAR   189. SEA I N SAMANTA   184. EAP-4 S C CHAUHAN   189. SEA I N SAMANTA   184. EAP-4 S C CHAUHAN   189. SEA I N SAMANTA   184. EAP-4 IN DERJIT   189. SEA I N SAMANTA   184. EAP-4 S C CHAUHAN   189. SEA I N SAMANTA   184. EAP-4 S C CHAUHAN   189. SEA I N SAMANTA   184. EAP-4 S C CHAUHAN   189. SEA I N SAMANTA   184. EAP-4 S C CHAUHAN   189. SEA I N SAMANTA   184. EAP-4 S C CHAUHAN   189. SEA I N SAMANTA   184. EAP-4 IN DERJIT   189. SEA I N SAMANTA   184. EAP-4 S C CHAUHAN   189. S	104.	TEL I W RAY	151.	LSIG P R LOKIAAH
108.	105.		152.	
108.	106.	EMP II K S THAKUR	153.	SEA-I S B SAMI
109.   STD I V R MORE   110.   ME I T R SALUNKE   157.   ME-I R GURUMURTHY   111.   LME J B PATIL   158.   CH YS M A PROSPERIAN   112.   ME I K KABBUR   159.   MAA K G NAIR   160.   ME II R SHRINIVASAN   161.   CK (O) A RAJU   162.   AG, LS K R JOSHI   161.   CK (O) A RAJU   162.   AG, LS K R JOSHI   163.   SEA I R SANKER   164.   SEA I B S TANGNIYA   165.   SEA I B S TANGNIYA   166.   SEA I B S TANGNIYA   166.   SEA I B S TANGNIYA   167.   EMP II RAM ANJU   167.   EMP II RAM ANJU   168.   POME R SINGH   169.   MECH-3 A P RANA   169.   MECH-3 A P RANA   170.   SEA I M S NEGI   171.   TEL I H K MEHTA   172.   EMP II HARI MITTER   173.   ERA 4 L S SHARMA   174.   ME II BANSHI LAL   175.   SA I A RAM   176.   LS M G PANDEY   177.   ME I S N PATHAK   178.   EAP-4 B SINGH   179.   LS R SINGH   170.   LS R SINGH   170.   LS R SINGH   170.   SEA I R B SINGH   170.   SEA I R B SINGH   170.   SEA I M S NEGI   17	107.	LCK(S) S SHINDE	154.	PO C D MANDIRI
110.         ME I T R SALUNKE         157.         ME-I R GURUMURTHY           111.         LME J B PATIL         158.         CH YS M A PROSPERIAN           112.         ME I K KABBUR         159.         MAA K G NAIR           113.         LME B MALESAPPAR         160.         ME II R SHRINIVASAN           114.         TEL V DESHMUKH         161.         CK (O) A RAJU           115.         CK(S) I T N S SHETTY         162.         AG, LS K R JOSHI           116.         SEA I T SAMANTA         163.         SEA I R SANKER           117.         ERA 3 S MOHAN         164.         SEA II R B SINGH           119.         POELP J RAJ         166.         SEA I R S TANCNIYA           119.         POELP J RAJ         166.         SEA I R SINGH           120.         SIG B DAS         167.         EMP II RAM ANJU           121.         CHME N SINGH         167.         EMP II RAM ANJU           122.         TEL B SINGH         168.         POME R SINGH           123.         SCPO A SINGH         170.         SEA I M S NEGI           124.         LWTR K SINGH         171.         TEL I H K MEHTA           125.         SWA 3 S K VERMA         172.         APP U C PANDEY	108.		155.	
