Ariel Dynamics Inc. Media Library - Video

APAS

Code	**adi-vid-01007**
Title	APAS
Subtitle	Ariel Performance Analysis System
Description	The most advanced biomechanical system in the world. If it moves, you can analyze it.
Subject	APAS;Favorite;Performance Analysis
Duration	00:06:36
URL	https://arielweb.com/videos/play/adi-vid-01007
Date	2003-10-01 17:55:02
Label	Approved
Privacy	Public

Ariel Performance Analysis System (APAS)

The Ariel Performance Analysis System (APAS) is the world's most advanced computerized system for biomechanical analysis and the study of human motion. Developed by Dr. Gideon Ariel, founder of Ariel Life Systems, the APAS has been instrumental in various fields, including the development of lunar and Mars invasion spacesuits.

Applications

The APAS has been used by renowned athletes such as Frank Shorter, Al Oder, Brian Oldfield, the U.S. women's volleyball team, and Mack Wilkins. It can also be used by physical therapists, coaches, trainers, and insurance personnel to quantify physical performance or human movement.

Features

The APAS can calculate the third dimension, derive the speed of every joint in the body, and provide a clear-cut method for analyzing injury and recovery. It can also integrate force platforms, EMG, and kinematic analysis in real time. The system is menu-driven, making it easy to use even for those without previous knowledge of computers.

Benefits

The APAS can help therapists accurately analyze human movement, calculate the force exerted by specific body segments, and work with any speed of video camera. It also allows for automatic picture storage and the enlargement of any part of the kinematic figure for closer study.

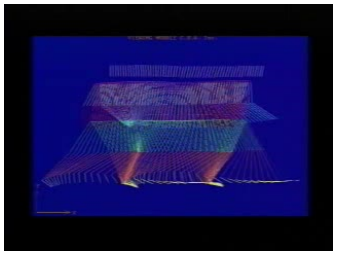
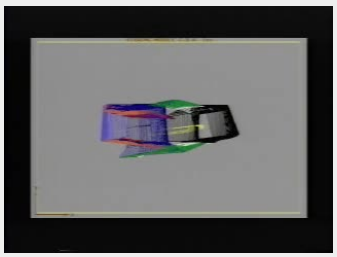
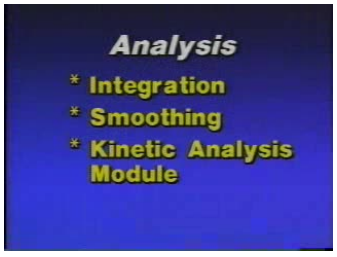
The APAS is not just another motion analysis system, but the most sophisticated system available to study human movement.

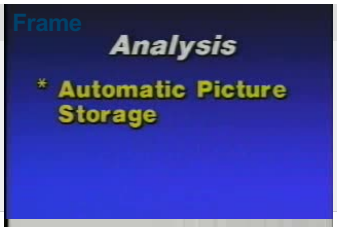
Model Id: gpt-4-0613
Created on: 2023-09-19 00:07:45
Processing time: 00:00:17.9330000
Total tokens: 1380

Audio transcription

Frame	#	Time	Spoken text
	0.	**00:00:00**	*The APAS, the Ariel Performance Analysis System, the world's most advanced computerized*
	1.	**00:00:14**	*system for biomechanical analysis and the study of human motion.*
	2.	**00:00:19**	*The Ariel Performance Analysis System, or APAS, was developed by Dr. Gideon Ariel,*
	3.	**00:00:24**	*founder of Ariel Life Systems, former Olympic Committee Chairman, NASA Consultants,*

Frame	#	Time	Spoken text
	4.	**00:00:29**	*and world leader in biomechanical research.*
	5.	**00:00:33**	*The APAS was instrumental in the development of the lunar and Mars invasion spacesuits,*
	6.	**00:00:38**	*and the APAS is the same system that has made Dr. Ariel a consultant to some of the best*
	7.	**00:00:44**	*athletes on the planet.*
	8.	**00:00:46**	*Among these athletes are Frank Shorter, Gold Medalist in the 1972 Olympics,*
	9.	**00:00:51**	*Al Oder, former Olympian, Brian Oldfield, world champion in the shot put, the U.S.*
	10.	**00:00:57**	*women's volleyball team, and Mack Wilkins, winner of the Gold Medal in the 1976 Olympics,*
	11.	**00:01:03**	*and world record holder in the discus.*
	12.	**00:01:06**	*The same system can be used by you to diagnose and rehabilitate your patients.*
	13.	**00:01:12**	*We are going to demonstrate here is probably the most sophisticated technology*
	14.	**00:01:18**	*that was created to analyze human movement.*
	15.	**00:01:22**	*The question is, why would you need a sophisticated system like this?*
	16.	**00:01:28**	*Well, today, in a modern world, whether you are a physical therapist,*
	17.	**00:01:34**	*or whether you are an insurance person, whether you are a coach, trainer,*
	18.	**00:01:39**	*any place where we need physical performance or human movement,*
	19.	**00:01:45**	*the question is, how you quantify the results.*
	20.	**00:01:49**	*What we can do with our system, instead of using two eyes, we are using two comments.*
	21.	**00:01:54**	*And from there, we can do what the brain does to the human body,*
	22.	**00:01:59**	*and actually calculate the third dimension.*
	23.	**00:02:01**	*For example, here I have a runner.*
	24.	**00:02:04**	*This runner actually was running while the pictures were taken,*
	25.	**00:02:08**	*and he was not even aware that the pictures were taken.*
	26.	**00:02:12**	*I can do it in a multiple image, so here I have many, many pictures.*
	27.	**00:02:17**	*If a coach, or a trainer, or physical therapist want to look on a person from the top,*
	28.	**00:02:23**	*even though he did not have camera on the top,*
	29.	**00:02:26**	*the computer can calculate the view from the top, so I can go actually to Orient,*
	30.	**00:02:31**	*put the top, and right now I see the same motion from the top view.*
	31.	**00:02:36**	*With the human body, you have to know precisely if you want to optimize a baseball player*
	32.	**00:02:41**	*or a discus tutorial or a runner.*
	33.	**00:02:44**	*What is the contribution of each segment in the body to the other sentence?*
	34.	**00:02:48**	*If you don't know precisely the speed, you cannot tell what is the efficiency of the movement.*