111.         LME J B PATIL           112.         ME I K KABBUR           113.         LME B MALESAPPAR           114.         TEL V DESHMUKH           115.         CK(S) I T N S SHETTY           116.         SEA I T SAMANTA           117.         ERA 3 S MOHAN           118.         LPM S LAL           119.         POELP J RAJ           120.         SIG B DAS           121.         CHME N SINGH           122.         TEL B SINGH           123.         SCPO A SINGH           124.         LWTR K SINGH           125.         SWA 3 S K VERMA           127.         EMR II HARI MITTER           128.         SEA I IB SINGH           129.         LCK M CHAND           130.         POELP R SINGH           131.         EAP-4 INDERJIT           132.         EAP-4 B SINGH           133.         SPO R PIARA           134.         EAP-3 S K PATHAK           135.         ERA-4 IN SINGH           137.         EAP-2 J S HARIKE           138.         STD-I S DASS           139.         LWTR H SINGH           131.         EAP-2 J S HARIKE	109.		156.	ME-I G VENKATESAN
112.         ME I K KABBUR           113.         LME B MALESAPPAR           114.         TEL V DESHMUKH           115.         CK(S) I T N S SHETTY           116.         SEA I T SAMANTA           117.         ERA 3 S MOHAN           118.         LPM S LAL           119.         POELP J RAJ           120.         SIG B DAS           121.         CHME N SINGH           122.         TEL B SINGH           123.         SCPO A SINGH           124.         LWTR K SINGH           125.         SWA 3 S K VERMA           127.         EMR II HARI MITTER           128.         SEA I I B SINGH           129.         LCK M CHAND           130.         POELP R SINGH           131.         EAP-4 INDERJIT           132.         EAP-4 B SINGH           133.         SPO R PIARA           134.         EAP-3 S K PATHAK           135.         ERA-5 P SINGH           136.         LWTR H SINGH           137.         ER SINGH           138.         SPO R PIARA           139.         LOBOR PIARA           131.         EAP-4 B SINGH           137.	110.		157.	
113.         LME B MALESAPPAR         160.         ME II R SHRINIVASAN           114.         TEL V DESHMUKH         161.         CK (O) A RAJU           115.         CK(S) I T N S SHETTY         162.         AG, LS K R JOSHI           116.         SEA I T SAMANTA         163.         SEA I R SANKER           117.         ERA 3 S MOHAN         164.         SEA I B S TANGNIYA           118.         LPM S LAL         165.         SEA II R B SINGH           119.         POELP J RAJ         166.         SEA I R SANKER           120.         SIG B DAS         166.         SEA I R SANKER           121.         CHME N SINGH         166.         SEA I R SANKER           122.         TEL B SINGH         166.         SEA I R SANKER           121.         CHME N SINGH         166.         SEA I R SANKER           122.         TEL B SINGH         167.         EMP II RAM ANJU           123.         SCPO A SINGH         169.         MECH-3 A P RANA           124.         LWTR K SINGH         170.         SEA I M S NEGI           125.         SWA 3 S K VERMA         172.         APP U C PANDEY           126.         POWTR H K SINGH         173.         ERA 4 L S SHARMA	111.	LME J B PATIL	158.	
114.         TEL V DESHMUKH           115.         CK(S) I T N S SHETTY           116.         SEA I T SAMANTA           117.         ERA 3 S MOHAN           118.         LPM S LAL           119.         POELP J RAJ           120.         SIG B DAS           121.         CHME N SINGH           122.         TEL B SINGH           123.         SCPO A SINGH           124.         LWTR K SINGH           125.         SWA 3 S K VERMA           126.         POWTR H K SINGH           127.         EMR II HARI MITTER           128.         SEA II B SINGH           129.         LCK M CHAND           130.         POELP R SINGH           131.         EAP-4 INDERJIT           132.         EAP-4 B SINGH           133.         SPO R PIARA           134.         EAP-3 S K PATHAK           135.         ERA-5 P SINGH           136.         LWTR H SINGH           137.         EAP-2 J S HARIKE           138.         STD-I S DASS           139.         LMA P SINGH           136.         LWTR H SINGH           137.         EAP-2 J S HARIKE           1	112.	ME I K KABBUR	159.	
115.         CK(S) I T N S SHETTY         162.         AG, LS K R JOSHI           116.         SEA I T SAMANTA         163.         SEA I R SANKER           117.         ERA 3 S MOHAN         164.         SEA I B S TANGNIYA           118.         LPM S LAL         165.         SEA II B SINGH           119.         POELP J RAJ         166.         SEA I A K TRIPATHI           120.         SIG B DAS         167.         EMP II RAM ANJU           121.         CHME N SINGH         168.         POME R SINGH           122.         TEL B SINGH         169.         MECH-3 A P RANA           123.         SCPO A SINGH         170.         SEA I M S NEGI           124.         LWTR K SINGH         171.         TEL I H K MEHTA           125.         SWA 3 S K VERMA         172.         APP U C PANDEY           126.         POWTR H K SINGH         173.         ERA 4 L S SHARMA           127.         EMR II HARI MITTER         174.         ME II BANSHI LAL           128.         SEA II B SINGH         175.         SA I A RAM           129.         LCK M CHAND         176.         LS M G PANDEY           130.         POELP R SINGH         177.         ME I S N PATHAK	113.	LME B MALESAPPAR		
116.         SEA I T SAMANTA           117.         ERA 3 S MOHAN           118.         LPM S LAL           119.         POELP J RAJ           120.         SIG B DAS           121.         CHME N SINGH           122.         TEL B SINGH           123.         SCPO A SINGH           124.         LWTR K SINGH           125.         SWA 3 S K VERMA           126.         POWTR H K SINGH           127.         EMR II HARI MITTER           128.         SEA II B SINGH           130.         POELP R SINGH           131.         EAP-4 INDERJIT           132.         EAP-4 B SINGH           133.         SPO R PIARA           134.         EAP-3 S K PATHAK           135.         ERA-5 P SINGH           136.         LWTR H SINGH           137.         EAP-2 J S HARIKE           138.         STD-I S DASS           139.         LMA P SINGH SHEKHWAT           140.         CK(S) H SINGH           141.         CK-I G B SINGH           142.         EAP-4 S C CHAUHAN           143.         ME-I B SINGH           144.         ME-II H R JAT	114.		161.	
117.         ERA 3 S MOHAN           118.         LPM S LAL           119.         POELP J RAJ           120.         SIG B DAS           121.         CHME N SINGH           122.         TEL B SINGH           123.         SCPO A SINGH           124.         LWTR K SINGH           125.         SWA 3 S K VERMA           126.         POWTR H K SINGH           127.         EMR II HARI MITTER           128.         SEA II B SINGH           129.         LCK M CHAND           130.         POELP R SINGH           131.         EAP-4 INDERJIT           132.         EAP-4 B SINGH           133.         SPO R PIARA           134.         EAP-3 S K PATHAK           135.         ERA-5 P SINGH           136.         LWTR H SINGH           137.         EAP-2 J S HARIKE           138.         STD-I S DASS           139.         LMA P SINGH SHEKHWAT           140.         CK(S) H SINGH           141.         CK-I G B SINGH           142.         EAP-4 S C CHAUHAN           143.         ME-1 B SINGH           144.         EMR-II H R JAT <td< td=""><td>115.</td><td></td><td></td><td></td></td<>	115.			
118.         LPM S LAL           119.         POELP J RAJ           120.         SIG B DAS           121.         CHME N SINGH           122.         TEL B SINGH           123.         SCPO A SINGH           124.         LWTR K SINGH           125.         SWA 3 S K VERMA           126.         POWTR H K SINGH           127.         EMR II HARI MITTER           128.         SEA II B SINGH           129.         LCK M CHAND           130.         POELP R SINGH           131.         EAP-4 INDERJIT           132.         EAP-4 B SINGH           133.         SPO R PIARA           134.         EAP-3 S K PATHAK           135.         ERA-5 P SINGH           136.         LWTR H SINGH           137.         EAP-4 INDERJIT           138.         SPO R PIARA           139.         LRAP-3 S K PATHAK           139.         LWTR H SINGH           137.         EAP-2 J S HARIKE           138.         STD-1 S DASS           139.         LMA P SINGH SHEKHWAT           140.         CK(S) H SINGH           141.         CK-1 G B SINGH           1				
119.         POELP J RAJ           120.         SIG B DAS           121.         CHME N SINGH           122.         TEL B SINGH           123.         SCPO A SINGH           124.         LWTR K SINGH           125.         SWA 3 S K VERMA           126.         POWTR H K SINGH           127.         EMR II HARI MITTER           128.         SEA II B SINGH           129.         LCK M CHAND           130.         POELP R SINGH           131.         EAP-4 INDERJIT           132.         EAP-4 B SINGH            133.         SPO R PIARA           134.         EAP-3 S K PATHAK           135.         ERA-5 P SINGH           136.         LWTR H SINGH           137.         EAP-2 J S HARIKE           138.         STD-I S DASS           139.         LMA P SINGH SHEKHWAT           140.         CK(S) H SINGH           141.         CK-I G B SINGH           142.         EAP-4 S C CHAUHAN           143.         ME-1 B SINGH           144.         EMR-II HIRALAL JAT           145.         ME-II H R JAT           146.         LS M SINGH				
120.         SIG B DAS           121.         CHME N SINGH           122.         TEL B SINGH           123.         SCPO A SINGH           124.         LWTR K SINGH           125.         SWA 3 S K VERMA           126.         POWTR H K SINGH           127.         EMR II HARI MITTER           128.         SEA II B SINGH           129.         LCK M CHAND           130.         POELP R SINGH           131.         EAP-4 INDERJIT           132.         EAP-4 B SINGH           133.         SPO R PIARA           134.         EAP-3 S K PATHAK           135.         ERA-5 P SINGH           136.         LWTR H SINGH           137.         EAP-2 J S HARIKE           138.         STD-I S DASS           139.         LMA P SINGH SHEKHWAT           140.         CK(S) H SINGH           141.         CK-I G B SINGH           142.         EAP-4 S C CHAUHAN           143.         ME-1 B SINGH           144.         EMR-II HR JAT           145.         ME-II HR JAT           146.         LS M SINGH	118.		165.	