Frame	#	Time	Spoken text
	35.	00:02:55	*Our system can derive precisely the speed of every joint in the body,*
	36.	00:03:00	*so not only it knows the position and the displacement, it also can calculate the velocities.*
	37.	00:03:07	*The APAS system is not just a tool for the Olympic athlete.*
	38.	00:03:11	*In your facility, the APAS will provide a clear-cut method for analyzing the injury*
	39.	00:03:16	*and recovery of your patient in their everyday activities.*
	40.	00:03:20	*Activities such as walking can be broken down and quantified,*
	41.	00:03:24	*so that the therapist can quickly diagnose and treat the patient with increased success.*
	42.	00:03:30	*Feels such as industrial medicine will open up to the therapist*
	43.	00:03:34	*due to the ability of the APAS to take data directly from a work situation*
	44.	00:03:39	*and extract the necessary information to make all the calculations for the patient's diagnosis.*
	45.	00:03:45	*The APAS, like the Ariel computerized exercise system,*
	46.	00:03:50	*was created to provide the user with the maximum amount of technology and an easy-to-use format.*
	47.	00:03:59	*The APAS is all menu-driven,*
	48.	00:04:02	*and no previous knowledge of computers is necessary to operate the APAS.*
	49.	00:04:07	*Tutorials, descriptions, and menus make operation of the APAS self-explanatory.*
	50.	00:04:15	*Analysis*
	51.	00:04:16	*If your work involves measurement, diagnosis, or improvement of human performance,*
	52.	00:04:21	*you can't afford to operate without the corners the competition is cutting.*
	53.	00:04:27	*Integration*
	54.	00:04:28	*The APAS is the only system that can integrate force platforms,*
	55.	00:04:33	*EMG, and kinematic analysis in real time.*
	56.	00:04:38	*Smoothing*
	57.	00:04:40	*The APAS is the only system that gives the therapist the tools necessary*
	58.	00:04:45	*to accurately analyze human movement by making not one algorithm available,*
	59.	00:04:50	*but a whole library.*
	60.	00:04:53	*Kinetic analysis module*
	61.	00:04:55	*It can actually calculate the force exerted by specific body segments.*
	62.	00:05:01	*Adaptability*
	63.	00:05:03	*The APAS can work with any speed of video camera,*
	64.	00:05:07	*and the APAS can also work with high-speed film.*
	65.	00:05:11	*Automatic picture storage*
	66.	00:05:14	*The APAS is the only system that allows the user to exploit the full potential of motion analysis*

Frame	#	Time	Spoken text
	67.	00:05:21	*by imposing the kinetic data over the actual video of the subject.*
	68.	00:05:26	*Because all data is converted to digital form,*
	69.	00:05:30	*the APAS allows the therapist to enlarge any part of the kinematic figure for closer study.*
	70.	00:05:36	*What we try to show here, for example to the occupational therapist,*
	71.	00:05:43	*how to bring a person to me injury back to a maximum performance.*
	72.	00:05:48	*We try to show to the coach how can he understand the event better,*
	73.	00:05:53	*and how can he take an athlete and perform with a person at its maximum.*
	74.	00:05:58	*We try to show here that every person is really a gold medalist in his own body,*
	75.	00:06:06	*but in order to find and quantify it, we need this technology.*
	76.	00:06:11	*We have to analyze the movement and try to perfect.*
	77.	00:06:14	*That's why you need the APAS system.*
	78.	00:06:17	*The APAS is not just another motion analysis system,*
	79.	00:06:23	*but the most sophisticated system available to study human movement.*

This PDF-document has been auto-generated from a video file by arielweb-ai-bot v1.2.2023.0926 on 2023-09-28 03:47:07 without human intervention. In case of errors or omissions please contact our aibot directly at ai@macrosport.com.

Video filename: **adi-vid-01007-apas-256kbps.mp4**