121.         CHME N SINGH           122.         TEL B SINGH           123.         SCPO A SINGH           124.         LWTR K SINGH           125.         SWA 3 S K VERMA           126.         POWTR H K SINGH           127.         EMR II HARI MITTER           128.         SEA II B SINGH           129.         LCK M CHAND           130.         POELP R SINGH           131.         EAP-4 B SINGH           132.         EAP-4 B SINGH           133.         SPO R PIARA           134.         EAP-3 S K PATHAK           135.         ERA-5 P SINGH           136.         LWTR H SINGH           137.         EAP-2 J S HARIKE           138.         STD-I S DASS           139.         LMA P SINGH SHEKHWAT           140.         CK(S) H SINGH           141.         CK-I G B SINGH           142.         EAP-4 S C CHAUHAN           144.         EMR-I B SINGH           145.         ME-II H R JAT           146.         LS M SINGH				
122.         TEL B SINGH           123.         SCPO A SINGH           124.         LWTR K SINGH           125.         SWA 3 S K VERMA           126.         POWTR H K SINGH           127.         EMR II HARI MITTER           128.         SEA II B SINGH           129.         LCK M CHAND           130.         POELP R SINGH           131.         EAP-4 INDERJIT           132.         EAP-4 B SINGH           133.         SPO R PIARA           134.         EAP-3 S K PATHAK           135.         ERA-5 P SINGH           136.         LWTR H SINGH           137.         EAP-2 J S HARIKE           138.         STD-I S DASS           139.         LMA P SINGH SHEKHWAT           140.         CK(S) H SINGH           141.         CK-I G B SINGH           142.         EAP-4 S C CHAUHAN           143.         ME-I B SINGH           144.         EMR-II HIRALAL JAT           145.         ME-II H R JAT           146.         LS M SINGH	120.		167.	
123.         SCPO A SINGH           124.         LWTR K SINGH           125.         SWA 3 S K VERMA           126.         POWTR H K SINGH           127.         EMR II HARI MITTER           128.         SEA II B SINGH           129.         LCK M CHAND           130.         POELP R SINGH           131.         EAP-4 INDERJIT           132.         EAP-4 B SINGH           133.         SPO R PIARA           134.         EAP-3 S K PATHAK           135.         ERA-5 P SINGH           136.         LWTR H SINGH           137.         EAP-2 J S HARIKE           138.         STD-I S DASS           139.         LMA P SINGH SHEKHWAT           140.         CK(S) H SINGH           141.         CK-I G B SINGH           142.         EAP-4 S C CHAUHAN           143.         ME-I B SINGH           144.         EMR-II HIRALAL JAT           145.         ME-II H R JAT           146.         LS M SINGH	121.			
124.         LWTR K SINGH           125.         SWA 3 S K VERMA           126.         POWTR H K SINGH           127.         EMR II HARI MITTER           128.         SEA II B SINGH           129.         LCK M CHAND           130.         POELP R SINGH           131.         EAP-4 INDERJIT           132.         EAP-4 B SINGH           133.         SPO R PIARA           134.         EAP-3 S K PATHAK           135.         ERA-5 P SINGH           136.         LWTR H SINGH           137.         EAP-2 J S HARIKE           138.         STD-I S DASS           139.         LMA P SINGH SHEKHWAT           140.         CK(S) H SINGH           141.         CK-I G B SINGH           142.         EAP-4 S C CHAUHAN           143.         ME-1 B SINGH           144.         EMR-II HIRALAL JAT           145.         ME-II H R JAT           146.         LS M SINGH    171.  TEL I H K MEHTA  172.  APP U C PANDEY  173.  ERA 4 L S SHARMA  174.  ME II BANSHI LAL  175.  SA I A RAM  176.  LS M G PANDEY  177.  ME I S N PATHAK  178.  PO N S KATHAIT  179.  LS R SINGH  180.  LTOP OM PRAKASH  181.  ME I V SINGH  182.  EMR I A K KHANNA  183.  LTEL B D MANNA  184.  ME II P C MAITY  186.  CK I B K MANDAL  187.  AG ERA 4 K MUKHOPAD				
125.       SWA 3 S K VERMA         126.       POWTR H K SINGH         127.       EMR II HARI MITTER         128.       SEA II B SINGH         129.       LCK M CHAND         130.       POELP R SINGH         131.       EAP-4 INDERJIT         132.       EAP-4 B SINGH         133.       SPO R PIARA         134.       EAP-3 S K PATHAK         135.       ERA-5 P SINGH         136.       LWTR H SINGH         137.       EAP-2 J S HARIKE         138.       STD-I S DASS         139.       LMA P SINGH SHEKHWAT         140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-1 B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH				
126.       POWTR H K SINGH         127.       EMR II HARI MITTER         128.       SEA II B SINGH         129.       LCK M CHAND         130.       POELP R SINGH         131.       EAP-4 INDERJIT         132.       EAP-4 B SINGH         133.       SPO R PIARA         134.       EAP-3 S K PATHAK         135.       ERA-5 P SINGH         136.       LWTR H SINGH         137.       EAP-2 J S HARIKE         138.       STD-I S DASS         139.       LMA P SINGH SHEKHWAT         140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-1 B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH				
127.       EMR II HARI MITTER         128.       SEA II B SINGH         129.       LCK M CHAND         130.       POELP R SINGH         131.       EAP-4 INDERJIT         132.       EAP-4 B SINGH         133.       SPO R PIARA         134.       EAP-3 S K PATHAK         135.       ERA-5 P SINGH         136.       LWTR H SINGH         137.       EAP-2 J S HARIKE         138.       STD-I S DASS         139.       LMA P SINGH SHEKHWAT         140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-I B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH				
128.       SEA II B SINGH         129.       LCK M CHAND         130.       POELP R SINGH         131.       EAP-4 INDERJIT         132.       EAP-4 B SINGH         133.       SPO R PIARA         134.       EAP-3 S K PATHAK         135.       ERA-5 P SINGH         136.       LWTR H SINGH         137.       EAP-2 J S HARIKE         138.       STD-I S DASS         139.       LMA P SINGH SHEKHWAT         140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-I B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH				
129.       LCK M CHAND         130.       POELP R SINGH         131.       EAP-4 INDERJIT         132.       EAP-4 B SINGH         133.       SPO R PIARA         134.       EAP-3 S K PATHAK         135.       ERA-5 P SINGH         136.       LWTR H SINGH         137.       EAP-2 J S HARIKE         138.       STD-I S DASS         139.       LMA P SINGH SHEKHWAT         140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-I B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH				
130.       POELP R SINGH         131.       EAP-4 INDERJIT         132.       EAP-4 B SINGH         133.       SPO R PIARA         134.       EAP-3 S K PATHAK         135.       ERA-5 P SINGH         136.       LWTR H SINGH         137.       EAP-2 J S HARIKE         138.       STD-I S DASS         139.       LMA P SINGH SHEKHWAT         140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-I B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH				
131.       EAP-4 INDERJIT         132.       EAP-4 B SINGH         133.       SPO R PIARA         134.       EAP-3 S K PATHAK         135.       ERA-5 P SINGH         136.       LWTR H SINGH         137.       EAP-2 J S HARIKE         138.       STD-I S DASS         139.       LMA P SINGH SHEKHWAT         140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-I B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH				
132.       EAP-4 B SINGH         133.       SPO R PIARA         134.       EAP-3 S K PATHAK         135.       ERA-5 P SINGH         136.       LWTR H SINGH         137.       EAP-2 J S HARIKE         138.       STD-I S DASS         139.       LMA P SINGH SHEKHWAT         140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-I B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH				
133.       SPO R PIARA         134.       EAP-3 S K PATHAK         135.       ERA-5 P SINGH         136.       LWTR H SINGH         137.       EAP-2 J S HARIKE         138.       STD-I S DASS         139.       LMA P SINGH SHEKHWAT         140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-I B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH				
134.       EAP-3 S K PATHAK         135.       ERA-5 P SINGH         136.       LWTR H SINGH         137.       EAP-2 J S HARIKE         138.       STD-I S DASS         139.       LMA P SINGH SHEKHWAT         140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-I B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH				
135.       ERA-5 P SINGH         136.       LWTR H SINGH         137.       EAP-2 J S HARIKE         138.       STD-I S DASS         139.       LMA P SINGH SHEKHWAT         140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-I B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH				
136.       LWTR H SINGH         137.       EAP-2 J S HARIKE         138.       STD-I S DASS         139.       LMA P SINGH SHEKHWAT         140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-I B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH				
137.       EAP-2 J S HARIKE         138.       STD-I S DASS         139.       LMA P SINGH SHEKHWAT         140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-I B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH				
138.       STD-I S DASS         139.       LMA P SINGH SHEKHWAT         140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-I B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH            185.       ME I S K BISWAS         186.       CK I B K MANDAL         187.       AG ERA 4 K MUKHOPADYA         188.       SEA I S K DAS         190.       SEA I N SAMANTA         191.       LCK (O) P K SEN         192.       SEA I S P DUTTA         193.       TOP - I A LAL				
139.       LMA P SINGH SHEKHWAT         140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-1 B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH             188.       SEA I A K SARKAR         189.       SEA I S K DAS         190.       SEA I N SAMANTA         191.       LCK (O) P K SEN         192.       SEA I S P DUTTA         193.       TOP - I A LAL	_			
140.       CK(S) H SINGH         141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-1 B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH             187.       AG ERA 4 K MUKHOPADYA         188.       SEA I S K DAS         190.       SEA I N SAMANTA         191.       LCK (O) P K SEN         192.       SEA I S P DUTTA         193.       TOP - I A LAL		STD-I S DASS		
141.       CK-I G B SINGH         142.       EAP-4 S C CHAUHAN         143.       ME-1 B SINGH         144.       EMR-II HIRALAL JAT         145.       ME-II H R JAT         146.       LS M SINGH             188.       SEA I A K SARKAR         189.       SEA I S K DAS         190.       SEA I N SAMANTA         191.       LCK (O) P K SEN         192.       SEA I S P DUTTA         193.       TOP - I A LAL		LMA P SINGH SHEKHWAT		
142.       EAP-4 S C CHAUHAN       189.       SEA I S K DAS         143.       ME-1 B SINGH       190.       SEA I N SAMANTA         144.       EMR-II HIRALAL JAT       191.       LCK (O) P K SEN         145.       ME-II H R JAT       192.       SEA I S P DUTTA         146.       LS M SINGH       193.       TOP - I A LAL				
143.       ME-1 B SINGH       190.       SEA I N SAMANTA         144.       EMR-II HIRALAL JAT       191.       LCK (O) P K SEN         145.       ME-II H R JAT       192.       SEA I S P DUTTA         146.       LS M SINGH       193.       TOP - I A LAL				
144.       EMR-II HIRALAL JAT       191.       LCK (O) P K SEN         145.       ME-II H R JAT       192.       SEA I S P DUTTA         146.       LS M SINGH       193.       TOP - I A LAL				
145. ME-II H R JAT 146. LS M SINGH 193. TOP - I A LAL				
146. LS M SINGH 193. TOP - I A LAL				
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147.   SEA-I P CHAND   194.   LME S B S CHAUHAN				
	147.	SEA-I P CHAND	194.	LME S B S CHAUHAN

## **Endnotes**

<sup>1</sup> Dr. Arogyaswamy Paulraj "Reminisces On Dr. D Srinivasan", Resonance(Special Issue) p.6 http://www.oceansociety.in/wp-content/uploads/2019/06/resonance2.pdf